APPENDIX 5

FMC Corporation

2000 Market Street
Philadelphia Pennsylvania 19103
(215) 299 6000

July 15, 1983



FMC

David Beier, Esq.
Subcommittee on Courts, Civil Liberties
and the Administration of Justice
Committee on the Judiciary
2137 Rayburn Building
Washington, DC 20515

Subject: Ad Hoc Group to Improve the Patent Laws --
Sections 5 and 6 of Proposed Legislation

Dear David:

Concurrent with our preparation of testimony, we are collecting materials in response to your inquiry about background for the items in our proposed patent legislation.

One of the areas for which we are seeking legislative remedy has to do with the effect, on the patentability of subsequent inventions, of background scientific knowledge within an organization. This situation has led to conflicting judicial decisions over the past decade. Our concern is for the effect of such decisions on team research and the free exchange of scientific information within research organizations.

There has been extensive scholarly analysis of this situation, and several excellent reviews of the law have recently been published. Copies are enclosed.

There is now extensive discussion within the bar associations of this issue, and several good suggestions have been made to improve the language of the Ad Hoc Group. We look forward to discussing this with you, because we would like to include all useful suggestions in the bill as introduced.

We will write to you separately on the other sections of the proposed bill.

Very truly yours,

Pauline Newman, Director
Patent & Licensing Department

Encl. Shurn, "Is the Invention of Another Available as Prior Art? In re Bass to In re Clemens and Beyond", 63 Journal of the Patent Office Society 516 (1981).

Walterscheid, "The Ever Evolving Meaning of Prior Art",
Part I, 64 J.P.O.S. 457 (1982)
Part II, 64 J.P.O.S. 571 (1982)
Part III, 64 J.P.O.S. 632 (1982)
Part IV, 65 J.P.O.S. 3 (1983)

cc: Ad Hoc Group to Improve the Patent Laws

d51B5
md73

OCTOBER 1981 Volume 63, No.
Pages 514-5

JOURNAL

of the

PATENT OFFICE SOCIETY

In This Issue—

- Is The Invention Of Another Available As Prior Art? In re Bass To In re Clemens And Beyond
- PTO Practice (In re Rasmussen)
- Book Reviews and Notes

*Peter J. Shurn III***

IS THE INVENTION OF ANOTHER AVAILABLE AS PRIOR ART? *IN RE BASS* TO *IN RE CLEMENS* AND BEYOND*

I. INTRODUCTION

In its 1973 decision, *In re Bass*,[1] the United States Court of Customs and Patent Appeals (hereinafter the CCPA) first considered combining sections 102(g) and 103 of Title 35, U.S. Code, in the context of an ex parte rejection entirely divorced from the award of priority in an interference. Six years later, the court avoided further consideration of this issue in *In re Bulloch*.[2] But in 1980, the issue was considered anew in *In re Clemens*[3] and a unanimous CCPA refused to extend the *Bass* holding beyond the facts of that case.

The trilogy of *Bass* opinions were critically reviewed in the literature[4] and the potential ramifications of the *Bass* holding hotly debated. The *Bulloch* opinion received scant mention, and thus far, the *Clemens* opinion has received little, if any, attention.

© 1981. Peter J. Shurn III.

*A thesis submitted to the faculty of the National Law Center of George Washington University in partial satisfaction of the requirements for the degree of Master of Laws, Patent and Trade Regulation Law.

The American Patent Law Association presented its 1981 Robert C. Watson Award to the author for the best article on a subject of primary importance to the patent system written or published between November 1, 1980 and September 1, 1981.

**Associate, Arnold, White & Durkee, Houston, Texas. B.S.E.E., The Polytechnic Institute of Brooklyn, 1974; J.D., The New England School of Law, 1977; LL.M., Patent and Trade Regulation Law, George Washington University, 1981.

1 474 F.2d 1276, 177 U.S.P.Q. 178 (C.C.P.A. 1973).

2 604 F.2d 1362, 203 U.S.P.Q. 171 (C.C.P.A. 1979).

3 622 F.2d 1029, 206 U.S.P.Q. 289 (C.C.P.A. 1980).

4 *See, e.g.*, Patent Law Perspectives, 1973 Developments, Dev. A. 3[7]-1 *et seq.*; Rosenstock, *Prior Art Under 35 U.S.C. Section 103 Includes Prior Invention—In re Bass and In re Hellsund*, 56 J. Pat. Off. Soc'y 263 (1974); Pitlick, *A Proposed Compromise to the "Prior Art" Controversy Surrounding In re Hellsund and In re Bass*, 56 J. Pat. Off. Soc'y 699 (1974); Klitzman, *35 U.S.C. 102(g) As Establishing Prior Art*, 58 J. Pat. Off. Soc'y 505 (1976); Jorda, *Section 102(g) Prior Invention As Section 103 Prior Art: Impact on Corporate Research*, 58 J. Pat. Off. Soc'y 523 (1976); F. Robbins, The Defense of Prior Invention—Patent Infringement Litigation (Prac. L. Inst. 1977); Janicke, *What Prior Art is "Known" to the Client?—A Suggested Investigative Approach*, 1979 Patent Law Annual 67 (Matthew Bender 1979); Janicke, *What is "Prior Art" Under Section 103? The Need for Policy Thought*, Nonobviousness—The Ultimate Condition of Patentability 5:101 (J. Witherspoon ed. Bureau Nat'l Aff. 1980); Witherspoon, *Current Problems and Considerations Re Section 103 "Prior Art" by Reason of 35 U.S.C. 102 (e), (f), and (g)*, [1980] Current Developments in Patent Law 95 (Prac. L. Inst. 1980).

The law as clarified in the *Bass* and *Clemens* opinions has significant impact upon invention in the corporate environment. That impact, however, arises not from any *Bass-Clemens* rule *per se*, but rather from concepts of inventive entity and joint and sole invention under United States patent law.[5]

In clarifying the law, the *Bass* and *Clemens* opinions suggest lines of inquiry for determining whether a particular invention of another is available as prior art within the meaning of that term in section 103 by virtue of section 102(g). These lines of inquiry will be developed and explored after examination of the relevant case law and statutory provisions.

II. Background

Any standard for determining whether a patent applicant's contribution to the art is sufficient to justify issuance of a patent must be based upon the patent laws. Consequently, any analysis of such a standard must start with an analysis of the patent laws and of the cases construing and applying their terms.

A. *Relevant Statutory Provisions*

The relevant statutory provisions include section 102(g)[6] and section 103[7] of the 1952 Patent Act.

1. Title 35, U.S. Code, Section 102(g)

Section 102(g) prevents an applicant from obtaining a patent if before the applicant made his invention, that invention was made in this country by another and that other had not abandoned, suppressed, or concealed the invention. The condition subsequent on abandonment, suppression, and concealment is a codification of the *Mason v. Hepburn*[8] doctrine[9] that

---

5 *See* F. Robbins, The Defense of Prior Invention—Patent Infringement Litigation 2-8 (Prac. L. Inst. 1977) *and* D. Chisum, 2 Patents §5.03[3] (Matthew Bender 1980).

6 35 U.S.C. §102(g).

7 35 U.S.C. §103.

8 13 App. D.C. 86 (D.C. Cir. 1898).

9 *See, e.g.*, Young v. Dworkin, 489 F.2d 1277, 1280, 180 U.S.P.Q. 388, 391 (C.C.P.A. 1973).

a subsequent inventor . . . who has diligently pursued his labors to the procurement of a patent in good faith and without any knowledge of the preceding discoveries of another, shall, as against that other, who has deliberately concealed the knowledge of his invention from the public, be regarded as the real inventor and as such entitled to his reward. . . .

The true ground of the doctrine, we apprehend, lies in the policy and spirit of the patent laws and in the nature of the equity that arises in favor of him who gives the public the benefit of the knowledge of his invention, who expends his time, labor, and money in discovering, perfecting, and patenting, in perfect good faith, that which he and all others have been led to believe has never been discovered, by reason of the indifference, supineness, or wilful act of one who may, in fact, have discovered it long before.[10]

Section 102(g) provides:

A person shall be entitled to a patent unless—

. . . .

(g) *before* the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.[11]

The House Report on section 102(g) states: "Subsection (g) relates to the question of priority of invention between rival inventors."[12] The Revision Notes which accompanied the Report indicate that:

Paragraph (g) is derived from title 35, U.S.C., 1946 ed., §69 (R.S. 4920, . . .), the *second defense* recited in this section. This paragraph retains the present rules of law governing the determination of priority of invention.[13]

In pertinent part, R.S. 4920 read:

---

10 13 App. D.C. at 95-96.

11 35 U.S.C. §102(g) (emphasis added).

12 H.R. Rep. No. 1923, 82d Cong., 2d Sess., at 7 [hereinafter cited as House Report], [1952] U.S. Code Cong. & Ad. News 2394, 2399. The Senate Report, S. Rep. No. 1979, 82d Cong., 2d Sess., *id.*, repeats in substance the House Report.

13 House Report, *supra* note 12, at 17-18, [1952] U.S. Code Cong. & Ad. News at 2410 (emphasis added).

In any action for infringement the defendant may plead the general issue, and, having given notice in writing to the plaintiff or his attorney thirty days before, may prove on trial any one or more of the following special matters:

. . . .

Second. That [the patentee] had surreptitiously or unjustly obtained the patent for that which was in fact invented by another, who was using reasonable diligence in adapting and perfecting the same; or,

. . . .

And in notices as to proof of previous invention, knowledge, or use of the thing patented, the defendant shall state the names of patentees and the dates of their patents, and when granted, and the names and residences of the persons alleged to have invented or to have had the prior knowledge of the thing patented, and where and by whom it had been used; . . . .

P.J. Federico, one of the draftsmen of the 1952 Patent Act, commented that:

Paragraph (g) relates to prior inventorship by another in this country as preventing the grant of a patent. It is based in part on the second defense in old R.S. 4920 . . . and retains the rules of law governing the determination of priority of invention developed by decisions.[14]

Characterized from its creation as relating to the question of priority of invention between rival inventors, section 102(g) was not relied on in the context of an ex parte rejection entirely divorced from the award of priority in an interference until *Bass*.

2. Title 35, U.S. Code, Section 103

Section 103 provides:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and *the prior art* are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said

---

[14] Federico, *Commentary on the New Patent Act*, 35 U.S.C.A. p. 1, at 19 (1954).

subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.[15]

It codified a condition that existed in the law by reason of decisions of the courts since at least as early as 1850.[16]

Section 103 established an objective condition for patentability based upon obviousness in an attempt to improve the patent law by doing away with the phantom requirement of "invention" created through a "flash of creative genius".[17] As characterized by Judge Rich, one of the draftsmen of the 1952 Patent Act,

> Section 103 speaks of a condition of *patentability* instead of "invention". The condition is *unobviousness*, but that is not all. The unobviousness is *as of a particular time* and *to a particular* legally fictitious, technical *person*, analogous to the "ordinary reasonable man" so well known to courts as a legal concept. To protect the inventor from hindsight reasoning, the time is specified to be *the time when the invention was made.* To prevent the use of too high a standard—which would exclude inventors as a class and defeat the whole patent system—the invention must have been obvious at that time to "a person having *ordinary* skill in the art to which said subject matter (i.e., *the* invention) pertains." But *that* is not all; *what* must have been obvious is "*the subject matter as a whole.*" That, of course, is the invention as defined by each patent claim. If, for example, a *combination* is claimed, Section 103 requires that to invalidate the claim, it must be shown that the *combination* was obvious, not merely its components.[18]

The term "prior art" used in section 103, however, is not expressly defined in that section or elsewhere in the 1952 Patent Act,[19] and everything in section 102 is not prior

---

15 35 U.S.C. §103 (emphasis added).

16 Federico, *supra* note 14, at 20.

17 *See* Rich, *Why and How Section 103 Came To Be*, Nonobviousness—The Ultimate Condition of Patentability 1:201, 1:209-1:213 (J. Witherspoon ed. Bureau Nat'l Aff. 1980) *and* Federico, *Further Comments and Observations on the Origins of Section 103*, *id.* at 1:301.

18 Rich, *Laying the Ghost of the "Invention" Requirement*, Nonobviousness—The Ultimate Condition of Patentability, *supra* note 17, at 1:501, 1:508 (emphasis in original).

19 The House Report on the 1952 Patent Act states: "Section 103 . . . refers to the difference between the subject matter sought to be patented and the prior art, meaning what was known before as described in section 102." House Report, *supra* note 12, at 7, [1952] Code Cong. & Ad. News at 2399. P.J. Federico's commentary on the 1952 Patent Act states: "The antecedent of the words 'the prior art' . . . lies in the phrase 'disclosed or described as set forth in section 102'

art. Judge Rich has indicated that the anatomy of section 102 is fairly clear.

> As forecast in its heading, it deals with the two questions of "novelty and loss of right." It also deals with originality in subsection (f) which says that one who "did not himself invent the subject matter" (i.e., he did not originate it) has no right to a patent on it. Subsections (c) on abandonment and (d) on first patenting the invention abroad, before the date of the U.S. application, on an application filed more than a year before filing in the U.S., are loss of right provisions and in no way relate to prior art. Of course, (c), (d), and (f) have no relation to §103 and no relevancy to what is "prior art" under §103. Only the remaining portions of §102 deal with "prior art". Three of them, (a), (e), and (g), deal with events prior to applicant's *invention* date and the other, (b), with events more than one year prior to the U.S. *application* date. These are the "prior art" subsections.[20]

Under the circumstances of *Bass*, the prior invention of another, who had not abandoned, suppressed, or concealed that invention, was held to be available as prior art within the meaning of that term in section 103 by virtue of section 102(g).[21]

3. *Combining Section 102(g) and Section 103 in the Context of an Ex Parte Rejection*

In combining sections 102(g) and 103 in the context of an ex parte rejection, four questions arise due to the wording of these statutory provisions.

(1) Was the invention of another abandoned, suppressed, or concealed within the meaning of section 102(g)?

(2) Which invention was prior, the invention of another or the invention in question?

(3) What is included in the "prior art" within the meaning of that term in section 103?

---

and hence these words refer to material specified in section 102 as the basis for comparison." Federico, *supra* note 14, at 20.

20 In re Bass, 474 F.2d at 1290, 177 U.S.P.Q. at 189 (emphasis in original).

21 *Accord*, Sutter Prods. Co. v. Pettibone Mulliken Corp., 428 F.2d 639, 166 U.S.P.Q. 100 (7th Cir. 1970); Grinnell Corp. v. Virginia Elec. & Pwr. Co., 277 F. Supp. 507, 156 U.S.P.Q. 443 (E.D. Va. 1967).

(4) What would have been known to a person having ordinary skill in the art at the time the invention in question was made?

Each of these questions were in essence addressed and answered by the court in *Bass* and *Clemens*. The answers to these questions form the basis on which these cases are distinguishable.

B. *Relevant Case Law*

The relevant case law construing and applying rejections based on a combination of sections 102(g) and 103 include *In re Bass*,[22] *In re Bulloch*,[23] and *In re Clemens*.[24]

1. In re Bass

In re Bass[25] was not the first time the CCPA considered whether section 102(g) prior invention of another is prior art, or whether such prior invention can be combined with other prior art to sustain a section 103 obviousness rejection. What was considered for the first time was combining section 102(g) and section 103 in the context of an ex parte rejection entirely divorced from the award of priority in an interference which established the prior inventorship relied on in the rejection.[26] The court held that the prior invention of another who had not abandoned, suppressed, or concealed it, under the circumstances of that case which included the disclosure of such invention in an issued patent, was available as "prior art" within the meaning of that term in section 103 by virtue of section 102(g).[27]

A patent application[28] (hereinafter the Bass application) was filed in the names of Bass, Jr., Jenkins, Sr., and Horvat and claimed an improved vacuum system for controlling and collecting waste on carding machines. References relied upon by the Patent and Trademark Office (hereinafter the PTO) in rejecting the claims for obviousness included a

22 474 F.2d 1276, 177 U.S.P.Q. 178 (C.C.P.A. 1973).
23 604 F.2d 1362, 203 U.S.P.Q. 171 (C.C.P.A. 1979).
24 622 F.2d 1029, 206 U.S.P.Q. 289 (C.C.P.A. 1980).
25 474 F.2d 1276, 177 U.S.P.Q. 178 (C.C.P.A. 1973).
26 *Id.* at 1283, 177 U.S.P.Q. at 183.
27 *Id.* at 1286-87, 177 U.S.P.Q. at 186.
28 Application Serial No. 623,721, filed March 16, 1967.

patent issued to Jenkins, Sr.[29] (hereinafter the Jenkins patent) and a patent issued to Bass, Jr. and Horvat[30] (hereinafter the Bass patent). Patentees Jenkins, Sr., Bass, Jr., and Horvat were the applicants named in the Bass application.

The Jenkins patent, the Bass patent, and the Bass application were all coassigned. Of the three, the Jenkins patent, which essentially shows one element of the vacuum system claimed in the Bass application, was filed first. The Bass patent, which essentially shows another element of the vacuum system claimed in the Bass application, was filed second. The Bass application was filed last.

The claims in the Bass application were essentially rejected by the PTO on the basis of section 103, with sections 102(e) and 102(g) being relied upon to make certain patents available as "prior art". Applicants filed Rule 131[31] affidavits to show who invented what and when.

In his final rejection, the examiner indicated that while the Rule 131 affidavits may overcome the Jenkins patent and the Bass patent so far as section 102(e) was concerned since the affidavits show that applicants' invention antedates the *filing dates* of the two patents, the patents were not overcome as disclosing *prior inventions* of "another" under section 102(g), relying on dicta in the opinion of Examiner-in-Chief Federico in *Ex parte Robbins*.[32]

The PTO Board of Appeals (hereinafter the board) agreed that the Jenkins patent and the Bass patent were available as prior art, and stated, in pertinent part:

> Proof that the over-all combination recited in the claims on appeal was made prior to the *filing dates* of the Bass, Jr. et al. and Jenkins, Sr. patents does not establish that such combination was *invented prior to the subcombinations* claimed in said patents. . . .
>
> Under the circumstances here involved it does not appear that an affidavit under Rule 131 was the proper procedure to adopt. The proper subject of inquiry is not compliance with the Rule but

---

29 United States Patent No. 3,348,268, issued Oct. 24, 1967, parent filed Oct. 15, 1964.

30 United States Patent No. 3,315,320, issued April 25, 1967, filed Aug. 23, 1965.

31 37 C.F.R. § 1.131.

32 156 U.S.P.Q. 707, 709 (Pat. Off. Bd. App. 1967). *See In re* Bass, 474 F.2d at 1281 n.3, 177 U.S.P.Q. at 182.

rather what [the] evidence shows [as to] who invented the subject matter of the references which is relied upon and when.[33]

On appeal, appellants (applicants) argued that their application was claiming separate and distinct inventions from what was claimed in the Bass patent and in the Jenkins patent, and that these patents were not proper references because applicants Bass, Jenkins, and Horvat were working together on a common project as evidenced by facts recited in the Rule 131 affidavits. They admitted that they did not invent the claimed subject matter of either the Bass patent or the Jenkins patent.

Addressing the legal question of what is included in the "prior art" referred to in section 103, Judge Rich, in a lead opinion joined by Judge Rosenstein,[34] indicated that

prior art for one purpose is prior art for all purposes and in all courts and in the Patent Office. . . . [P]rior invention *is* prior art and always has been. The only distinction which exists is between anticipation and obviousness and the determination of either depends on what is in the prior art.[35]

Section 102(g) prior invention of another is prior art, even in the context of an ex parte rejection entirely divorced from the award of priority in an interference which established the prior inventorship relied on in rejecting.

Of course, [§§102] (c), (d), and (f) have no relation to §103 and no relevancy to what is "prior art" under §103. Only the remaining portions of §102 deal with "prior art". Three of them, (a), (e), and (g), deal with events prior to applicant's *invention* date and the other, (b), with events more than one year prior to the U.S. *application* date. These are the "prior art" sections.[36]

After settling the question of law and holding that

the use of prior invention of another who had not abandoned, suppressed, or concealed it, under the circumstances of this case which include the disclosure of such invention in an issued patent,

---

33 474 F.2d at 1282, 177 U.S.P.Q. at 183 (emphasis in original).

34 The Honorable Samuel M. Rosenstein, Senior Judge, United States Court of International Trade, sitting by designation.

35 474 F.2d at 1289, 177 U.S.P.Q. at 188.

36 *Id.* at 1290, 177 U.S.P.Q. at 189 (emphasis in original).

is available as "prior art" within the meaning of that term in §103 by virtue of §102(g),[37]

the court went on to determine what the evidence showed as to priority of the inventions described in the Bass and Jenkins patents, upon which their availability as prior art depended.[38]

The evidence of priority in the record consisted of filing dates, the Bass application, the reference patents, statements in affidavits filed and accepted under Rule 131, and statements by appellants' attorneys during prosecution. The evidence established that the invention described in the Jenkins patent was prior to the combination invention of the Bass application.[39]

The solicitor argued that the invention described in the Bass patent should also be deemed prior to appellants' invention because the Rule 131 affidavits made no attempt to show that it was not. The court rejected this argument stating that it was not incumbent on the applicants to prove it was *not* prior merely because the PTO thought it might have been. Finding no evidence in the record tending to indicate priority of the invention described in the Bass patent, the court excluded the Bass patent from consideration as prior art in passing on the obviousness rejection.[40]

Holding that the Jenkins patent was available as prior art and the Bass patent was not, the court went on to consider the obviousness of the claimed subject matter in view of the prior art.

Judge Baldwin, in a concurring opinion joined by Judge Almond, stated:

> The principal opinion takes the position that the term "prior art" as it is used in 35 U.S.C. 103 should include all inventions which were made in this country before an applicant or patentee made his invention, regardless of when those inventions are made public or patent applications on them are filed, so long as those inventions are found not to have been abandoned, suppressed or concealed. I disagree with that conclusion . . . .

---

37 *Id.* at 1286-87, 177 U.S.P.Q. at 186 (Rich, J.); *id.* at 1306-07, 177 U.S.P.Q. at 201 (Lane, J. concurring).
38 *Id.* at 1287, 177 U.S.P.Q. at 186.
39 *Id.* at 1287, 177 U.S.P.Q. at 187.
40 *Id.* at 1288, 177 U.S.P.Q. at 187.

If we allow this subjective, secret knowledge to become the standard against which patentability is judged, we will do the public a disservice by watering down the incentive that the patent system provides for the advancement of the useful arts.[41]

The concurring opinion of Judge Lane indicates he believed both Judges Rich and Baldwin expounded points of law not necessarily involved nor essential to the disposition of the appeal. Judge Lane stated his view to be

the prior invention of another who had not abandoned, suppressed, or concealed it, *under the circumstances of this case* which include the disclosure of such invention in an issued patent, is available as "prior art" within the meaning of that term in §103 by virtue of §102(g).[42]

The three opinions are concurring since each affirmed the rejection of the appealed claims as obvious in view of references *other than* the Bass patent and the Jenkins patent, and reversed rejections of the appealed claims as obvious in view of the Bass patent taken with the Jenkins patent and another patent since the Bass patent was not available as prior art. Consequently, all that was said about section 102(g) by Judges Rich and Baldwin was dicta.[43]

2. In re Bulloch

The issue of a 102(g)/103 rejection was once again before the CCPA in *In re Bulloch*.[44] The case, however, was decided on other grounds. The issue presented was whether, in an ex parte case involving an application for patent, the disclosure of an alleged prior invention of another in an issued patent[45] was available as "prior art" within the meaning of that term in section 103 by virtue of section 102(g), even though that disclosure was not available to the public prior to the date of applicants' invention.[46]

41 *Id.* at 1292-1304, 177 U.S.P.Q. at 190-99.

42 *Id.* at 1306-07, 177 U.S.P.Q. at 201.

43 *See* F. Robbins, The Defense of Prior Invention—Patent Infringement Litigation 2 (Prac. L. Inst. 1977) *and* D. Chisum, 2 Patents §5.03[3] n.48 and accompanying text (Matthew Bender 1980).

44 604 F.2d 1362, 203 U.S.P.Q. 171 (C.C.P.A. 1979).

45 Both the Bulloch application and the application that matured into the reference patent were filed on the same date, and both were assigned to the same company. *Id.* at 1364 n.5, 203 U.S.P.Q. at 173.

46 *Id.* at 1366 n.11, 203 U.S.P.Q. at 174.

Assuming, arguendo, that the alleged prior invention was available as prior art, the court found the claimed invention unobvious in view of the prior art. Consequently, the 102(g)/103 issue was not reached.

Speaking for the court, Judge Miller noted that any proper rejection involving section 102(g), whether or not combined with section 103, must be based upon *evidence* of an invention prior to that of the applicant.[47] Judge Miller further noted that the patent asserted as disclosing the prior invention of another, was not in fact prior art under section 102(g) because its filing date was too late and there was no evidence that the invention disclosed in that patent was invented prior to the invention in question.

3. In re Clemens

In re Clemens[48] once again afforded the CCPA the opportunity to review *Bass*. In *Clemens*, the application for patent (hereinafter the Clemens application) was filed in the names of Clemens, Hurwitz, and Walker,[49] and claimed a process for purifying condensate water for a steam regenerating system in which steam is first passed through a steam turbine to generate electricity and is then condensed and recycled back to a boiler. Such a purification process is called condensate polishing.

The claimed method uses a strong base ion exchange resin derived from vinylbenzylchloride. Applicants discovered that vinylbenzylchoride-based resins (hereinafter VBC-based resins) were superior to the prior art chloromethylated-based resins (hereinafter CME-based resins) in condensate polishing.

Applicants acknowledged as prior art: VBC-based resins *per se;* the use of VBC-based resins generally for ion exchange purposes; CME-based resins *per se;* the use of CME-based resins generally for ion exchange purposes; and the use of CME-based resins specifically for condensate polishing. They asserted, however, that the CME-based resins had serious drawbacks when used for condensate pol-

---

47 *Id.* at 1366 n.12, 203 U.S.P.Q. at 174.

48 622 F.2d 1029, 206 U.S.P.Q. 289 (C.C.P.A. 1980).

49 Application Serial No. 641,464 filed Dec. 17, 1975, a continuation-in-part of application Serial No. 428,968 filed Dec. 27, 1973.

ishing. Primarily due to their thermal instability at elevated temperatures, the hot condensate had to be cooled to below 60°C before it could be polished using CME-based resins.

The references relied upon by the PTO in rejecting the claims for obviousness included a patent to Barrett.[50] The Clemens application and the Barrett patent were coassigned and the Barrett patent had the earlier effective filing date. Claims 1-10 of the Clemens application were rejected as obvious in view of Barrett (hereinafter the Barrett rejection) and as obvious in view of certain other references (hereinafter the CME rejection).

The Barrett patent disclosed a macroreticular polymer of crosslinked vinylbenzylchloride which can be used to make VBC-based resins. Moreover, the use of resins in condensate polishing was mentioned in the portion of the specification describing the prior art. The specification also indicates that in tests comparing the thermal stability of the VBC-based resins claimed in the Barrett patent with corresponding CME-based resins, the VBC-based resins consistently had greater thermal stability. The applicants' claims were rejected in view of subject matter disclosed, but not claimed, in the Barrett patent.

To remove the Barrett patent as a reference, the applicants filed a declaration under Rule 131 in which they described three tests conducted at their direction prior to the filing date of the Barrett patent. Two of the tests were run to compare the thermal stability of VBC-based resins used in the claimed process with closely related CME-based resins used in prior art condensate polishing. The two tests showed that at temperatures of 110°C and 140°C the VBC-based resins were more thermally stable. Applicants argued these results demonstrated an unexpected superiority of the claimed process. On appeal, appellants (applicants) submitted that in view of the known chemical similarity between VBC-based resins and CME-based resins, one skilled in this art would have expected the two types of resins to have the same physical characteristics and functionality, and therefore, appellants' discovery that VBC-based resins were substantially superior in condensate polishing at high and mod-

50 United States Patent No. 3,843,566 issued Oct. 22, 1974, filed April 16, 1973.

erate temperatures would have been unexpected and surprising.[51]

In response to applicants' assertion that the Barrett rejection was overcome by the Rule 131 declaration, the examiner stated:

> Barrett is applied as a reference, not under 35 USC 102(e), but because he is the prior inventor of the claimed subject matter. Since Barrett invented the claimed composition, it would be logically inconsistent that Clemens et al invented the process of using the composition prior to Barrett inventing the composition per se. The composition's utility, use in boiler steam condensate purification, is seen to be a part of Barrett's invention.[52]

The board affirmed both the CME rejection and the Barrett rejection, indicating that applicants' rebuttal evidence was directed at establishing the nonobviousness of using VBC-based resins at temperatures of 110°C and above whereas the claims were broad enough to cover treatment at lower temperatures, such as at 60°C, the maximum recommended temperature for CME-based resins.

Regarding the Barrett rejection, the board stated:

> There is no showing here that patentee derived his knowledge that VBC anion exchange resins were useful in condensate polishing operations from appellants. There must be sufficient evidence to establish that appellants are the prior inventors of the subject matter disclosed in the patent to Barrett. This is especially true where, as here, the present application and Barrett are coassigned and presumably [the] assignee has possession of the necessary evidence to establish inventorship. Thus, we conclude that appellants have not sustained their burden of proving facts sufficient to remove the prima facie availability of the Barrett reference.[53]

Addressing the CME rejection, the CCPA found that the condensate polishing process recited in claims 1-7 and 9-10 differed from the prior art condensate polishing in that the claimed process used VBC-based resins whereas the prior art used CME-based resins. The court held that appellants' evidence of unexpected results at temperatures of 110°C and 130°C was not commensurate in scope to the

---

51 622 F.2d at 1034, 206 U.S.P.Q. at 294-95.
52 *Id.* at 1033, 206 U.S.P.Q. at 294.
53 *Id.* at 1034, 206 U.S.P.Q. at 294.

breadth of those claims because the claims did not include a limitation to temperature. Accordingly, the court affirmed the board's decision regarding claims 1-7 and 9-10.

The court held that the remaining claim, claim 8, which included the additional limitation that condensate polishing be performed at a temperature in excess of 100°C, was not prima facie obvious in view of CME-based resin condensate polishing. The close structural similarity between the VBC-based resins and the CME-based resins would have led one skilled in the art at the time the invention was made to have expected the VBC-based resins to have the same thermal instability of CME-based resins at temperatures above 60°C. Since the PTO did not establish a prima facie case of obviousness, the court reversed the decision of the board regarding claim 8.

Turning to the Barrett rejection, the CCPA found that Barrett appeared to have invented macroreticular VBC-based resins and condensate polishing with macroreticular VBC-based resins. The court, however, went on to reverse the board's decision regarding the Barrett rejection.

The court found that in making the Barrett rejection both the examiner and the board had rejected the claims as obvious in view of the invention of another (Barrett) who had not abandoned, suppressed, or concealed it. Judge Maletz,[54] speaking for the court, indicated that while the CCPA approved such a rejection in *In re Bass*, the *Bass* decision was limited to the circumstances of *that* case, and that the circumstances presently before the court were significantly different.

First, in *Bass* the record contained clear and conclusive evidence of priority. In *Clemens* the record was devoid of any evidence tending to show the order in which the Barrett invention and the applicants' invention were made. The examiner had concluded that Barrett was the first inventor, reasoning that it would be logically inconsistent that applicants invented the process of using VBC-based resins prior to Barrett inventing VBC-based resins per se. The board, on the other hand, placed the burden on applicants to prove

54 The Honorable Herbert N. Maletz, Judge, United States Court of International Trade, sitting by designation.

that Barrett's was *not* the prior invention, reasoning that since applicants' application and the Barrett patent were coassigned, the assignee had possession of the necessary evidence to establish priority of inventorship.

The CCPA found that the composition per se invented by Barrett and disclosed in the Barrett patent was *macroreticular* VBC-based resins, and that all of applicants' claims (except claim 6) included in their coverage the use of *gellular* as well as macroreticular VBC-based resins. Since gellular VBC-based resins were known prior to Barrett's discovery, the court found it not logically inconsistent that applicants invented the process of using VBC-based resins in condensate polishing prior to Barrett inventing macroreticular VBC-based resins.[55]

The court reaffirmed its holding in *Bass* that common assignment of an application and a reference patent having an earlier filing date did not in and of itself establish priority of invention. Citing *In re Bulloch,* the court restated that coassignment does not alter the rule that any proper rejection involving section 102(g), whether or not combined with section 103, must be based upon evidence of an invention prior to that of the applicant.[56]

Because the record did not support a finding that Barrett made his invention before applicants made the invention of claims 1-5 and 7-10, the court held that the 102(g)/103 rejection of those claims must fall.[57]

Second, in *Bass* the record clearly established that at least one of the three Bass coinventors had actual knowledge of the prior invention before the making of their joint invention. In *Clemens* the record was devoid of any evidence tending to show that any of the applicants had knowledge of the Barrett invention at the time they made their joint invention.

The court indicated that under section 103, obviousness is determined with reference to a person having ordinary

55 Applicants had alleged that their original work was done with gellular VBC-based resins.

56 622 F.2d at 1039, 206 U.S.P.Q. at 298.

57 With regard to clain. 6, which was limited to macroreticular VBC-based resins, the court found th: examiner's reasoning to be sound and accordingly affirmed the decision of the board.

skill in the art to which the claimed subject matter pertains, and that *Bass* effectively imputed to such a person the applicants' own knowledge of another's prior invention. The court refused to extend *Bass* to impute to such a hypothetical person knowledge which was not shown to have been known to either the public or the applicants. The court stated:

> Where an applicant *begins* with knowledge of another's invention that will be available to the public at a later date as a result of an issued patent, treating this other invention as prior art is justified under facts such as those in Bass. No such consideration is present when the applicant does not begin with such knowledge. To the contrary, where this other invention is unknown to both the applicant and the art at the time the applicant makes his invention, treating it as 35 USC 103 prior art would establish a standard for patentability in which an applicant's contribution would be measured against *secret prior art*. Such a standard would be detrimental to the innovative spirit the patent laws are intended to kindle. In as much as there are no competing policy considerations to justify it, as there is in the case of §102(e) prior art and lost counts, we decline to establish such a standard here.[58]

III. A Two-Prong Test for Determining Whether the Invention of Another Is Available As Prior Art

A. *The Lines of Inquiry Suggested by In re Bass and In re Clemens*

In *Bass* the court was sharply divided. Judge Rich indicated that the law as applied in *Bass* was in conformity with the law as applied in the courts in passing on patent validity as it should be[59] and did not change the law as it had been in the CCPA for at least 20 years.[60] Judge Baldwin indicated that the Rich opinion overruled a long line of previous CCPA cases without needing to do so,[61] and allows subjective, secret knowledge to become the standard against

---

58 622 F.2d at 1039-40, 206 U.S.P.Q. at 299 (footnotes omitted) (emphasis added). *Cf.* In re Stalego, 154 U.S.P.Q. 52 (Pat. Off. Bd. App. 1966); In re Thelin, 152 U.S.P.Q. 624 (Pat. Off. Bd. App. 1966).

59 474 F.2d at 1285, 177 U.S.P.Q. at 185.

60 *Id.* at 1288, 177 U.S.P.Q. at 187.

61 *Id.* at 1291, 177 U.S.P.Q. at 190.

which patentability is judged.[62] Judge Lane indicated that the statements of law made by Judges Rich and Baldwin regarding the 102(g)/103 issue were neither necessary for nor essential to the disposition of the appeal.[63]

In *Clemens*, however, the court was in agreement. This was perhaps not only due to the court consisting of different judges,[64] but also to the opinion meeting many of the concerns about "secret" prior art expressed by Judge Baldwin in *Bass*.

Bass and *Clemens* suggest two lines of inquiry to determine whether the alleged prior invention of another who had not abandoned, suppressed, or concealed that invention is available as prior art for the purpose of determining the patentability of the invention claimed in a patent application. One line of inquiry involves determining priority of invention. The other involves determining whether the alleged prior invention was known to either the art or the applicant at the time the applicant made his invention.

Additionally, *Bass* and *Clemens* indicate that common assignment of the patent application and of a reference patent which has an earlier filing date and describes but does not claim the invention claimed in the application, does not in and of itself establish priority of invention.[65] Moreover, the fact that the applicant and the patentee were both employed by a common assignee at the time the applicant made his invention does not in and of itself impute to the applicant knowledge of the invention described in the patent.[66]

Based upon the suggested lines of inquiry, a two-prong test can be developed for determining whether the invention of another that had not been abandoned, suppressed, or concealed is available as prior art within the meaning of that

---

62 *Id.* at 1304, 177 U.S.P.Q. at 199.

63 *Id.* at 1306, 177 U.S.P.Q. at 201.

64 In *Bass* the court consisted of Judges Rich, Almond, Baldwin, Lane, and Rosenstein. In *Clemens* the court consisted of Judges Markey, Rich, Baldwin, Miller, and Maletz.

65 In re Bass, 474 F.2d at 1287, 177 U.S.P.Q. at 187; In re Clemens, 622 F.2d at 1038-39, 206 U.S.P.Q. at 298.

66 Implicit from text accompanying n.21 in In re Clemens, 622 F.2d at 1039, 206 U.S.P.Q. at 299.

term in section 103 by virtue of section 102(g), which includes asking:

(1) Was the invention of the other made before the applicant made his invention?

(2) Did either the applicant or the art have knowledge of the invention of the other at the time the applicant made his invention?

Each is a factual inquiry, the affirmative determination of which must be supported by evidence contained in the record. If the answer to *both* questions is affirmative, the invention of the other is available as prior art. If the answer to *either* question is negative, the invention of the other is not available.

Determining answers to these two basic questions involves numerous factual inquiries, each of which involves numerous legal considerations.

Assume invention *A* is claimed in patent application I filed in the name of inventors *U* and *V*, and that invention *B* is the invention of another, namely of inventors *Y* and *Z*. Assume further that applicants *U* and *V* are both employed in a research facility of corporation *Q*, and that corporation *Q* is the assignee of their patent application. Then the questions that should be asked and the order in which they should be asked can be organized as follows:

Priority Inquiry:

(1) Was invention *B* conceived and reduced to practice?

(2) Is conception and reduction to practice of invention *B* corroborated?

(3) Was invention *B* conceived and/or reduced to practice before applicants made invention *A*?

Knowledge Inquiry:

(1) Was invention *B* reduced to practice inside corporation *Q*?

(2) Was reduction to practice of invention *B* actually known to applicants at the time they made their invention?

(3) Was reduction to practice of invention *B* known to the attorney prosecuting application I?

(4) Was reduction to practice of invention *B* known to the art at the time applicants made their invention?

(a) Was invention *B* described in an application for patent?

(b) Was invention *B* described in a technical paper?

(c) Was invention *B* commercially exploited?

1. Priority

Determining whether invention *B* is prior in time to invention *A*, and thus possibly available as prior art, can be a complex, involved task.

a. Was the Invention of Another Conceived and Reduced to Practice?

The making of invention *B*, as the making of all inventions, requires both conception and reduction to practice. Invention *B* is not completed until it is reduced to practice, either actually or constructively.[67] Significantly, for invention *B* to be available as prior art it must have been completed, that is, reduced to practice, prior to applicants making their invention or, where inventions *A* and *B* are simultaneously reduced to practice, invention *B* must have been conceived prior to the conception of invention *A*.[68] Moreover, it is submitted that the reduction to practice of invention *B* must be corroborated.

Invention *B* could be constructively reduced to practice by the filing of a patent application that meets the requirements of Title 35, U.S. Code, section 112.[69] Actual reduction to practice would occur when an actual physical embodiment of invention *B* is made and sufficiently tested to dem-

67 Rivise and Caesar, 1 Interference Law and Practice § 130 (Michie 1940).

68 In re Bass, 474 F.2d at 1287, 177 U.S.P.Q. at 187, *citing* Whittier v. Borchardt, 154 F.2d 522, 69 U.S.P.Q. 382 (C.C.P.A. 1946).

69 Boyce v. Anderson, 451 F.2d 818, 171 U.S.P.Q. 792 (9th Cir. 1971); Kardulas v. Florida Mach. Prods. Co., 438 F.2d 1118, 1120, 168 U.S.P.Q. 673, 675 (5th Cir. 1971); James B. Clow & Sons, Inc. v. United States Pipe & Foundry Co., 313 F.2d 46, 48n.1, 136 U.S.P.Q. 397, 398-99 (5th Cir. 1963); Hann v. Venetian Blind Corp., 111 F.2d 455, 458, 45 U.S.P.Q. 292, 296 (9th Cir. 1940); In re McKay, 200 U.S.P.Q. 224 (Pat. Off. Bd. App. 1975).

onstrate that the embodiment functions for its intended purpose.[70] In either case, a reduction to practice must occur.[71]

The reduction to practice requirement for invention *B* to be an anticipatory reference under section 102(g) is inherent in the concept of the reference being available as prior art under section 103 by virtue of section 102(g). That is, all the elements necessary to make invention *B* an anticipatory reference under section 102(g) must be met before it can be available as prior art to obviate the claimed invention under section 103.

b. Is Conception and Reduction To Practice of the Invention of Another Corroborated?

It is submitted that there must be corroboration of the conception and the reduction to practice of invention *B* before that invention can legally be considered to have been conceived and reduced to practice, respectively.[72] In the context of a priority contest in an interference situation, it is fundamental that evidence tending to show conception and tending to show reduction to practice must be corroborated.[73] Since the same statutory basis, namely section

---

70 CTS Corp. v. Piher Int'l Corp., 593 F.2d 777, 201 U.S.P.Q. 649 (7th Cir. 1979); Steinberg v. Seitz, 517 F.2d 1359, 186 U.S.P.Q. 209 (C.C.P.A. 1975); Tomecek v. Stimpson, 513 F.2d 614, 185 U.S.P.Q. 235 (C.C.P.A. 1975); In re Dardick, 496 F.2d 1234, 1238, 181 U.S.P.Q. 834, 837 (C.C.P.A. 1974); Hradel v. Griffith, 367 F.2d 851, 151 U.S.P.Q. 580 (C.C.P.A. 1966); Gordon v. Hubbard, 347 F.2d 1001, 1006, 146 U.S.P.Q. 303, 307 (C.C.P.A. 1965); Harding v. Steingiser, 318 F.2d 748, 138 U.S.P.Q. 32 (C.C.P.A. 1963); Fitzgerald v. Arbib, 268 F.2d 763, 767-68, 122 U.S.P.Q. 530, 533 (C.C.P.A. 1959); Sinko Tool Mfg. v. Automatic Devices Corp., 157 F.2d 974, 977, 71 U.S.P.Q. 199, 202 (2d Cir. 1946); Eastern Rotorcraft Corp. v. United States, 384 F.2d 429, 155 U.S.P.Q. 729 (Ct. Cl. 1967); Elfab Corp. v. NCR Corp., 204 U.S.P.Q. 999 (C.D. Calif. 1979).

71 Coffin v. Ogden, 85 U.S. (18 Wall.) 120 (1873); Seymour v. Osborne, 78 U.S. (11 Wall.) 515 (1870); Boyce v. Anderson, 451 F.2d 818, 171 U.S.P.Q. 792 (9th Cir. 1971); Bedford v. Hunt, 3 F. Cas. 37 (C.C.D. Mass. 1817) (No. 1,217); Int'l Glass Co. v. United States, 408 F.2d 395, 159 U.S.P.Q. 434, 161 U.S.P.Q. 116 (Ct. Cl. 1969).

72 *But cf.* Janicke, *What Prior Art is "Known" to the Client?—A Suggested Investigative Approach*, 1979 Patent Law Annual 67, 77 (Matthew Bender 1979).

73 Berges v. Gottstein, 618 F.2d 771, 205 U.S.P.Q. 691 (C.C.P.A. 1980); Randolph v. Shoberg, 590 F.2d 923, 200 U.S.P.Q. 647 (C.C.P.A. 1979); Velsicol Chem. Corp. v. Monsanto Co., 579 F.2d 1038, 198 U.S.P.Q. 584 (7th Cir. 1978); Breuer v. De Marinis, 558 F.2d 22, 194 U.S.P.Q. 308 (C.C.P.A. 1977); Mikus v. Wachtel, 542 F.2d 1157, 191 U.S.P.Q. 571 (C.C.P.A. 1976); Peeler v. Miller, 535 F.2d 647, 190 U.S.P.Q. 117 (C.C.P.A. 1976); Grasselli v. Dewing, 534 F.2d 306, 189 U.S.P.Q. 637 (C.C.P.A. 1976); Tomecek v. Stimpson, 513 F.2d 614, 185 U.S.P.Q. 235

102(g), supports the determination of priority in the interference situation as well as in the 102(g)/103 situation, it is likewise fundamental that in the latter situation reduction to practice of invention *B* must be corroborated.

c. Was the Invention of Another Conceived and/or Reduced To Practice Before Applicant Made His Invention?

Having determined the points in time when invention *B* was conceived and reduced to practice, the points in time when invention *A* was conceived and reduced to practice must next be determined. The evidence tending to establish these dates must also be corroborated.

d. Determination of Priority

Assume corroborated dates of conception and reduction to practice of both inventions *A* and *B* are established by competent evidence. Assume further that inventions *A* and *B* are completely independent of each other, that the respective inventors are totally ignorant of each others' work, and that inventions *A* and *B* are not identical. Also assume that invention *A* is constructively reduced to practice by the filing of patent application I, and that invention *B* is actually reduced to practice. Assume further, that although a patent application disclosing invention *B* has not been and never will be filed, invention *B* has not been abandoned, suppressed, or concealed. Then nine factual scenarios[74] can exist:

(i) Invention *B* was the first to be conceived and the last to be reduced to practice;

(C.C.P.A. 1975); Blicharz v. Hays, 496 F.2d 603, 181 U.S.P.Q. 712 (C.C.P.A. 1974); Berry v. Webb, 412 F.2d 261, 162 U.S.P.Q. 170 (C.C.P.A. 1969); Mann v. Werner, 347 F.2d 636, 146 U.S.P.Q. 199 (C.C.P.A. 1965); Rooted Hair, Inc. v. Ideal Toy Corp., 329 F.2d 761, 141 U.S.P.Q. 540 (2d Cir. 1964); Miessner v. Hoschke, 131 F.2d 865, 55 U.S.P.Q. 221 (D.C. Cir. 1942); Electro-Metallurgical Co. v. Krupp Nirosta Co., 122 F.2d 314, 50 U.S.P.Q. 158 (3d Cir. 1941); Petrie v. De Schweinitz, 19 App. D.C. 386 (1902); Ritter v. Rohm & Hass Co., 271 F. Supp. [illegible], 154 U.S.P.Q. 518 (S.D.N.Y. 1967); Moran v. Paskert, 205 U.S.P.Q. 356 (Pat. Off. Bd. Pat. Int'f 1979); Rivise & Caesar, 1 Interference Law and Practice §§111. [illegible]-128, 132, 152 (Michie 1940).

74 While the term "scenario" is defined as "an outline or synopsis of a play" and as "a plot outline used by actors of the commedia dell'arte," Webster's Third New International Dictionary 2028 (unabridged 1969), it is used herein to describe separate sequences of events.

(ii) Invention *B* was the first to be conceived and the first to be reduced to practice;

(iii) Invention *B* was the first to be conceived and inventions *A* and *B* were simultaneously reduced to practice;

(iv) Invention *A* was the first to be conceived and the first to be reduced to practice;

(v) Invention *A* was the first to be conceived and the last to be reduced to practice;

(vi) Invention *A* was the first to be conceived and inventions *A* and *B* were simultaneously reduced to practice;

(vii) Inventions *A* and *B* were conceived simultaneously and invention *A* was reduced to practice before invention *B;*

(viii) Inventions *A* and *B* were conceived simultaneously and invention *A* was reduced to practice after invention *B;* and

(ix) Inventions *A* and *B* were conceived simultaneously and were reduced to practice simultaneously.

In considering each scenario, the second sentence of section 102(g) must be considered as in an interference situation.[75]

Considering scenario (i), if inventors *Y* and *Z* were reasonably diligent from a time prior to conception of invention *A* until their subsequent reduction to practice of invention *B*, invention *B* is the prior invention by virtue of section 102(g), second sentence. If inventors *Y* and *Z* were not reasonably diligent during that period of time, invention *A* is the prior invention. It matters not that this is not an interference situation per se because the established law in determining priority of invention in an interference situation must be applicable in a 102(g)/103 situation inasmuch as both find their basis in the same statutory provision, section 102(g).

In scenarios (ii) and (iii) diligence is irrelevant because in each instance invention *B* is not reduced to practice after

---

75 The second sentence of 35 U.S.C. § 102(g) reads: In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

invention *A*. In each scenario invention *B* is the prior invention.[76]

In scenario (iv) invention *B* is clearly not prior because invention *A* was the first to be conceived and reduced to practice.

In scenario (v) where invention *A* was the first to be conceived and the last to be reduced to practice, if inventors *U* and *V* were reasonably diligent from a time prior to conception of invention *B* until their subsequent reduction to practice of invention *A*, invention *A* is the prior invention by virtue of section 102(g), second sentence. If they were not, invention *B* is prior.[77]

Turning to scenario (vi), the situation is analogous to that of scenario (iii). Diligence is irrelevant and invention *A* is prior to invention *B*.

It is submitted that in scenarios (vii) and (viii) the prior invention is the first invention reduced to practice. Diligence is irrelevant because neither inventive entity is first to conceive.

In the last scenario it is apparent that neither invention is prior.[78]

Only scenarios (i), (ii), and (iii) are of practical importance. Only in these factual situations is it possible for inventors *U* and *V* to begin with knowledge of invention *B*. In each of the remaining six factual situations inventors *U* and *V* begin making their invention by conceiving invention *A*

---

76 Scenario (iii) is that of In re Bass with invention *B* being the Jenkins invention and invention *A* being the joint invention of Bass, Jenkins, and Horvat, except for the assumption in this scenario of independent inventions and lack of knowledge.

77 *Compare* scenarios (i) *and* (v).

78 Simultaneous independent conception and simultaneous independent reduction to practice are "secondary considerations" from which the obviousness of inventions *A* and *B* may be inferred. Ceco Corp. v. Bliss & Laughlin Indus., Inc., 557 F.2d 687, 690, 195 U.S.P.Q. 337, 339 (9th Cir. 1977); Fred Whitaker Co. v. E.T. Barwick Indus., Inc., 551 F.2d 622, 628, 194 U.S.P.Q. 113, 117-18 (5th Cir. 1977); Lerner v. Child Guidance Prods., Inc., 547 F.2d 29, 31, 193 U.S.P.Q. 329, 330-31 (2d Cir. 1976); Stamicarbon, N.V. v. Escambia Chem. Corp., 430 F.2d 920, 928-29, 166 U.S.P.Q. 363, 369 (5th Cir. 1970); Reeves Bros., Inc. v. U.S. Laminating Corp., 417 F.2d 869, 872, 163 U.S.P.Q. 577, 579 (2d Cir. 1969); Continental Can Co. v. Old Dominion Box Co., 393 F.2d 321, 327, 157 U.S.P.Q. 353, 357-58 (2d Cir. 1968); Novo Indus. Corp. v. Standard Screw Co., 374 F.2d 824, 828, 152 U.S.P.Q. 543, 546 (7th Cir. 1967); Felburn v. New York Central R.R., 350 F.2d 416, 425-26, 146 U.S.P.Q. 622, 630 (6th Cir. 1965); Kay Patents Corp. v. Martin Supply Co., 202 F.2d 47, 50, 96 U.S.P.Q. 225, 228 (4th Cir. 1953).

either prior to or simultaneously with the conception of invention *B* by inventors *Y* and *Z*.

In *Clemens* the CCPA spoke in terms of what knowledge the applicant *begins* with (referring to the factual situation of *Bass*) and what knowledge the applicant has when he *makes* his invention (referring to the factual situation of *Clemens*).[79] An applicant *begins* his invention with a conception sufficient to enable a person of ordinary skill in the art to construct an embodiment of the invention without extensive research or experimentation.[80] And, an applicant *makes* his invention when he conceives and successfully reduces his invention to practice. Thus for invention *B* to be prior to invention *A*, (1) invention *B* must have been conceived prior to the conception of invention *A*, and (2) invention *B* must have been reduced to practice either (i) before the conception of invention *A*, or (ii) after the conception of invention *A* but before invention *A* is reduced to practice, or (iii) after both the conception and reduction to practice of invention *A* provided inventors *Y* and *Z* are reasonably diligent from before conception of invention *A* until their subsequent reduction to practice of invention *B*.[81]

To reduce the number of possible permutations and to simplify the discussion that follows, unless otherwise indicated, it will be assumed that invention *B* was in fact reduced to practice prior to the conception of invention *A*.

2. Knowledge

Under section 103, obviousness is determined with reference to a person having ordinary skill in the art to which the claimed subject matter pertains. *Bass* essentially imputes to that hypothetical person[82] the applicants' own

79 In re Clemens, 622 F.2d at 1039-40, 206 U.S.P.Q. at 299.

80 *See infra* note 90.

81 Interpreting In re Bass and In re Clemens to stand for the proposition that invention *B* must be reduced to practice before the conception of invention *A* would be contrary to *Bass* wherein the Jenkins invention, which was conceived prior to, and reduced to practice simultaneous with, the Bass, Jenkins, and Horvat invention, was held to be the prior invention. In re Bass, 474 F.2d at 1287, 177 U.S.P.Q. at 186-87.

82 Flour City Architectual Metals v. Alpana Alum. Prods., 454 F.2d 98, 107-08, 172 U.S.P.Q. 341, 349 (8th Cir. 1972) ("We do not measure the knowledge of any particular person, or any particular expert who might testify in the case, but, rather, we measure the knowledge of a hypothetical person skilled in the art, who has thought about the subject matter of the patented invention in light of that art.")

knowledge of another's prior invention, and *Clemens* essentially requires a factual showing sufficient to establish that the prior invention was known to the applicants or to the art at the time applicants made their invention. Accordingly, invention *B* may be available as prior art only if applicants *U* and *V* are shown to have had either actual or constructive knowledge of invention *B* prior to their making of invention *A*. Determining whether the prerequisite knowledge exists can be more complex and involved than determining priority of invention.

a. Was the Invention of Another Reduced To Practice Inside the Corporation Employing Applicant?

In both *Bass* and *Clemens* the CCPA addressed the question of whether common ownership in and of itself established priority of invention between two inventions, both of which were made within the same corporation. The court held priority must be established by evidence over and above that of common ownership.[83] The court did not, however, explicitly address the question of whether common ownership in and of itself establishes knowledge.

Assume inventors *U* and *V* and inventors *Y* and *Z* are each employed by corporation *Q*. Assume that invention *B* was reduced to practice prior to conception of invention *A*. Then, by virtue of both inventive entities being employed by the same corporation, are applicants *U* and *V* charged with constructive knowledge of invention *B?* It is submitted that the answer is no. If inventors *U* and *V* were charged with constructive knowledge of invention *B* (an invention which although not abandoned, suppressed, or concealed is nevertheless unknown to the art), the contribution of these applicants to the art would in essence be measured against "secret" prior art, a standard explicitly denounced in *Clemens*.[84]

This is not to say, however, that it does not matter whether invention *B* was reduced to practice inside or out-

---

83 In re Bass, 474 F.2d at 1287-88, 177 U.S.P.Q. at 186-87; In re Clemens, 622 F.2d at 1038-39, 206 U.S.P.Q. at 298-99.

84 In *Clemens* it appears that the inventor of the subject matter disclosed in the Barrett patent and applicants Clemens, Hurwitz, and Walker were all employed by the same corporation.

side corporation *Q*. If invention *B* was reduced to practice inside the corporation, a duty may exist to determine facts surrounding the making of that invention and to convey that information to the PTO during prosecution of patent application I. Such a duty, however, does not fall upon applicants *U* and *V*.[85] And, more important, the existence of such a duty does not operate to charge inventors *U* and *V* with knowledge of invention *B*.

b. Was Reduction To Practice of the Invention of Another Actually Known to Applicant At the Time He Made His Invention?

In determining actual knowledge of invention *B*, inquiry is made not to the actual knowledge of the inventive entity consisting of inventors *U* and *V*, but rather to the actual knowledge of each of the coinventors. If either had actual knowledge of invention *B*, that knowledge is imputed to the hypothetical person having ordinary skill in the art of section 103. It is not necessary that each of the coinventors have actual knowledge. This much is clear from *Bass* and *Clemens*.[86] This does not, however, dispose of the question.

Three factual scenarios can readily exist:[87]

(i) Invention *B* becomes known prior to conception of invention *A*;

(ii) Invention *B* becomes known after reduction to practice of invention *A*; and

(iii) Invention *B* becomes known after conception, but before reduction to practice, of invention *A*.[88]

In the first scenario applicants know of invention *B* *prior* to the beginning of their making of invention *A*, that

85 *See* § III(A)(2)(c), *infra*.

86 In In re Bass, where at least one of the three applicants had actual knowledge of the prior invention before the making of the Bass invention, the court held the prior invention was available as prior art. In In re Clemens, where there was no evidence that any of the applicants had knowledge of the alleged prior invention before the making of the Clemens invention, the court held the alleged prior invention was not available as prior art.

87 In each scenario it is assumed that invention *B* is not known to the art.

88 Two additional scenarios can exist in which invention *B* becomes known simultaneous with either conception or reduction to practice of invention *A*. Since the requisite simultaneous occurrence of events, that is, two events being performed by the same entity at the same time, is remote, these additional scenarios will not be dealt with.

is, prior to conception of invention *A*. Consequently, invention *B* is available as prior art.

In the second scenario applicants did not know of invention *B* until *after* completion of making invention *A*, that is, after reduction to practice of invention *A*. Consequently, invention *B* is not available as prior art.

In the third scenario applicants obtained knowledge of invention *B* *during* the course of making their invention, that is, after conception but before reduction to practice of invention *A*. While at first blush this factual situation may appear difficult to address, it is being addressed *after* having already determined that invention *B* is in fact the prior invention.[89] Consequently, the conception of invention *B* and the diligence of inventors *U* and *V* are irrelevant to the present inquiry.

It is submitted that the determinative factor is whether the knowledge of invention *B* materially affected the subsequent reduction to practice of invention *A*. If it did, invention *B* is available as prior art; if it did not, invention *B* is not available as prior art.

At the time applicants acquired knowledge of invention *B*, invention *A* was already completely conceived. But conception is not complete until it is sufficiently developed to enable one of ordinary skill in the art to reduce the conception to practice without extensive research or experimentation.[90] Thus, at the time knowledge of invention *B* is acquired, all that remains to be done for invention *A* to be completed is the performance of a task, albeit a very important task, but a task which can be performed by anyone skilled in the art.[91] When that task is actually performed by

89 Since *both* priority of invention *B* *and* knowledge of invention *B* are necessary for that invention to be available as prior art, if invention *B* is not in fact prior, knowledge of that invention is immaterial.

90 Kardulas v. Florida Mach. Prods. Co., 438 F.2d 1118, 168 U.S.P.Q. 673 (5th Cir. 1971); Spero v. Ringold, 377 F.2d 652, 660, 153 U.S.P.Q. 726, 732 (C.C.P.A. 1967); In re Tansel, 253 F.2d 241, 117 U.S.P.Q. 188 (C.C.P.A. 1958); Bac v. Loomis, 252 F.2d 571, 117 U.S.P.Q. 29 (C.C.P.A. 1958); Land v. Dreyer, 155 F.2d 383, 69 U.S.P.Q. 602 (C.C.P.A. 1946); Anderson v. Anderson, 403 F. Supp. 834, 188 U.S.P.Q. 194 (D.D.C. 1975).

91 Gunter v. Stream, 573 F.2d 77, 197 U.S.P.Q. 482 (C.C.P.A. 1978); Townsend v. Smith, 36 F.2d 292, 4 U.S.P.Q. 269 (C.C.P.A. 1929); Mergenthaler v. Scudder, 11 App. D.C. 264, 276 (1897). This task must be performed by or on behalf of the applicants or their assignee to be a reduction to practice of applicants' invention. Litchfield v. Eigen, 535 F.2d 72, 190 U.S.P.Q. 113 (C.C.P.A. 1976); Borglin v.

a third person acting on behalf of the applicants or their assignee, that third person does not become a coinventor merely by virtue of performing his task.[92]

Suppose applicants *U* and *V* conceive invention *A* and thereafter instruct a third person to reduce their conception to practice with sufficient detail that the third person need not do further research or experimentation and need not communicate with applicants until after his reduction to practice of invention *A*. Suppose further that applicants acquire knowledge of invention *B* after their instructing of the third person.

In this factual situation applicants' later knowledge of invention *B* does not affect their reduction to practice of invention *A*. The reduction to practice by the third person occurs in due course based totally on the conception of invention *A* and the ability of one skilled in the art. Since the knowledge of invention *B* did not in fact affect either conception or reduction to practice of invention *A*, knowledge of invention *B* cannot be imputed to the hypothetical person of ordinary skill in the art of section 103. To impute such knowledge would exalt form over substance.

This situation is radically different from that where actual knowledge of a reference by the inventor is immaterial because the hypothetical person skilled in the art is charged with knowledge of all things known to the art. Here invention *B* is *not* known to the art.[93]

The situation becomes more difficult when invention *A* is reduced to practice not by a third person, but by the applicants themselves after acquiring knowledge of invention *B*. It is submitted that the test remains the same: Was the reduction to practice of invention *A* materially affected by knowledge of invention *B*? Only if it was so affected should knowledge of invention *B* be imputed to that hypothetical person of section 103.

Palmer, 70 F.2d 899, 21 U.S.P.Q. 587 (C.C.P.A. 1934); De Forest v. Hartley, 10 F.2d 901 (D.C. Cir. 1926); Anderson v. Anderson, 403 F. Supp. 834, 188 U.S.P.Q. 194 (D.D.C. 1975).

92 Applegate v. Scherer, 332 F.2d 571, 141 U.S.P.Q. 796 (C.C.P.A. 1964).

93 *Compare* § III(A)(2)(d), *infra*. If invention *B* remains unknown to the art for an unreasonable period of time it may be deemed to have been abandoned, suppressed, or concealed. If invention *B* becomes known to the art within a reasonable period of time, it is available as prior art.

Whether knowledge of invention *B* materially affected the reduction to practice of invention *A* would appear to be demonstrated by establishing precisely what was contained in the conception of invention *A*, and establishing the level of ordinary skill in the art at the time invention *A* was conceived. The former would entail the same showing of conception required to demonstrate priority of invention, and the latter would essentially entail the same showing required in the test for obviousness enunciated in *Graham v. John Deere Co.*[94]

c. Was Reduction To Practice of the Invention of Another Known to the Attorney Prosecuting Applicant's Patent Application?

Rule 56[95] imposes a duty of disclosure not only on the applicant for a patent, but also on the attorney prosecuting the patent application and upon every other individual who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor or with the assignee or the like. All such individuals have a duty to disclose to the PTO information they are aware of which is material to the examination of the application.[96]

Rule 65[97] provides for an acknowledgment of the duty of disclosure by the applicant in the oath or declaration filed

---

94 383 U.S. 1, 17, 148 U.S.P.Q. 459, 466-67 (1966).

95 37 C.F.R. § 1.56 reads in pertinent part: § 1.56 Duty of disclosure; striking of applications.

(a) A duty of candor and good faith toward the Patent and Trademark Office rests on the inventor, on each attorney or agent who prepares or prosecutes the application and on every other individual who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application. All such individuals have a duty to disclose to the Office information they are aware of which is material to the examination of the application. Such information is material where there is a substantial likelihood that a reasonable examiner would consider it important in deciding whether to allow the application to issue as a patent. The duty is commensurate with the degree of involvement in the preparation or prosecution of the application.

96 Information is material if the claims would not have been allowed but for the misrepresentation or concealment of that information. Norton v. Curtiss, 433 F.2d 779, 795, 167 U.S.P.Q. 532, 545 (C.C.P.A. 1970); Timely Prods. Corp. v. Arron, 523 F.2d 288, 297, 187 U.S.P.Q. 257, 263 (2d Cir. 1975).

97 37 C.F.R. § 1.65 reads in pertinent part:

§ 1.65 Oath or declaration.

(a)(1) The applicant . . . must acknowledge a duty to disclose information he is aware of which is material to the examination of the application.

with the application, and Rules 97,[98] 98,[99] and 99[100] provide for a prior art statement as a vehicle by which such information can be brought to the attention of the examiner. Additionally, the attorney may present information to the examiner that the examiner should be apprised of, but which in the attorney's professional judgment does not negate patentability, in an information statement. In such a statement the attorney can set forth the operative facts and present his reasons why those facts do not negate patentability.[100.1] If the examiner considers the factual situation to be material to his consideration of patentability, he may then request the attorney to supply additional information.[101] Thusly, the prior art known to the applicant as well as other information deemed material to the examination of the application can be presented to the PTO.[102]

Assume that invention *B* is unknown to applicants but is known to the attorney prosecuting their application. It is still assumed that invention *B* is not known to the art and has not been abandoned, suppressed, or concealed. Then four factual scenarios can exist:

---

98 37 C.F.R. § 1.97 reads:

§ 1.97 Filing of prior art statement.

(a) As a means of complying with the duty of disclosure set forth in § 1.56, applicants are encouraged to file a prior art statement at the time of filing the application or within three months thereafter. The statement may either be separate from the specification or may be incorporated therein.

(b) The statement shall serve as a representation that the prior art listed therein includes, in the opinion of the person filing it, the closest prior art of which that person is aware; the statement shall not be construed as a representation that a search has been made or that no better art exists.

99 37 C.F.R. § 1.98 (relates to the content of a prior art statement).

100 37 C.F.R. § 1.99 (relates to updating the prior art statement).

100.1 *Cf.* Manual of Patent Examining Procedure § 2122 *et seq.* (4th ed. 1979: Rev. 3, July 1980) [hereinafter cited as MPEP] (relates to statutory bars of "public use" and "on sale" under 35 U.S.C. §102(b)).

101 *See* Skillman, *1977 Rules On Duty of Disclosure*, 1979 Patent Law Annual 29, 51 *et seq.* (Matthew Bender 1979) [hereinafter cited as Skillman] *and* MPEP, *supra* note 100.1, §§2021.04, 2031 (Rev. 2, April 1980). *See also* MPEP §§2123, 2124 (Rev. 3, July 1980).

102 *See* Janicke, *What Prior Art Is "Known" to the Client?—A Suggested Investigative Approach*, 1979 Patent Law Annual 67 *and* MPEP, *supra* note 100.1, ch. 2000.

(i) Invention *B* is reduced to practice inside corporation *Q* and the attorney is in-house patent counsel;[103]

(ii) Invention *B* is reduced to practice inside corporation *Q* and the attorney is outside patent counsel;

(iii) Invention *B* is reduced to practice outside corporation *Q* and the attorney is in-house patent counsel; and

(iv) Invention *B* is reduced to practice outside corporation *Q* and the attorney is outside patent counsel.

In each scenario invention *B* is not prior art because it was unknown to the art and to the applicants at the time they made their invention. Arguably, then, since invention *B* is not prior art and therefore cannot be used to render applicants' claims unpatentable, a reasonable examiner would *not* consider it important in deciding whether to allow the application to issue as a patent. And, consequently, the attorney need not inform the PTO of invention *B*. This, however, is submitted to be too narrow a reading of Rule 56.

After the attorney decides that invention *B* does not negate patentability, he can, in good faith, file the patent application. The examiner then must render a decision on patentability. But to render such a decision the examiner, like the attorney, needs to be apprised of all reasonably necessary information. Since invention *B* is on its face prior art, it is part of that information.

Accordingly, the better practice is for the attorney to file an information statement disclosing invention *B* to the PTO and showing by clear and convincing evidence[103.1] that invention *B* is not prior art because it was not known to either the art or to the applicants at the time they made their invention.[103.2] Thus, even though applicants *U* and *V* have no actual knowledge of invention *B* and are not construc-

---

103 It will be assumed that as in-house patent counsel, the attorney devotes his full professional energy to corporation *Q* and that any information he obtains regarding activities outside corporation *Q* is public information.

103.1 *Cf.* MPEP, supra note 100.1, § 2124 (relates to rebutting a 35 U.S.C. § 102(b) prima facie case).

103.2 Such practice should effectively negate a subsequent allegation that the attorney violated the duty of disclosure.

tively charged with knowledge of invention *B*,[104] invention *B* nonetheless should be brought to the attention of the PTO.

The question then is whether the attorney can disclose invention *B* to the PTO without breaching his attorney-client responsibility to another inventor.

In the first and second scenarios both inventions are made within corporation *Q* and both are known to the attorney. It is submitted that the real party in interest of both invention *A* and invention *B*, corporation *Q*, is charged with knowledge of both inventions, and the duty to convey such information to the PTO falls upon the attorney.[105] Consequently, it may be impossible to maintain confidentiality of invention *B* without abandoning patent application I.[106]

In scenario (iii) where in-house patent counsel has knowledge of invention *B*'s reduction to practice outside corporation *Q*, such knowledge is public knowledge due to the definition of in-house counsel set forth in the margin[107] and, therefore, invention *B* is known to the art. Consequently, the attorney can readily make this information known to the examiner.

In the fourth scenario where invention *B* is reduced to practice outside of corporation *Q* and the attorney is outside patent counsel, the attorney may have a conflict of interests. The attorney must rely on his professional judgment and determine the extent to which invention *B* should be disclosed.[108] If the attorney cannot inform the PTO about invention *B* without breaching his attorney-client responsibility to another, the attorney may have to withdraw from the case.[109]

d. Was Reduction To Practice of the Invention of Another Known to the Art At the Time Applicant Made His Invention?

---

104 *See* § III(A)(2)(a), *supra*.

105 *See generally* Bernstein, *Duty of Candor and Good Faith—Does Rule 56 Compliance or Noncompliance Support or Defeat An Allegation of Fraud?*. Current Developments in Patent Law 9 (Prac. L. Inst. 1980).

106 *See* Skillman, *supra* note 101, at 56.

107 *See supra* note 103.

108 *See* Skillman, *supra* note 101, at 60-61.

109 *See* ABA Code of Professional Responsibility, Canons 4 and 5 and related Ethical Considerations and Disciplinary Rules.

To impute to the hypothetical person of ordinary skill in the art knowledge of a prior invention that is not known to the applicant, that knowledge must have been known to the art at the time applicant made his invention.[110] If the prior invention was actually known to or used by the art before the invention in question was made, the prior invention is available as prior art within the meaning of that term in section 103 by virtue of section 102(a).[111] Consequently no further inquiry regarding the prior invention having been abandoned, suppressed, or concealed within the meaning of section 102(g) need be made. And, if the prior invention is described in a patent granted on an application for patent filed in the United States before the invention in question is made, the prior invention is available as prior art within the meaning of section 103 by virtue of section 102(e),[112] thereby essentially charging the art with constructive knowledge of the described invention as of the filing date of the application upon which the patent issued.

The inventor of the prior invention need not seek patent protection for his invention to be a section 102(g) reference.[113] He just must not abandon, suppress, or conceal his invention. But if he chooses to exploit his invention by private arrangements, which he is entirely free to do, he may forfeit his right to a patent,[114] or rather forfeit his right to rely on his prior actual reduction to practice to defeat the award of priority to a second inventor[115] due to his concealment and secret use. Moreover, when his use of his

---

110 In re Clemens, 622 F.2d 1029, 206 U.S.P.Q. 289.

111 35 U.S.C. § 102 reads in pertinent part:

§ 102. Conditions for patentability: novelty and loss of right to patent

A person shall be entitled to a patent unless—

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, ...

112 Hazeltine Research Inc. v. Brenner, 382 U.S. 252, 255-56, 147 U.S.P.Q. 429, 431 (1965); In re Harry, 333 F.2d 920, 923-24, 142 U.S.P.Q. 164, 167 (C.C.P.A. 1964).

113 Corona Cord Tire Co. v. Dovan Chem. Corp., 276 U.S. 358 (1928); General Motors Corp. v. Toyota Motor Co., 467 F. Supp. 1142, 205 U.S.P.Q. 158 (S.D. Ohio 1979).

114 Painton & Co. v. Bourns, Inc., 442 F.2d 216, 225, 169 U.S.P.Q. 528, 534 (2d Cir. 1971) (Friendly, J.).

115 Young v. Dworkin, 489 F.2d 1277, 1286, 180 U.S.P.Q. 388, 395 (C.C.P.A. 1974) (Rich, J. concurring).

prior invention is not such that knowledge of the invention is made available to the public, he risks a second inventor securing a patent assertable against everyone, including him[116] because his use did not "enrich the art."[117]

All that is required for a prior invention to be available as a section 102(g) reference, even as of the time when it is unknown to the art, is that the invention be completed, that is, conceived and reduced to practice, and not abandoned, suppressed, or concealed.[118] The "not abandoned, suppressed, or concealed" clause of section 102(g) prevents "the use of truly 'secret' prior invention as prior art under § 103."[119]

The point in time at which the abandonment, suppression, or concealment of the prior invention is measured is at the time the invention in question is made. This is so because section 102(g) speaks in terms of "*before* the applicant's invention". Consequently, if the prior invention is abandoned, suppressed, or concealed after the invention in question is made, such abandonment, suppression, or concealment does not remove the prior invention as a reference.[120]

To prevent invention *B* from being deemed abandoned, suppressed, or concealed within the meaning of section 102(g), inventors *Y* and *Z* must take steps to make their invention publicly known within a reasonable time after the invention is completed. Such steps may include filing a patent application describing invention *B*, presenting a technical paper or publishing an article in which invention *B* is described, or commercially exploiting invention *B*. The

---

116 Palmer v. Dudzik, 481 F.2d 1377, 1387-88, 178 U.S.P.Q. 608, 616 (C.C.P.A. 1973).

117 *Id.* at 1386, 178 U.S.P.Q. at 615. *Cf.* Dunlop Holdings Ltd. v. Ram Golf Corp., 524 F.2d 33, 188 U.S.P.Q. 481 (7th Cir. 1975) (Stevens, J. now Mr. Justice). *cert. denied*, 424 U.S. 958 (1976).

118 Mason v. Hepburn, 13 App. D.C. 86 (D.C. Cir. 1898); Int'l Glass Co. v. United States, 408 F.2d 395, 402-03, 159 U.S.P.Q. 434, 440, 161 U.S.P.Q. 116 (Ct. Cl. 1969); Continental Copper & Steel Indus. v. New York Wire Co., 196 U.S.P.Q. 30 (M.D. Pa. 1976); Solvex Corp. v. Freeman, 199 U.S.P.Q. 797 (W.D. Va. 1977).

119 In re Bass, 474 F.2d at 1286, 177 U.S.P.Q. at 186 (footnote omitted).

120 Allen v. W.H. Brady Co., 508 F.2d 64, 184 U.S.P.Q. 385 (7th Cir. 1974); Del Mar Eng'r Labs. v. United States, 524 F.2d 1178, 1184, 186 U.S.P.Q. 42, 47 (Ct. Cl. 1975); Connecticut Valley Enterprises v. United States, 348 F.2d 949, 952, 146 U.S.P.Q. 404, 406 (Ct. Cl. 1965); Continental Copper & Steel Indus. v. New York Wire Co., 196 U.S.P.Q. 30 (M.D. Pa. 1976).

effect of each such step upon invention *A* will be explored, assuming that invention *A* would have been obvious at the time it was made in view of invention *B*. Again, application I, filed in the name of inventors *U* and *V*, discloses and claims invention *A*.

i. Was the invention of another described in an application for patent? Assume patent application II, filed in the name of inventors *Y* and *Z* prior to the filing of application I, describes but does not claim invention *B*. If application II matures into patent *B* and patent *B* issues during the pendency of application I, invention *B* is available as prior art within the meaning of section 103 by virtue of section 102(e).[121]

Invention *B* is then available as prior art as of the date application II was filed. Accordingly, in ex parte prosecution of application I, applicants *U* and *V* can overcome patent *B* as a 102(e)/103 reference by filing an affidavit or declaration under Rule 131[122] showing that they made invention *A* in this country prior to the filing date of application II. Such a showing requires establishing that invention *A* was reduced to practice prior to the filing date of patent application II, or that invention *A* was conceived prior to that filing date and

---

121 Hazeltine Research Inc. v. Brenner, 382 U.S. 252, 147 U.S.P.Q. 429 (1965). The basis rationale is that of Milburn v. Davis-Bournonville, 270 U.S. 390 (1926) (35 U.S.C. § 102(e) being a codification of the *Milburn* rule) that when the patentee files his patent application he has done all he could to add his disclosure to the prior art. His disclosure would have been actually disclosed to the public on that filing date but for the delays of the PTO in eventually issuing his patent.

122 37 C.F.R. § 1.131 reads:

> § 1.131 Affidavit or declaration of prior invention to overcome cited patent or publication.
>
> (a) When any claim of an application is rejected on reference to a domestic patent which substantially shows or describes but does not claim the rejected invention, or on reference to a foreign patent or to a printed publication, and the applicant shall make oath or declaration as to facts showing a completion of the invention in this country before the filing date of the application on which the domestic patent issued, or before the date of the foreign patent, or before the date of the printed publication, then the patent or publication cited shall not bar the grant of a patent to the applicant, unless the date of such patent or printed publication be more than one year prior to the date on which the application was filed in this country.
>
> (b) The showing of facts shall be such, in character and weight, as to establish reduction to practice prior to the effective date of the reference, or conception of the invention prior to the effective date of the reference coupled with due diligence from said date to a subsequent reduction to practice or to the filing of the application. . . .

due diligence was exercised from that filing date to a subsequent reduction to practice.

If the only evidence of priority in the record is the filing date of application II and the Rule 131 affidavit establishing that invention *A* was made in this country prior to that filing date, the PTO must consider invention *A* to be the prior invention. Accordingly, patent *B* is overcome as a 102(e)/103 reference because the application which matured into the patent describing invention *B* was not filed before applicants *U* and *V* made invention *A*.

Similarly, invention *B* which is described in patent *B* is overcome as a 102(g)/103 reference because the requisite priority of invention *B* is lacking.[123]

If applicants *U* and *V* cannot antedate the filing date of application II, they cannot overcome patent *B* as a 102(e)/103 reference and it is then immaterial whether invention *B* can be overcome as a 102(g)/103 reference.[124] If invention *A* was only rejected under 102(g)/103, inability of applicants *U* and *V* to antedate the filing date of application II provides the necessary priority element of the two-prong test, and the constructive knowledge of invention *B* by the art as of that filing date provides the necessary knowledge element of the test to sustain the 102(g)/103 rejection.

Assume that applicants *U* and *V* make the necessary showing under Rule 131 and that application I matures into and issues as patent *A*. Assume further that it can be shown that invention *B* was reduced to practice prior to the earliest possible date of conception of invention *A*. Then patent *A* would be invalid if it can be shown that invention *B* was known either to the art or to inventors *U* and *V* at the time they made invention *A*.[125]

If application II never matures into a patent and is abandoned for one reason or another,[126] the event necessary to make invention *B* available as an anticipatory reference under section 102(e)—the issuance of a patent on application II—never occurs. Consequently, the public is not con-

123 In re Clemens, 622 F.2d 1029, 206 U.S.P.Q. 289.

124 *See* In re Bass, 474 F.2d at 1286 n.7, 177 U.S.P.Q. at 186.

125 In re Clemens, 622 F.2d 1029, 206 U.S.P.Q. 289.

126 Application II describes but does not claim invention *B*. The invention that is claimed in application II may not be patentable and consequently the application may never mature into a patent.

structively charged with knowledge of invention *B* as of the filing date of application II by virtue of section 102(e).

Consider the more interesting case in which application I matures into and issues as patent *A* prior to the issuance of patent *B*. Viewing the situation from the point of view of 102(e)/103, at the time patent *A* issues the necessary condition to make invention *B* available as prior art—the issuance of patent *B*—has not yet occurred and may never occur.[127] Assuming invention *A* cannot be shown to antedate invention *B*, if patent *B* issues, patent *A* is invalid. But at what point in time is it invalid? As of the issue date of patent *A*? As of the issue date of patent *B*? As of the filing date of patent *B*?[128] From the point of view of 102(g)/103 such questions do not arise.

The two-prong test suggested by *Bass* and *Clemens* requires not only that invention *B* be prior to invention *A*, but also that invention *B* be known either to the art or to inventors *U* and *V* at the time they make invention *A*. The issuance of patent *B* imputes knowledge to the art as of the filing date of application II. But inventors *U* and *V* have shown completion of invention *A* prior to that date—at a date when the art was not constructively charged with knowledge of invention *B*. Therefore, in order for patent *A* to be invalid under 102(g)/103, inventors *U* and *V* must have had actual knowledge of invention *B* at the time they made their invention. Since actual knowledge as well as constructive knowledge was absent at the time they made invention *A*, patent *A* is not invalid by virtue of 102(g)/103. Thus during the time that invention *B* was truly secret—from its making to the filing of the application that eventually matured into patent *B*—it cannot operate to invalidate patent *A*.

ii. Was the invention of another described in a technical paper? Assume that invention *B* was neither described in a patent application nor commercially exploited, but was described by inventors *Y* and *Z* in a paper presented at a technical society meeting. Assume further that between the

---

127 Application II may be abandoned and never issue as a patent that describes invention *B*. *See supra* note 126.

128 *See* Janicke, *What is "Prior Art" Under Section 103? The Need for Policy Thought*, Nonobviousness—The Ultimate Condition of Patentability 5:101, 5:104 (J. Witherspoon ed. Bureau Nat'l Aff. 1980).

time inventors *Y* and *Z* reduced invention *B* to practice and presented the technical paper, inventors *U* and *V* reduced invention *A* to practice and filed patent application I claiming that invention. At the time they reduced *A* to practice, invention *B* was not known either to them or to the art. Accordingly, under the two-prong test invention *B* is not available as prior art.[129] The outcome would be the same if invention *A* is conceived and constructively reduced to practice by filing application I between the time invention *B* was reduced to practice and described at the technical meeting.[130]

If between the time inventors *Y* and *Z* reduced invention *B* to practice and presented the technical paper, invention *A* was conceived and reduced to practice, and application I was filed within one year after the technical paper was presented, invention *B* would again not be available as prior art under the two-prong test. Once again the requisite knowledge element is missing.

If, however, invention *A* was conceived between the time invention *B* was reduced to practice and described at the technical meeting, and invention *A* was constructively reduced to practice by filing application I within one year after the technical meeting, invention *B* would be available as prior art.[131] In this situation invention *B* was known to the art, by virtue of it being described at the technical meeting, prior to invention *A* being reduced to practice.[132] Both the priority element and the knowledge element of the two-prong test being met, invention *B* is available as prior art.

iii. Was the invention of another commercially exploited? Invention *B* may be commercially exploited in such a manner that the invention is explicitly disclosed to the public, thereby enriching the art. When so exploited prior to the making of invention *A*, invention *B* is both prior and known and therefore available as prior art by virtue of both sections 102(a) and 102(g).

---

129 *Accord*, General Motors Corp. v. Toyota Motor Co., 467 F. Supp. 1142, 205 U.S.P.Q. 158 (S.D. Ohio 1979). *Cf.* Corona Cord Tire Co. v. Dovan Chem. Corp., 276 U.S. 358 (1928).

130 *Id.*

131 *Id.*

132 *Compare* § III(A)(2)(b), *supra*, scenario (iii), where invention *B* was *not* known to the art but became known to inventors *U* and *V* after invention *A* was conceived but before it was reduced to practice.

Invention *B* may be commercially exploited in such a manner that knowledge of the invention is *not* possessed by the public. The art is not enriched by such exploitation because the public has not gained the knowledge of the invention that will insure its preservation in the public domain.[133] From such a secret use, albeit a commercial one, the public may receive some benefit in the sense of receiving an improved product. But when invention *B* is neither disclosed to the public nor determinable by examining the product the public has learned nothing about the invention. Consequently, such use does not so enrich the art as to negate a finding of suppression or concealment.[134]

Assuming, arguendo, that neither suppression nor concealment existed, at the time invention *A* was made neither the public nor inventors *U* and *V* had knowledge of invention *B*. Consequently, the requisite knowledge element of the two-prong test is missing. Accordingly, invention *B* is not available as prior art.

Invention *B* may also be commercially exploited in such a manner that the public receives not only the benefit of an improved product, but also the knowledge of the invention, even though the invention is not explicitly disclosed to the public. From such a noninforming public use[135] in which inventors *Y* and *Z* are the first to confer the benefit of invention *B* on the public, and in which invention *B* is disclosed to the public or determinable by examining the product, the public receives a sufficient benefit to negate a finding of suppression or concealment.[136]

---

133 Palmer v. Dudzik, 481 F.2d 1377, 1387-88, 178 U.S.P.Q. 608, 615-16 (C.C.P.A. 1973).

134 *Id.* In *Palmer*, the invention was a device which, when installed in a machine, resulted in the machine producing a superior commercial product. The device was neither disclosed to the public nor determinable by examining the product.

135 The distinction between a noninforming public use and a secret use was drawn by Judge Hand in Gillman v. Stern, 114 F.2d 28, 31, 46 U.S.P.Q. 430, 434 (2d Cir. 1940) and by Judge (now Justice) Stevens in Dunlop Holdings Ltd. v. Ram Golf Corp., 524 F.2d 33, 36, 188 U.S.P.Q. 481, 483 (7th Cir. 1975). *Dunlop* involved a noninforming public use: *Palmer, supra* note 133, a secret use.

136 Dunlop Holdings Ltd. v. Ram Golf Corp., 524 F.2d 33, 188 U.S.P.Q. 481. In *Dunlop*, inventor Wagner did not apply for a patent but did market his improved golf ball as promptly and effectively as possible. He was the first to confer the benefit of the invention on the public. While Wagner did not explicitly disclose to

When invention *B* is exploited by such a noninforming public use prior to inventors *U* and *V* making invention *A*, invention *B* is available as prior art since both the priority and the knowledge elements of the two-prong test are fulfilled. Consequently, while such use by inventors *Y* and *Z* may result in forfeiting their entitlement to a patent, it does not impair their right to continue diligent efforts to market their product.[137]

If, on the other hand, such a noninforming public use does not occur prior to the making of invention *A*, then at the time that invention is made the requisite knowledge element of the two-prong test is missing. Consequently, invention *B* is not available as prior art.

IV. The Formidable But Not Insurmountable Task of Determining Whether the Invention of Another Is Available As Prior Art

The purpose of the patent laws is to promote the progress of the useful arts. The policy and spirit of the law encourages prompt disclosure of new inventions and favors him who gives the public the benefit of the knowledge of his invention. Especially favored is he who expends his time, labor, and money in discovering, perfecting, and patenting his invention. If his invention has utility, is novel, and is nonobvious in view of the prior art, he is granted a patent.

If he begins with the knowledge of another's invention which has not been abandoned, suppressed, or concealed, such invention is included in the prior art against which his contribution is measured. But when the invention of another is unknown both to him and to the art when he makes his invention, it is not so included. To do so would impede the progress of the useful arts.

As clarified by *Bass* and *Clemens*, the patent laws require the invention of another to satisfy two requirements before it can be available as prior art. It must have been made prior to his invention, and it must have been known either to him or to the art before he made his invention.

---

the public the ingredient that made his golf ball so tough, the court found that the ingredient could be determined by examining Wagner's ball. *Id.* at 37, 188 U.S.P.Q. at 484.

137 *Id.* at 37, 188 U.S.P.Q. at 485.

Two lines of inquiry are thus suggested. One involving priority; the other knowledge. Each has been developed in detail and numerous factual and legal considerations explored with emphasis on the corporate research environment.

A. *Determining Availability of Prior Art in an Expanded Patent System*

The impact of *Bass* and *Clemens* on the corporate research environment arises not from any *Bass-Clemens* rule *per se*, but rather from concepts of inventive entity and joint and sole inventorship under United States patent laws—laws that require each and every joint inventor to have contributed to the subject matter of each and every claim contained in a patent application, and laws that do not permit a patent application to be filed by the real party in interest, the corporation. *Bass* merely reminded the patent bar that prior invention of another *is* prior art within the meaning of that term in section 103, and *Clemens* essentially limited such prior art to those prior inventions *known* either to the art or to the applicant at the time he made his invention.

Thus, in the corporate research environment where teamwork is the general rule and the general policy is to encourage knowing what fellow employees are doing, the patent laws place a premium on *not knowing*. What an applicant did not know when he made his invention cannot be used as prior art, but what he did know, can.

Such encouragement of ignorance defeats a fundamental principle of corporate research—the free exchange of ideas between corporate employees. Moreover, it runs counter to both the policy and the spirit of the patent laws because it discourages both invention and the prompt disclosure of new inventions.

The progress of the useful arts can best be promoted by encouraging the free exchange of ideas between the employees of a corporation so as to maximize both the quantity and the quality of inventions resulting from the time, labor, and money expended by corporate employees in pursuit of corporate interests. The knowledge of new inventions flowing to the public through patent disclosures can be maximized

45-024 O - 85 - 18

by permitting the real party in interest, the corporation, to patent the inventions discovered and perfected by its employees, and by measuring such corporate inventions against the standard of what would have been obvious to one of ordinary skill in the art *outside* the corporation at the time the invention was made *within* the corporation.

All that is needed to expand the patent system to embrace corporate patent applications is a one sentence statutory amendment. Applying the two-prong test in such an expanded system, a prior invention made outside the corporation and unknown to the art, but known to an employee of the corporation, would be available as prior art against the corporate invention claimed in the corporation's patent application. But, a prior invention made inside the corporation and unknown to the art would not be available.

The task of determining whether the invention of another is available as prior art can be both complex and involved in either the present patent system or in an expanded patent system. It is by no means an insurmountable task, however, when approached in the manner developed herein.

SELECTED BIBLIOGRAPHY

Bernstein, *Duty of Candor and Good Faith—Does Rule 56 Compliance Support or Defeat an Allegation of Fraud?*, [1980] Current Developments in Patent Law 9 (Prac. L. Inst. 1980).

D. Chisum, Patents (Matthew Bender 1980).

Federico, *Further Comments and Observations on the Origin of Section 103*, Nonobviousness—The Ultimate Condition of Patentability 1:301 (J. Witherspoon ed. Bureau Nat'l Aff. 1980).

Janicke, *What is "Prior Art" Under Section 103?—The Need for Policy Thought*, Nonobviousness—The Ultimate Condition of Patentability 5:101.

Janicke, *What Prior Art Is "Known" to the Client?—A Suggested Investigative Approach*, 1979 Patent Law Annual 67 (Matthew Bender 1979).

Jorda, *Section 102(g) Prior Invention as Section 103 Prior Art: Impact on Corporate Research*, 58 J. Pat. Off. Soc'y 523 (1976).

Klitzman, *35 U.S.C. 102(g) As Establishing Prior Art*, 58 J. Pat. Off. Soc'y 505 (1976).

La Fuze, *Avoiding Inequitable Conduct in Selecting and Citing Prior Art in Patent Solicitation*, 1977 Patent Law Annual 37 (Matthew Bender 1977).

R. Milgrim, Trade Secrets (Matthew Bender 1979).
Oisher and Steinhauser. *The Role of the Prior Inventor Under Section 102(g)*, 45 J. Pat. Off. Soc'y 595 (1963).
Patent Law Perspectives
Pitlick, *A Proposed Compromise to the "Prior Art" Controversy Surrounding In re Hellsund and In re Bass*, 56 J. Pat. Off. Soc'y 699 (1974).
Rich, *Congressional Intent—Or, Who Wrote the Patent Act of 1952*, Nonobviousness—The Ultimate Condition of Patentability 1:1.
Rich, *Laying the Ghost of the "Invention" Requirement*, Nonobviousness—The Ultimate Condition of Patentability 1:501.
Rich, *Why and How Section 103 Came To Be*, Nonobviousness—The Ultimate Condition of Patentability 1:201.
Rivise and Caesar, Interference Law and Practice (Michie 1940).
F. Robbins, The Defense of Prior Invention—Patent Infringement Litigation (Prac. L. Inst. 1977).
Rosenstock, *Prior Art Under 35 U.S.C. Section 103 Includes Prior Invention—In re Bass and In re Hellsund*, 56 J. Pat. Off. Soc'y 263 (1974).
Skillman, *1977 Rules on Duty of Disclosure*, 1979 Patent Law Annual 29 (Matthew Bender 1979)
Witherspoon, *Current Problems and Considerations Re Section 103 "Prior Art" by Reason of 35 U.S.C. 102(e), (f), and (g)*, [1980] Current Developments in Patent Law 95 (Prac. L. Inst. 1980).

EDITOR'S NOTE: And see Chisum, *Prior Invention and Patentability*, 63 J. Pat. Off. Soc'y 397 (1981).

THE EVER EVOLVING MEANING OF PRIOR ART (PART I)

*Edward C. Walterscheid**

As the Court of Customs and Patent Appeals (C.C.P.A.) has noted, prior art "is a *very* important term of art in patent law."[1] It is not surprising therefore that an immense amount has been written—by both the judiciary and the various commentators—concerning this amorphous concept. Although the very scope and complexity of the subject matter covered by the seemingly innocuous term "prior art" would appear to preclude any simple definition of what is meant thereby, there nonetheless is no dearth of trying. Thus, as but one example, the Seventh Circuit offers the following:

> The prior art includes any relevant knowledge, arts, description, and patents which pertain to, but predate, the invention in question.[2]

The C.C.P.A., while acknowledging that the "exact meaning is a somewhat complex question of law," weighs in with:

> Basically, the concept of prior art is that which is publicly known, or at least known to someone who has taken steps which do make it known to the public, . . . or known to the inventor against whose application it is being applied. . . .[3] [Citations omitted.]

Unfortunately, definitions of this kind are not only simplistic but also are subject to a variety of exceptions.[4]

---

*Deputy Assistant Director, University of California, Los Alamos National Laboratory, Los Alamos, New Mexico 87545

**The Los Alamos National Laboratory requests that the publisher identify this article as work performed under the auspices of the U.S. Department of Energy.

1 In re Bergy, 596 F.2d 952, 201 U.S.P.Q. 352, 365 (1979).

2 Mooney v. Brunswick Corp., 663 F.2d 724, 212 U.S.P.Q. 401, 408 (1981).

3 *Bergy*, *supra*, at footnote 7. This definition is dictum for there was no reason other than apparent pique with language used by the Supreme Court for the C.C.P.A. to volunteer it.

4 This will be shown in some detail later in these articles. Suffice to say here that the mere fact that someone has taken steps which do in fact make information publicly known does not automatically make it prior art in the context of the patent law. Moreover, such a definition literally suggests that the inventor's own invention is always prior art to him since clearly it is known to him. While there are certain circumstances in which this can be the case, it is certainly not the usual state of affairs. In addition, contrary to the Seventh Circuit definition, in some instances "prior art" can literally post-date rather than pre-date the invention in question.

For reasons which will become clearer as this series of articles progresses, the complex nature of prior art can best be interpreted and understood in terms of the multitudinous case law involving it. Having said that, it is still appropriate to commence within the present statutory framework for the patent law which is the Patent Act of 1952 as subsequently amended. Title 35 of the United States Code is the codification of this Act. The only reference to prior art in the entire Act appears at 35 U.S.C. 103.[5] According to the Senate Report accompanying the Act:

[Section 103] refers to the difference between the subject matter sought to be patented and the prior art, *meaning what was known before as described in Section 102.*[6] [Emphasis supplied.]

The chief draftsman of the Act made the same point:

The antecedent of the words, "the prior art" . . . lies in the phrase "disclosed or described as set forth in Section 102" and hence these words refer to the material specified in Section 102 as the basis for comparison.[7]

Other than this, the legislative history is silent as to any meaning to be ascribed to prior art. Initially, there was very little comment, judicial or otherwise, on this point. This is somewhat remarkable in that there are several subsections of 35 U.S.C. 102 which a perusal suggests should have no relationship to prior art as that term is most commonly thought of.[8] For example, it is difficult to perceive how Section 102(c) concerning abandonment or Section 102(f)

Recently, a district judge in Ohio recognized these facts when he stated: "Prior art is a difficult concept to define. *For instance, a literal definition of it is impossible.*" (Emphasis supplied.) General Motors Corp. v. Toyota Motor Co., Ltd., 467 F. Supp. 1142, 205 U.S.P.Q. 158, 174 (S.D. Ohio 1979).

5 103. Conditions for patentability; non-obvious subject matter

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6 Senate Report No. 1979, 82d Cong., 2d Sess., *U.S. Code Cong. & Admin. News* at 2399.

7 P. J. Federico, "Commentary on the New Patent Act," 35 U.S.C.A. p. 1 at 20.

8 See text accompanying note 28, *supra*.

dealing with derivation or improper statement of invention pertain to prior art.

Indeed, that is straightforward, or so at least Judge Rich of the C.C.P.A. seemed to think when he stated in 1973 that "[o]f course, [Section 102] (c), (d) and (f) have no relation to §103 and no relevancy to what is 'prior art' under §103."[9] It was his position that these three subsections deal only with originality of invention or loss of right having nothing to do with prior art.[10] In a concurring opinion, Judge Baldwin noted that:

> The statute does not contain a definition of the term "prior art." Nor does section 103 require that *everything* referred to in section 102 must be considered as "prior art" as that term is used therein.[11]

Thus, insofar as Judge Baldwin was concerned, "[n]o one would contend that section 102(c) has anything to do with prior art."[12]

Having said that, he was careful to point out that a literal reading of the language of Section 103 might easily lead to the conclusion that "prior art" was intended to include only that material in Section 102 in which something is "disclosed or described."[13] He suggested that, based on the legislative history of the predecessor language to that which resulted in the Patent Act of 1952, the Congressional intent was not so narrow.[14]

Although Judge Rich and Judge Baldwin had a strong disagreement as to whether Section 102(g) was a prior art section of the statute,[15] they were in full accord in stating their belief that no one would contend that Section 102(c) has anything to do with prior art. No one but the Patent and Trademark Office, that is. Dismissing the views of the C.C.P.A. in this regard as merely noncontrolling dicta, the board of appeals has recently[16] espoused the position that

---

9 In re Bass, 474 F.2d 1276, 177 U.S.P.Q. 178, 189 (1973).

10 *Id.*

11 *Bass*, *supra*, 177 U.S.P.Q. at 193.

12 177 U.S.P.Q. at 193, n. 3.

13 The phrase "disclosed or described" is the exact terminology used in Section 103. See note 5, *supra*.

14 177 U.S.P.Q. at 193. The legislative history he relies on is set forth at note 4 of the published opinion.

15 See their respective opinions in *Bass*, *supra*.

16 Ex parte Andresen, 212 U.S.P.Q. 100 (1981).

Section 103 includes "all of the various bars to a patent as set forth in section 102" and stated:

> We here recognize that some of the bars set forth in section 102 may not be universally applicable to every applicant, but may apply only to certain applicants for a patent. For instance, the bar of section 102(c) may be applicable only to the applicant who has previously abandoned his invention and thereafter attempts to patent the same invention *or an obvious modification of the abandoned invention.*[17] [Emphasis supplied.]

Needless to say, the delineation of the prior art statutory arena as defined by the various provisions of Section 102 is in a state of evolution. Insofar as can be ascertained, neither the C.C.P.A. nor any other court has ever attempted to consider all aspects of the interrelationship between Section 102 and Section 103.[18]

Aside from that which is Section 102 prior art, the question arises as to whether there can be other prior art. Such a query is really two questions in one, i.e., is there other statutory prior art than Section 102 and is there non-statutory prior art? These questions were first inferentially raised in 1964 when the C.C.P.A. emphasized that " 'prior art' *means at least* those things named in section 102."[19] Subsequently, Judge Baldwin pointed out that this language "is, at best, inaccurate—some of the 'things' in section 102 are prior art, such as those in 102(a), and some are not, such as in 102(c)."[20] Be that as it may, in 1965 the court modified this language just a bit by stating that prior art "refers to at least the *statutory prior art material* named in section 102" [emphasis supplied].[21]

---

17 212 U.S.P.Q. at 102. It is interesting to note that the board's statements with respect to Section 102(c) were equally as much dicta as those of the C.C.P.A. which it so lightly dismissed.

18 Judge Baldwin was careful to point out in *Bass, supra* that the court was not there called upon to consider the entire interrelationship. 177 U.S.P.Q. at 193.

The district court in *General Motors Corp. v. Toyota Motor Co., Ltd., supra*, provided an analysis of 12 prior art scenarios said to arise from the operation of Sections 102(a), (b), (e), and (g). Although acknowledging that other subsections of Section 102 had previously been argued as providing Section 103 prior art, the court apparently did not subscribe to this view and did not discuss Sections 102(c), (d), or (f). See 205 U.S.P.Q. at 175 and in particular note 33.

19 In re Harry, 333 F.2d 920, 142 U.S.P.Q. 164, 167, n. 2 (1964).

20 *Bass, supra*, 177 U.S.P.Q. at 193, n. 3.

21 In re Yale, 347 F.2d 935, 146 U.S.P.Q. 400, 403 (1965).

Suffice it to say here, the answer to the first question is no,[22] and the answer to the second is yes.[23]

There is more to prior art, however, than merely its use in the context of Sections 102 and 103. It frequently becomes important in ascertaining whether the enablement requirement of the first paragraph of 35 U.S.C. 112 is met. In this regard, it must be borne in mind that patents are directed not to the layman or the expert but rather to one of ordinary skill in the art.[24] Thus, in determining whether the specification of a patent application does in fact teach how to make and use the invention, it may well be necessary to first determine just what the level of ordinary skill in the particular art is. The prior art provides an appropriate means for doing this.

Accordingly, while Section 102 provides a convenient frame of reference, it will be apparent that no analysis of the case law as it pertains to prior art can be reasonably complete without proceeding beyond the confines of Section 102. Thus, although a major portion of this series of articles will be concerned with Section 102 prior art, they will also include a discussion of prior art in the context of Section 112 as well as Sections 119 and 120 of the Patent Act of 1952. In addition, there will be a rather detailed review of the case law pertaining to judicially created prior art, e.g., art created by so-called "admissions against interest." Moreover, the effect of incorporation by reference and references to abandoned patents in creating prior art will be treated. Finally, any remaining odds and ends used in the creation of the existing potpourri of "prior art" will be briefly reviewed.

---

22 The C.C.P.A. has specifically rejected "the novel proposition that 35 USC 135(a) is a statutory prior art section." In re McKellin, 529 F.2d 1324, 188 U.S.P.Q. 428, 432 (1976). This did not preclude the Office from thereafter asserting that Section 135(b), as opposed to (a), was a source of statutory prior art. This proposition was rejected by the C.C.P.A. in In re Sasse, 629 F.2d 675, 207 U.S.P.Q. 107, 110 (1980).

23 See, e.g., In re Nomiya, 509 F.2d 566, 184 U.S.P.Q. 400, 403 (C.C.P.A. 1975).

24 §112. Specification

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same . . .

I. Section 102 Prior Art

While Section 102 represented a revision of the existing statutory scheme at the time of its enactment in 1952,[25] with the exception of a liberalizing provision in subsection (d) it continued certain of the existing statutory law and codified other existing case law into the statute.[26] It is no purpose of this article to provide any analysis of the pertinent case law prior to 1952 except to the extent that such case law may be relevant to an understanding of the subsequent interpretation which has been given to Section 102 by the courts.[27]

A. *The Language of Section 102*

Before commencing a detailed analysis of the case law pertaining to specific provisions of Section 102 and their relationship to the term "prior art," it is appropriate to look at the section in its entirety:

102. Conditions for patentability; novelty and loss of right to patent

A person shall be entitled to a patent unless—

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States, or

(c) he has abandoned the invention, or

(d) the invention was first patented or caused to be patented, or was the subject of an inventor's certificate, by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application for patent or inventor's certificate filed more than twelve months before the filing of the application in the United States, or

(e) the invention was described in a patent granted on an appli-

---

25 Senate Report No. 1979, June 27, 1952, 82 Cong. 2nd Sess. as reproduced in U.S. Code Congressional and Administrative News, p. 2410 (1952).

26 *Id.* at p. 2399.

27 For a detailed discussion of the case law relating to prior art as it evolved before the passage of the Patent Act of 1952, see V. E. Woodcock, "What is Prior Art," pp. 87-215 in *The Law of Chemical, Metallurgical and Pharmaceutical Patents*, H.I. Forman, ed. (Central Book Company, Inc., New York, 1967).

cation for patent by another filed in the United States before the invention by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent, or

(f) he did not himself invent the subject matter sought to be patented, or

(g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.[28]

At first glance there appears to be considerable redundancy in the language of the various subsections, but a perusal indicates that each subsection is in fact directed to a different aspect of the conditions stated to be necessary for patentability. Thus, if the board of appeals is correct in arguing that Section 103 prior art includes all the bars to patentability set forth in Section 102,[29] it is necessary to carefully analyze the language of each of the subsections to ascertain the nature and type of Section 103 prior art which may arise within the context of Section 102.

The conditions set forth in Section 102(a) are directed to activities or knowledge of "others," i.e., someone other than the inventor on whose behalf the patent application is filed, which occur before the act of invention by the inventor. Moreover, a very specific geographic limitation is placed on the "known or used" bar in that such knowledge or use must have been "in this country," i.e., the United States and its territories and possessions.[30] This is to be contrasted with the patented and publication bars which have no geographic limitation but effectively preclude patentability regardless of where they occur in the world. Finally, although not expressly stated in Section 102(a), the "known or used"

28 35 U.S.C. 102 (as amended).

29 As will be shown later in these articles, no judicial authority has been found for this view, although it may reasonably be argued that the more recent opinions are trending toward it.

30 See 35 U.S.C. 100(c).

provision has been judicially interpreted as requiring *public* knowledge or use in order to bar patentability.[31]

Whereas Section 102(a) sets forth bars resulting from activity or knowledge occurring before the act of invention by the inventor seeking the patent, Section 102(b) contemplates bars arising out of activities pertaining to the invention sought to be patented. Simply put, Section 102(b) sets forth a one-year time bar for the filing of a patent application which begins to run from the date of any of the activities enumerated. Thus publication describing the invention or patenting of the invention anywhere is the world starts the clock on the one year time bar as does public use of the invention in this country or offering it for sale in this country. Note that the use must be "public" in order to start the clock. There is nothing in Section 102(b) which precludes private use of the invention indefinitely without the time bar coming into effect; however, the case law makes clear that, at some point in time after private use has commenced the inventor will be deemed to have elected trade secret protection rather than patent protection and will be unable thereafter to obtain patent protection.[32] An interesting aspect of Section 102(b) is that the invention may be in public use or offered for sale *outside* this country without triggering the time bar.

Section 102(c) appears straightforward on its face; if the invention is "abandoned", it cannot be patented. The

---

31 This was recognized at the time the statute was enacted. Thus, the Reviser's Note states: "The interpretation by the courts of paragraph (a) as being more restricted than the actual language would suggest (for example, "known" has been held to mean "publicly known") is recognized but no change in the language is made at this time." See 35 U.S.C.A. at page 446.

32 The judicially created doctrine appears to have arisen from the holding in Metallizing Engineering Co. v. Kenyon Bearing & Automotive Parts Co., 153 F.2d 516, 68 U.S.P.Q. 54 (2nd Cir. 1946). As Kayton has stated,

> . . . it must be emphasized that *Metallizing Engineering* stands only for the proposition that a secret use of a potential invention more than one year before an applicant's filing date will preclude the issuance of the patent when it was the *applicant* who secretly used the claimed invention and wherein he did so to his commercial advantage. When the commercially advantageous, secret use is by a *third party* and even though that use is for a period more than one year before the applicant's filing date, it cannot constitute a statutory time bar under §102(b).

Irving Kayton, ed., 1 Patent Preparation & Prosecution Practice 4-24 (Patent Resources Institute 1976).

problem arises in determining what constitutes abandonment. Presumably, the term "abandoned" as used in Section 102(c) refers to something other than the statutory abandonment which occurs through failure to meet the one-year time bar of Section 102(b). Can an invention be abandoned even though there is a continuing private use of it? If there is not private use, how long after the act of invention does a failure to do anything further with it constitute an abandonment within the meaning of Section 102? On what basis and in what circumstances can an abandoned invention constitute Section 103 prior art?

Section 102(d) presents a variation of the one-year time bar first set forth in Section 102(b). In this instance, however, the bar commences to run as of the filing for a foreign patent or inventor's certificate. By action of Section 102(d) a U.S. application for the same invention must be filed within one year of the date of the foreign filing or there is an effective bar to the grant of a U.S. patent. But the language of Section 102(d) clearly indicates that the bar comes into play only if a foreign patent or inventor's certificate is issued on the foreign application. No significance would seem to attach to the fact that Section 102(b) uses the term "one-year" whereas Section 102(d) uses the term "twelve months."

Simply put, Section 102(e) makes the filing date of a U.S. patent or of a patent issued on an international application meeting the enumerated requirements the effective date for its use as prior art. This is to be contrasted with the use of a foreign patent as prior art under Sections 102(a) or (b) wherein the effective date of the patent for this purpose is its publication date.

The Reviser's Note indicates that the purpose of Section 102(f) is to identify the necessity that the inventor be the party to apply for the patent.[33] According to Federico, this subsection "is perhaps unnecessary."[34] It is apparent that neither he nor the Reviser ever contemplated that Section 102(f) might be treated as a source of Section 103 prior art. A comparison with Section 102(g) will show that for

---

33 See 35 U.S.C.A. at page 446. This is to be contrasted with the practice of various foreign jurisdictions of allowing patents to be applied for in the name of an assignee.

34 35 U.S.C.A. at page 19.

Section 102(f) to have any prior art meaning separate and distinct from Section 102(g) it must be read in the context of derivation, i.e., the purported inventor must have derived his knowledge of the invention from another rather than having independently invented it himself.[35]

While the various other subsections refer to the "invention," Section 102(f) is directed to "the subject matter sought to be patented." At first glance this language appears to be used merely in an attempt to avoid the use of the phrase "invent the invention." Thus, it would seem illogical to construe "the subject matter sought to be patented" as different than "invention." Unfortunately, however, the term "invention" as used in Section 102 appears to have at least three and possibly four separate and distinct meanings.[36] But is is only in the context of the fourth meaning, i.e., the entire subject matter claimed,[37] that Section 102(f) makes sense.

If Section 102(f) provides a basis for treating prior invention as prior art, then it does so on a broader basis than does the language of Section 102(g), which has certain clear-cut restrictions which are not found in Section 102(f). Thus, for example, Section 102(g) requires the prior invention to have been made in this country. Moreover, it states that the prior invention must not have been abandoned, suppressed, or concealed.

Having looked at the language of each subsection of Section 102, it is apparent that Sections 102(a), (b), and (e) which refer to printed publications and/or patents do in fact define Section 103 prior art. It is not so obvious that the other subsections do. For example, if prior invention in the context of Sections 102(f) and (g) is prior art, how and under what circumstances is this the case? A look at the pertinent case law is in order.

---

35 This will be discussed in some detail in the third of this series of articles.

36 P.M. Janicke, "The Varied Meanings of 'Invention' in Patent Practice: Different Meanings in Different Situations," Pat.L.Pers. (1970 Dev.) at Appendix I.

37 *Id.*

B. *Prior Invention as Prior Art*

Prior invention can be prior art under a variety of the provisions of Section 102.[38] Thus, if the prior invention was publicly known or used by others in this country before the date of invention of the subject matter claimed in an application or patent against which the prior invention is sought to be applied, then it is prior art under Section 102(a). The same is true if the prior invention is patented or described in a printed publication anywhere in the world before the date of invention of the claimed subject matter against which it is sought to be applied. If the prior invention is described in a U.S. patent which has an effective filing date prior to the date of invention of the claimed subject matter against which it is sought to be applied, then it is prior art under Section 102(e).[39]

But what of the situation wherein none of these actions have occurred. In this circumstance, can the prior invention still be Section 103 prior art? It depends on the interpretation to be given to Sections 102(f) and (g). Because there is considerably more case law pertaining to Section 102(g), it is appropriate to begin with a discussion of that subsection.

1. Section 102(g) Prior Invention Prior to Bass

The case law pertaining to Section 102(g) falls into three categories: interference proceedings,[40] infringement actions,[41] and ex parte proceedings before the Patent and Trademark Office.[42] The first two are adversarial in nature, i.e., they

---

38 In the context of this discussion, the prior invention is assumed to be in a field of analogous art, i.e., one which one of reasonable skill in the art would look to for a solution to the problem to which the claimed invention is directed.

39 See, e.g., In re Harry, 333 F.2d 920, 142 U.S.P.Q. 164, 167 (C.C.P.A. 1964).

40 Interference proceedings may be conducted in the Patent and Trademark Office before the Board of Patent Interferences under the authority of 35 U.S.C. 135 or before a federal district court under the authority of 35 U.S.C. 291. Office interference proceedings may involve two or more pending applications or a pending application or applications and an issued patent. An interference between issued patents can only be conducted in federal district court.

41 Under 35 U.S.C. 282, a showing of patent invalidity by reason of prior invention by another is a good defense in an infringement action.

42 See, e.g., In re Clemens, 622 F.2d 1029, 206 U.S.P.Q. 289 (C.C.P.A. 1980); and In re Bass, 474 F.2d 1276, 177 U.S.P.Q. 178 (C.C.P.A. 1973).

are inter partes proceedings, whereas the third is purportedly not.[43]

Interference proceedings occur because in this country, unlike most other industrialized nations, priority of invention is determined not by the first to file but rather by the first to invent. It is readily apparent from its second sentence[44] that Section 102(g) is directly related to the determination of priority of invention. The legislative history of section 102(g) indicates that "it relates to the question of priority of invention between rival inventors,"[45] and "retains the present rules of law governing the determination of priority of invention."[46] Judge Baldwin of the C.C.P.A. has argued "that the *final* intent behind section 102(g) was merely to codify the existing rules of law on priority of invention."[47] It is not surprising therefore that essentially all of the early case law pertaining to Section (g) was derived from interference practice.

One of the questions that inherently arises out of interference practice is how to treat the claims of the losing applicant when the application is returned to ex parte prosecution.[48] Clearly, under Section 102(g), an applicant who has lost an interference is not entitled to claims which correspond to the subject matter of the counts of the interference.[49] But how was the Office to treat claims in the losing application which did not correspond to a count[50] in inter-

---

43 Some patent attorneys would argue that before at least some examining groups in the Patent and Trademark Office, so-called ex parte prosecution is the epitome of an adversarial proceeding.

44 That sentence reads: "In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was the first to conceive and last to reduce to practice, from a time prior to conception by the other."

45 H.R. Rep. No. 1923, 82d Cong., 2d Sess. at 7. The Senate Report, S. Rep. No. 1979, 82d Cong., 2d Sess., is identical in all pertinent respects.

46 *Id.* at 18.

47 In re Bass, 474 F.2d 1276, 177 U.S.P.Q. 178, 195 (C.C.P.A. 1973).

48 37 C.F.R. §1.266 (July 1, 1981 Rev.) requires the examiner after termination of the interference "to take such action in each of the applications involved as may be necessary."

49 See, e.g., In re McKellin, 529 F.2d 1324, 188 U.S.P.Q. 428, 432 (C.C.P.A. 1976).

50 As pointed out in Squires v. Corbett, 569 F.2d 424, 194 U.S.P.Q. 513 (C.C.P.A. 1977):

ference? Were they automatically to be deemed allowable,[51] or was there some basis resulting from the lost interference by which the loss of priority could be used to support a rejection of such claims?

As the case law has developed, there are usually two ways in which the loss of priority can be used to support a rejection of such claims. These are interference estoppel[52] and the use of the lost count or counts as prior art under Section 102(g). Both have been discussed in detail elsewhere,[53] and will be treated later in this series of articles. Of interest here is how loss of priority in an interference came to be regarded as providing a basis for treating Section 102(g) as a prior art provision of the patent statute.

Prior to the enactment of the Patent Act of 1952 there was case law which indicated that the disclosure of the winning application or patent in an interference proceeding was available as prior art against the remaining claims of the losing party. Thus, for example, in 1943 in *In re Bicknell*[54] the C.C.P.A. for the first time expressly held that "the application[s] [of the winning parties] . . . are prior art."[55] Although three earlier opinions of the court were cited as supporting this conclusion, a perusal shows that in each instance the holding was that the claims of the losing party must be patentably distinct over the count lost in the interference.[56] In other words, the court appears to have misconstrued its own earlier holdings that lost counts are to be treated as prior art.

> The count . . . is merely the vehicle for contesting priority which, in the opinion of the Commissioner, effectively circumscribes the interfering subject matter, thereby determining what evidence will be regarded as relevant on the issue of priority.
>
> 194 U.S.P.Q. at 520.

51 Assuming arguendo that the various conditions for patentability have been met.

52 On occasion, a more general form of estoppel known as collateral estoppel may be used to support a rejection. See Wallerscheid, note 53, *infra*.

53 E. C. Wallerscheid, "The Effect of Loss of Priority on Claims Not in Interference," 63 J.P.O.S. 419 (August 1981).

54 136 F.2d 1016, 58 U.S.P.Q. 533.

55 58 U.S.P.Q. at 536.

56 The earlier cases cited were: In re Cole, 82 F.2d 403, 29 U.S.P.Q. 137 (1936); In re Soltu, 77 F.2d 627, 25 U.S.P.Q. 433 (1935); and In re Cady, 111 F.2d 899, 45 U.S.P.Q. 576 (1940).

Be that as it may, in *In re Boileau*,[57] decided in 1948, the C.C.P.A. relied on *Bicknell* to hold once again that the disclosure of the winning party could be used as prior art against the claims of the losing party. In *In re Gregg*,[58] decided in 1957, the losing party in an interference argued that the doctrine set forth in *Bicknell* and *Boileau* was modified by Sections 102 and 103 of the Patent Act of 1952.[59] Not so, said the court, and it held that the disclosure of the winning party Coakwell

> . . . constitutes prior art within the meaning of Section 102(g) of the Patent Act of 1952 and, in accordance with Section 103 of that Act, appellant may not obtain any claim which distinguishes from Coakwell's disclosure only in matters which would have been obvious to a person of ordinary skill in the art at the time when his invention was made.[60]

Thereafter in 1973 Judge Rich of the C.C.P.A. was to argue that this was the first case in which the C.C.P.A. approved a rejection based on a combination of Section 102(g) with Section 103.[61]

But was it? The only evidence given in *Gregg* of the nature of the rejection was the language of the examiner that the claims in question were rejected "as being directly readable on Coakwell."[62] In retrospect, it is unlikely that the examiner specified what subsection of Section 102 was relied upon to support the rejection, if indeed he mentioned Section 102 at all. The matter was further complicated by the court's statement that:

> It seems proper to note . . . that Coakwell's application was filed prior to that of appellant and there is no evidence to show completion of the invention covered by the appealed claims by appellant at any time prior to Coakwell's filing date. As the record stands, therefore, the Coakwell patent is a reference under Section 102(e) as well as 102(g)[63]

---

57 168 F.2d 753, 78 U.S.P.Q. 146 (1948).
58 244 F.2d 316, 113 U.S.P.Q. 526.
59 113 U.S.P.Q. at 528.
60 113 U.S.P.Q. at 529.
61 In re Bass, 474 F.2d 1276, 177 U.S.P.Q. 178, 184 (1973).
62 113 U.S.P.Q. at 529.
63 *Id.*

In 1965 in *In re Taub*[64] the C.C.P.A. sought to distinguish *Gregg* on the ground that the holding therein was predicated on a Section 102(e) rejection rather than a Section 102(g) rejection.[65] If this was indeed the case, then the court's statements regarding Section 102(g) were merely dicta. But subsequent events would render this issue academic.

The propensity of examiners in the early years of the 1952 Act to fail to cite precisely what provisions of the Act they were relying on to support a rejection or even if they were relying on the Act at all was once again evidenced in *Taub*. Although the opinion records various quotes from the examiner's rejection, none even mentions Section 102. The court concluded that Taub et al. were faced with a rejection of their claims as "unpatentable" over a count lost in an earlier interference.[66] It went on to discuss this rejection in the context of Sections 102(a) and (g). It determined that there was no anticipation in the Section 102 sense[67] but that it was necessary to remand to the Office to ascertain whether the claimed subject matter was obvious over the count lost in interference.[68] Without expressly saying so, the court seemed to be taking the position that if the claimed subject matter was obvious over the lost count, then a rejection based on a combination of Section 102(g) and Section 103 would be in order.[69]

The same day the court decided *Taub* it also decided *In re Yale*,[70] which involved a concession of priority in an

---

64 343 F.2d 556, 146 U.S.P.Q. 384.

65 146 U.S.P.Q. at 389.

66 146 U.S.P.Q. at 388.

67 Anticipation is frequently stated to be a "technical defense." Unfortunately, the various courts of appeal do not necessarily apply the same definition. Compare, for example, the following two definitions:

> Anticipation in the Section 102 sense requires that all elements of the invention or their equivalents must be found in one single description or structure in which they do substantially the same work in substantially the same way. Lucerne Products, Inc. v. Cutler-Hammer, Inc., 568 F.2d 784, 196 U.S.P.Q. 472 (6th Cir. 1977).
>
> Anticipation requires that all the same elements must be found in exactly the same situation and united in the same way to perform the identical function in a single prior art reference. Tights, Inc. v. Acme-McCrary Corp., 541 F.2d 1047, 191 U.S.P.Q. 305 (4th Cir. 1976).

68 146 U.S.P.Q. at 389.

69 In *Bass*, *supra*, Judge Rich contended that this was exactly the court's position in *Taub*. See 177 U.S.P.Q. at 184.

70 347 F.2d 995, 146 U.S.P.Q. 400.

interference proceeding. Although there was no express mention of Section 102(g), the court noted that prior art in the context of Section 103 refers at least to the statutory prior art material named in Section 102 and then went on to state:

> It seems clear that the three chemical compounds which appellants lost in interference by concession of priority are materials of which it must be said "before the applicant's invention thereof the invention was made in this country by another." Those compounds become "prior art" within the meaning of 35 U.S.C. 103 and, in accordance with that provision, appellants may not obtain any claim which distinguishes over that "prior art" only in matters which would have been obvious to one having ordinary skill in the art at the time appellants' invention was made."[71]

The clause in quotes in this excerpt is taken from Section 102(g). Again, the reasonable inference is that the court viewed Section 102(g) prior invention as Section 103 prior art.

Two years later the C.C.P.A. in *In re Risse*[72] also in the context of a rejection based on the result of an interference stated:

> Proceeding now to the matter of statutory prior art, we think it is well settled that prior art under 35 U.S.C. 103 includes prior invention under 35 U.S.C. 102(g).
>
> * * *
>
> At minimum, prior invention under section 102(g) includes the subject matter of the interference counts, which may be used as evidence of prior art under section 103.[73]

Regardless of what had gone before, that seemed to clearly delineate the court's view that at least with respect to prior invention determined by a priority contest Section 102(g) was a statutory prior art section.

The court also used *Risse* as a vehicle to point out

> . . . the entirely separate and distinct natures of the judicial doctrine of interference estoppel and the statutory prior art under 35 U.S.C. 103, the latter including prior invention under 35 U.S.C.

---

71 146 U.S.P.Q. at 493.
72 378 F.2d 948, 154 U.S.P.Q. 1 (1967).
73 154 U.S.P.Q. at 7.

102(g). Although "all" subject matter which is clearly common to the applications of the winning and losing interference parties may be used for purposes of an interference estoppel rejection against the losing party's claims, *the extent to which this commonly disclosed subject matter may be used as available evidence of the "prior art" under section 103 depends on whether the common subject matter relied on meets one or more of the paragraphs of 35 U.S.C. 102.*[74] (Emphasis supplied.)

While the court expressly noted that to the extent that this was inconsistent with *Bicknell* and *Bolleau* those cases were overruled,[75] it made no mention of *Gregg*. But as Judge Rich later noted, *Gregg's* language concerning use of the whole disclosure of the winning party as prior art under Section 102(g) coupled with Section 103 was necessarily modified by *Risse*.[76]

Heretofore, the only cases discussed with regard to prior invention being considered Section 103 prior art under Section 102(g) have dealt with prior invention established as the result of inter partes priority contests. *Risse* showed that at least as of 1967 the C.C.P.A. considered a count lost in interference to be Section 103 prior art within the statutory framework of Section 102(g). Once this became clear, it was almost inevitable that the question would be posited of whether prior invention under Section 102(g) included prior invention established by some means other than an interference proceeding.

Indeed, a few days prior to the opinion in *Risse*, the board of appeals in effect answered that question affirmatively. In *Ex parte Robbins*,[77] the examiner had rejected the claims on the ground of double patenting and under Sections 102(e) and 103 in view of the disclosure of two U.S. patents. One of the patents was to Porter and Ellerbee, whereas the appliction in issue was to Robbins and this same Porter.[78] Two Rule 131 affidavits had been submitted to overcome

---

74 154 U.S.P.Q. at 9–10.
75 154 U.S.P.Q. at 9.
76 *Risse, supra*, 177 U.S.P.Q. at 184, n. 5.
77 156 U.S.P.Q. 707 (1967).
78 The ramifications of this set of circumstances, i.e., the same individual listed as an inventor of the prior invention and also of the invention being rejected on the earlier invention, is discussed in the second of this series of articles.

the date of the Porter et al. patent but the examiner had refused to consider them.

Examiner in Chief Federico, speaking for the board, first held the double patenting rejection as improper in view of the different inventive entities of the Porter et al. patent and the Robbins et al. application.[79] He then indicated that the affidavits should have been considered for the purpose of removing a literal reliance on Section 102(e) with regard to the Porter et al. patent. But on Consideration of the affidavits he found them deficient to show completion of the Robbins et al. invention prior to the filing date of the Porter et al. patent.

He then came to the crux of the matter insofar as this article is concerned:

> However, assuming that the affidavits were sufficient, the reference is not necessarily removed in view of the relationship of the parties and the common ownership. There is still section 102(g) to consider. Under this provision the prior invention of another, meeting the conditions specified, is prior art with respect to a later invention. The invention claimed in the Porter et al. patent is taken as having been made prior to the date the invention claimed in the present application was made, in view of the facts present in this case, and hence available as prior art. What is being used by the examiner in any case is the claimed invention and we are not concerned with unclaimed disclosure.
>
> * * *
>
> In view of the above considerations the examiner's rejections of the claims are restated as a single rejection as follows: The claims are rejected as unpatentable over Porter et al. and Fuchs et al. on the basis of sections 102 and 103 of the statute, the Porter et al. invention being available as prior art on the basis of 102(e) as disclosed in the specification of the patent, no proper affidavit having been filed, *and* on the basis of 102(g) as the prior invention of another.[80]

In other words, the Office was now taking the position that a Section 103 rejection could be coupled with Section 102(g) in an ex parte proceeding even though there had been no previous inter partes priority determination. Insofar as can

---

79 156 U.S.P.Q. at 708.
80 156 U.S.P.Q. at 709.

be ascertained, *Robbins* was the first published opinion evidencing such a view from the Office.

On October 23, 1967, the district court opinion in *Grinnell Corp. v. Virginia Electric & Power Co.*[81] was issued. This appears to have been one of the earliest[82] published judicial opinions discussing Section 103 obviousness in the context of Section 102(g) prior invention in an infringement action. In that case the district court ascertained that one Suozzo had performed certain work and made certain drawings which he concealed and failed to publicize. It further concluded that Suozzo's work would have been sufficient to render obvious certain subject matter disclosed and claimed in at least one of the patents said to be infringed. But it held that no weight should be given to Suozzo's work on the issue of obviousness because:

> The same reasons of public policy which forbid prior suppressed and concealed activities from invalidating a patent under 35 U.S.C. 102(g) are also applicable to 35 U.S.C. §103.[83]

Although the court in *Grinnell* was of the opinion that Suozzo's work was not prior art under Section 102 because of its concealed nature, hindsight suggests that if there had been no concealment the court would have been faced with the clear issue of whether Section 102(g) could be combined with Section 103 to invalidate a patent relied upon in an infringement action. The meaning to be attached to *Grinnell* would be hotly disputed by Judges Rich and Baldwin of the C.C.P.A. in the not too distant future.[84]

Regardless of what conclusions could be drawn from *Grinnell*, the opinion of the Seventh Circuit in *Suiter Products Co. v. Pettibone Milliken Corp.*[85] in 1970 faced the issue squarely. The trial judge had found that a U.S. patent to one Harrison was prior art to the patent said to be infringed. The

81 277 F.Supp. 507, 156 U.S.P.Q. 443 (E.D.Va. 1967).

82 Judge Rich, concurring in In re Hellsund, 474 F.2d 1397, 177 U.S.P.Q. 170 (C.C.P.A. 1973), states that Lorenz v. Berkline Corp., 137 U.S.P.Q. 29 (N.D.Ill. 1963) is precedent for the view that the defense of prior invention under Section 102(g) may be raised against the validity of a patent in an infringement action. See 177 U.S.P.Q. at 175. But a review of that district court opinion reveals no discussion of Section 102(g) in the context of Section 103 prior art.

83 156 U.S.P.Q. at 452–53.

84 *Bass, supra*. Cf. 177 U.S.P.Q. at 186 and 197.

85 428 F.2d 639, 166 U.S.P.Q. 100 (7th Cir. 1970).

Harrison patent was filed approximately five months earlier and thus was considered to be prior art under 35 U.S.C. 102(e).[86] To avoid the application of Section 102(e), the plaintiff presented evidence showing a date of invention of the subject matter claimed in its patent which was earlier than the filing date of the Harrison patent. The defendant in turn presented evidence showing the date of invention of Harrison was still earlier. Under these circumstances the trial judge found the Harrison patent to "predate" the plaintiff's patent and the Seventh Circuit agreed.[87] Accordingly, the Harrison patent was deemed to disclose and was treated as evidence of prior invention under Section 102(g).[88]

But, argued the plaintiff, even if the Harrison invention is deemed to be prior invention under Section 102(g), it cannot be Section 103 prior art because it was not public knowledge prior to the date of invention of the claimed subject matter of plaintiff's patent. The Seventh Circuit in effect said good, but not good enough. It pointed out that in *Hazeltine Research, Inc. v. Brenner*,[89] the Supreme Court

> . . . rejected the claim that "prior art" included only publicly available information and not a previously filed patent application. . . . Although Hazeltine Research dealt with the specific correspondence between Section 103 and Section 102(e), the considerations expressed are equally applicable to prior invention under Section 102(g). [Citing *Yale* and *Risse*.][90]

2. *Section 102(g) Prior Invention as Prior Art According to Bass*

Thus by 1970 there had been judicial opinions holding that Section 102(g) prior invention was Section 103 prior art in the context of inter partes interference proceedings and infringement actions. But there had as yet been no judicial opinion relating to the position taken by the board of appeals in *Robbins*, namely, that prior invention of another under Section 102(g) could be used as prior art under Section 103

---

86 For the language of Section 102(e), see the text accompanying note 28, *supra*.

87 166 U.S.P.Q. at 103. In reality, what the court was indicating was that the invention disclosed and claimed in the Harrison patent predated the invention claimed by plaintiff.

88 166 U.S.P.Q. at 104.

89 382 U.S. 252, 147 U.S.P.Q. 429 (1965).

90 166 U.S.P.Q. at 104.

in an ex parte proceeding before the Patent and Trademark Office, even though there had been no inter partes priority proceeding. That issue was finally presented to the C.C.P.A. in 1973 in *In re Bass*.[91]

The result was in essence three separate opinions although all five judges concurred in the decision. The concurrence of Judge Baldwin with whom Judge Almond joined was in reality, however, very much of a dissent to the reasoning used in Judge Rich's principal opinion in which Judge Rosenstein of the United States Custom Court, sitting by designation, joined. This left Judge Lane as the fifth and deciding member of the court to present the holding, namely:

> . . . that the prior invention of another who had not abandoned, suppressed or concealed, *under the circumstances of this case* which include the disclosure of such invention in an issued patent, is available as "prior art" within the meaning of that term in §103 by virtue of §102(g).[92]

So there it was. But what of the circumstances of the case which dictated the outcome.

Needless to say, they were somewhat complicated. The claims in question had been rejected as obvious under Section 103 over a variety of references, two of which were U.S. patents to Bass et al. and Jenkins et al. Bass and Jenkins were two of three coinventors of the claims under rejection. To avoid the Bass and Jenkins references as well as a third reference Bass et al. filed affidavits under Rule 131 which were deemed effective to overcome the third reference but not the Bass and Jenkins patents. As to them, the examiner stated that while the affidavits overcame them as references under Section 102(e), in that they showed a date of invention for the claims in question which antedated the filing date of the patents, they failed to remove them as evidence of prior invention under Section 102(g). He cited *Robbins* to support this position.[93]

The board of appeals upheld this rejection, noting that:

> Proof that the overall combination recited in the claims on appeal was made prior to the *filing date* of the Bass, Jr. et al. and Jenkins,

---

91 474 F.2d 1276, 177 U.S.P.Q. 178.
92 177 U.S.P.Q. at 381.
93 177 U.S.P.Q. at 182.

Sr. et al. patents does not establish that such combination was invented prior to the *subcombinations claimed in said patents*.[94]

In response, the appellants Bass et al. principally argued the impropriety of using the Bass and Jenkins patents as evidence of prior invention and hence as prior art under Section 102(g). They essentially argued that Section 102(g) can only be used as a basis to reject identical invention[95] rather than an invention deemed to be obvious over the prior invention of another.[96]

As has been indicated, by the narrowest of margins the C.C.P.A. held that under the facts of the case prior invention under Section 102(g) could be considered as prior art under Section 103. Accordingly, it was necessary to determine whether the Office had met its burden of establishing that the inventions disclosed in the Bass and Jenkins patents had been made prior to the invention on appeal. The evidence adduced by the Office was deemed sufficient to show the Jenkins invention was prior invention but insufficient to show that the Bass invention was prior invention and hence prior art. Since both the Bass and Jenkins inventions were required to be shown to be prior in order to support the Section 103 rejection of certain claims, that rejection was reversed.[97]

Although Judge Rich and Judge Baldwin presented extensive arguments in support of their respective positions,[98] their fundamental philosophical difference can be stated rather succinctly. Judge Rich emphasized that prior invention was prior art for all purposes,[99] whereas Judge Baldwin expressed the view that prior invention under Sec-

---

94 177 U.S.P.Q. at 183.

95 *Id.*

96 They did not argue that the Bass and Jenkins patents, because of a common inventor, did not represent prior invention as to them. Indeed, they could not do so because of the court's earlier holdings that unless the inventive entity named in the reference patent is identical to that named in the application against which it is cited, that earlier entity is "another" under Section 102 even though one or more of the inventors were the same. See, e.g., In re Land, 368 F.2d 866, 151 U.S.P.Q. 621, 633 (1966).

97 177 U.S.P.Q. at 187.

98 Five pages of the published *Bass* opinion are directed to Judge Rich's arguments whereas eleven pages were required to present Judge Baldwin's point of view. See generally 177 U.S.P.Q. at 183 *et seq.*

99 177 U.S.P.Q. at 188.

tion 102(g) was not prior art except in the circumstance where it had been shown to be such by formal priority contest.

What then was the meaning to be ascribed to *Bass*? Most narrowly construed, it implied that only in the circumstance where the prior invention under Section 102(g) had been disclosed in an issued U.S. patent could it be treated as prior art under Section 103. A somewhat more liberal construction would suggest that the prior invention must have been described in a fashion so as to make it publicly available. While this might be done in several ways, clearly in the opinion of the C.C.P.A. some kind of public availability was essential.[100] As will be shown, however, the federal districts courts hearing infringement actions would not necessarily be disposed to treat Section 102(g) prior invention as only that which had been publicly disclosed.

On the same day that *Bass* was decided, the C.C.P.A. also rendered its opinion in *In re Hellsund*.[101] There, a commonly assigned application by Opel filed on the same day as Hellsund's had issued as a patent. In his specification, Hellsund made certain statements rather clearly indicating that the Opel invention was prior to his. In making a Section 103 rejection of Hellsund's claims, "the examiner postulated that the Opel disclosure was available as prior art under 35 U.S.C. 102(a), (f), or (g)."[102] The board of appeals "concluded that the prior invention of Opel was available as prior art by virtue of 35 U.S.C. 102(g)."[103]

The majority opinion by Judge Almond stated that in view of Hellsund's admission in his specification and in his reply brief before the board of appeals that Opel was prior invention to him there was no need to address the issue of whether prior invention under Section 102(g) was a source of Section 103 prior art.[104] It is apparent, however, that in view of the concurrently rendered holding in *Bass* the decision could readily have been made on the basis that the Opel invention was Section 103 prior art by virtue of Section 102(g).[105]

(To be continued)

---

100 Under either of these interpretations of *Bass*, *Grinnell* and *Sutter Products* were correctly decided.

101 474 F.2d 1307, 177 U.S.P.Q. 170.

102 177 U.S.P.Q. at 173.

103 *Id.*

104 *Id.*

105 Indeed, this is precisely what Judge Rich's concurring opinion argued should have occurred. See 177 U.S.P.Q. at 174 *et seq.*

*Edward C. Walterscheid**

THE EVER EVOLVING MEANING OF PRIOR ART (PART 2)

This is the second in a series of articles intended to explore the complex and changing nature of prior art in the patent law. The first article[1] in the series provided an introduction to the scope of the endeavor and began an analysis of Section 102 prior art within the following framework:

I. SECTION 102 PRIOR ART[2]

A. *The Language of Section 102*[3]

B. *Prior Invention as Prior Art*[4]

1. Section 102(g) Prior Invention Prior to Bass

2. Section 102(g) Prior Invention as Prior Art According to Bass

This article continues that analysis commencing with subsection 3 under "Prior Invention as Prior Art."

3. Public vs. Private Knowledge

The language of Section 102(g) suggests that prior invention cannot result in loss of patentability by being available as prior art if the prior invention has been abandoned, suppressed, or concealed.[5] Since under the facts of *Bass* the prior invention was disclosed in an issued patent,[5a] there presumably had been no abandonment, suppression or concealment.[6] Nonetheless, it is in the context of this statutory language of "abandoned, suppressed, or concealed" that

---

*Deputy Assistant Director for Legal Affairs, University of California, Los Alamos National Laboratory, Los Alamos, New Mexico 87545.

**The Los Alamos National Laboratory requests that the publisher identify this article as work performed under the auspices of the U.S. Department of Energy.

1 E.C. Walterscheid. "The Ever Evolving Meaning of Prior Art (Part I)," 64 J.P.O.S. 457 (1982).

2 64 J.P.O.S. 462.

3 64 J.P.O.S. 462.

4 64 J.P.O.S. 467.

5 See text accompanying note 54. *infra*.

5a For a discussion of *Bass* see Walterscheid, *supra*. 64 J.P.O.S. at 476.

6 The word "presumably" is used advisedly. While the issuance of the patent would seem clearly to rule out abandonment of the prior invention, it does not under the later case law necessarily or automatically preclude suppression or concealment of the prior invention, even though it is ultimately made public through the issuance of the patent. See the text accompanying notes 19–21, *infra*.

the issue of public versus private knowledge in the treatment of prior invention as prior art is most appropriately addressed. As will be shown, the case law subsequent to *Bass* does not always address the issue and, on occasion, treats it inconsistently.

Writing in 1968, and thus prior to *Bass*, Trial Commissioner Davis of the United States Court of Claims stated in *International Glass Co. v. United States*[7]:

> The courts have consistently held that an invention, though completed,[8] is deemed abandoned, suppressed or concealed if, within a reasonable time after completion, no steps are taken to make the invention publicly known.[9] [Citing cases.]

He pointed out that in the case law prior to the enactment of Section 102(g), failure to file a patent application,[10] or to describe the invention in a publicly disseminated document,[11] or to use the invention publicly[12] had been held to constitute abandonment, suppression, or concealment.

In his opinion in *Young v. Dworkin*[13] in 1974, Judge Miller of the C.C.P.A. noted

> . . . that commencing with the first edition of Webster's Dictionary in 1828 and continuing to the present the definition of "suppress" has included the idea of keeping from public knowledge.[14]

He also emphasized that each case involving the issue of suppression or concealment must be considered on its own particular set of facts. In considering those facts, the length of time from reduction to practice[15] to the filing of a patent application is not in and of itself determinative. That is to say, mere delay, without more, is not sufficient to establish suppression or concealment.[16]

---

7 408 F.2d 395, 159 U.S.P.Q. 434.

8 That is, reduced to practice.

9 159 U.S.P.Q. at 441.

10 Mason v. Hepburn, 13 App.D.C. 86 (1898).

11 Corona Cord v. Dovan Corp., 276 U.S. 358 (1928).

12 Allison Mfg. Co. v. Ideal Filter Co., 21 F.2d 22 (8th Cir. 1927).

13 489 F.2d 1277, 180 U.S.P.Q. 388 (1974).

14 180 U.S.P.Q. at 390–91.

15 An invention cannot be abandoned, suppressed, or concealed within the meaning of Section 102(g) until it has been reduced to practice. See, e.g., Peeler v. Miller, 535 F.2d 647, 190 U.S.P.Q. 117, 120 (C.C.P.A. 1976).

16 180 U.S.P.Q. at 391.

But, according to Judge Miller, when the delay period is determined to be "unreasonable," there is a basis for inferring an intent to suppress. A showing of appropriate activity during the delay may excuse it and thereby render it reasonable.[17] The controlling factor, however, is not time but conduct.[18]

Nonetheless, both *International Glass* and *Young v. Dworkin* seem to suggest that an unexplained delay which extends over some period of time would be prima facie evidence of suppression or concealment. And indeed that is the way the later cases have tended. While no fixed time has been held to raise the inference,[19] there is case law indicating that a delay in excess of two years which is not explained satisfactorily will be considered as unreasonable and hence evidence of suppression or concealment.[20]

Although such case law is limited to interference practice, it would appear to be applicable where no interference is involved. Thus, if a patent relied on as evidence of a prior invention under Section 102(g) can be shown to have issued on an application filed some two years or more after the invention was reduced to practice, the burden would presumably then shift to the opposing party to show that the delay was not unreasonable, i.e., it was not prima facie evidence of suppression or concealment. If that burden were not met, then a good argument can be made that even though the prior invention was ultimately disclosed in an issued patent, it is still not prior art under Section 102(g) because it was suppressed or concealed for an unreasonable time.[21]

---

17 180 U.S.P.Q. at 391, n. 3.

18 Judge Rich, concurring, 180 U.S.P.Q. at 394.

19 The C.C.P.A. has cautioned that any attempt to establish a rule that a certain specified length of time is per se unreasonable will be looked upon askance. Shindelar v. Holdeman, 628 F.2d 1337, 207 U.S.P.Q. 112, 117 (1980), cert. denied, 210 U.S.P.Q. 776 (1981).

20 See, e.g., Klug v. Wood, ___F.2d ___, 212 U.S.P.Q. 767 (C.C.P.A. 1981) (unexcused 26 month delay held presumptive evidence of intent to suppress); Shindelar v. Holdeman, 628 F.2d 1337, 207 U.S.P.Q. 112 (C.C.P.A. 1980) (29 month delay held to be, prima facie, unreasonable and hence evidence of suppression or concealment); and Peeler v. Miller, 535 F.2d 647, 190 U.S.P.Q. 117 (C.C.P.A. 1976) (48 month delay held prima facie evidence of suppression and concealment).

21 It is for this reason that disclosure of a prior invention in an issued patent should only be treated as presumptive evidence that the prior invention is prior art under Section 102(g).

But what of the circumstance wherein the prior invention could not—when originally made—be disclosed in an issued patent or in any other publication available to the public. This was precisely the situation faced by the Court of Claims in *Del Mar Engineering Laboratories v. United States*[22] wherein the plaintiff sought compensation from the Government for the unauthorized use of its patented "tow target having combustion signal means."[23]

A similar target known as the Dart had been previously developed at the Naval Ordnance Test Station and reduced to practice but at the time of the reduction to practice, all documents pertaining thereto were classified. Apparently the security classification was not removed until after the invention of the patent in suit.[24] The published record in *Del Mar* does not indicate that the declassified documents were ever published or that a patent application was ever filed covering the Dart invention.[25] It does indicate that the Dart work was abandoned sometime after conception of the invention of the patent in suit.[26]

The Government argued successfully that despite its security classification the Dart invention was a prior invention under Section 102(g) which had not been suppressed or concealed and hence was Section 103 prior art.

The Court of Claims began its consideration by holding that since the Dart had been reduced to practice, its subsequent abandonment did not remove it as prior invention under Section 102(g).[27] It then went on to note that while suppression or concealment are deemed to be contrary to the public interest, "[i]t is difficult to view the secrecy imposed on work by a security classification as being hostile to the public good." Accordingly,

> . . . the fact of security classification should not be regarded per se as a suppression and concealment; rather it should be viewed

---

22 524 F.2d 1178, 186 U.S.P.Q. 42 (Ct.Cl. 1975).

23 186 U.S.P.Q. at 43.

24 186 U.S.P.Q. at 45.

25 Security classification would not have precluded the filing of a patent application but instead would only have precluded the issuance of a patent until such time as declassification occurred. See 37 C.F.R. §5.3 (July 1, 1981 Rev.).

26 186 U.S.P.Q. at 47.

27 *Id.*

as but one fact in the totality of particular facts applicable to the specific situation under consideration.[28]

The court based its holding of no suppression or concealment on the fact that (a) information relating to the Dart was accessible to at least certain of the military, and (b) targets subsequently procured and used by the military were similar to the Dart. In support of its holding, it stated:

> Thus, despite its classified nature, the work on the Dart was not suppressed, in the sense that the benefit thereof was withheld from the public. In the absence of any showing that defendant, by its security classification system, attempted to exclude the public from the benefit of this work, it is considered not to have been suppressed or concealed for purposes of 35 U.S.C. §102(g).[29]

Del Mar is interesting in that although the opinion was issued more than a year after *Bass* it made no reference whatever to *Bass*. Moreover, there is nothing to indicate that the Dart prior invention had ever been made publicly available even after its declassification.[30]

Suppose that the facts in *Del Mar* had been somewhat different. That is, what if the Dart prior invention had occurred more than four years prior to the *Del Mar* invention and the Government had decided to file a patent application on the Dart invention after becoming aware of the *Del Mar* invention. Bear in mind that the work on the Dart was abandoned a little more than a year after the *Del Mar* invention had been conceived. Assume further that an interference had been declared between the two applications. Under these hypothetical circumstances, there is a fair chance that priority would have been awarded to the *Del Mar* application on the grounds of suppression or concealment of the Dart invention.[31] Presumably, the Government would thereafter be liable for its use of the invention claimed in the *Del Mar* patent.

Now assume the same set of hypothetical facts except that no patent application is filed on the Dart invention.

---

28 *Id.*

29 186 U.S.P.Q. at 48.

30 The mere fact of declassification does not in and of itself make previously classified documents "publicly" available.

31 Such an inference can certainly be drawn from the case law discussed in the text accompanying notes 13–21, *supra*.

Under the holding of *Del Mar* presumably no liability would accrue against the Government. In other words, the failure to file the patent application would actually work to the benefit of the Government.

No other case has been found which is on all fours with *Del Mar*. In 1969 in *Carboline Co. v. Mobil Oil Corp.*,[32] the district court held that work done under a government security classification is not publicly available and hence is not prior art under Section 102.[33] Unfortunately, the opinion discussed only Section 102(a) issues[34] and did not address the problem in the context of Section 102(g). The *Carboline* holding was distinguished in *Del Mar* on the ground that the prior invention had not been adequately proved to have been reduced to practice.[35] In 1977 in *Lockheed Aircraft Corp. v. United States*,[36] the Court of Claims cited *Del Mar* in assuming arguendo that classified material can form the basis of Section 102(g) prior invention.[37] There appears to be no other recent case law on the topic.

Although few patent attorneys are aware of its existence and the Patent and Trademark Office has only rarely relied upon it, there is an express statutory provision requiring classified prior inventions in the field of atomic energy to be treated as prior art. Thus, Section 155 of the Atomic Energy Act of 1954 relating to prior art reads as follows:

> In connection with applications for patents covered by this subchapter, the fact that the invention or discovery was known or used before shall be a bar to the patenting of such invention or discovery even though such prior knowledge or use was under secrecy within the atomic energy program of the United States.[38]

---

32 301 F.Supp. 141, 163 U.S.P.Q. 273 (N.D.Ill. 1969).

33 163 U.S.P.Q. at 279.

34 §102. Conditions for patentability: novelty and loss of right to patent

A person shall be entitled to a patent unless—

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or

* * *

35 186 U.S.P.Q. at 47, n. 5.

36 553 F.2d 69, 193 U.S.P.Q. 449.

37 193 U.S.P.Q. at 457, n. 9.

38 42 U.S.C. 2185.

Although Section 155 would clearly appear to make a classified prior invention applicable prior art under Section 102(g), no case has been found which discusses it in this context. Rather, the only extant case, *In re Borst*,[39] refers only to Section 102(a).[40]

As has been noted previously,[41] prior invention can be prior art under several subsections of Section 102. Of interest at this point is the fact that if a prior invention is prior art under Section 102(a), it will also be prior art under Section 102(g), but the reverse is not necessarily true. *Del Mar* represents but one example of the latter situation.

Shortly after *Bass*, the Sixth Circuit affirmed a holding of patent invalidity under the provisions of Sections 102(a), (b), and (g).[42] Although there was no mention of *Bass* or any detailed discussion pertaining to Section 102(g), the decision with regard to the Section 102(g) rejection was clearly correct once the Section 102(a) rejection had been upheld.[43]

The next case of any consequence pertaining to Section 102(g) prior invention as prior art is *Allen v. W. H. Brady Co.*[44] decided in late 1974. *Allen* is one of those rare decisions predicated on the "abandoned" provision rather than the "suppressed or concealed" provisions of Section 102(g).

The facts were as follows. The validity of a patent to one Prosser was challenged on the ground of prior invention by another. Prosser's invention was admittedly anticipated by the invention claimed in an application by Law.[45] But Law lost an interference with an Allen application which disclosed an invention generic to both Prosser and Law, but did not disclose their particular species. After losing the interference, Law made no attempt to commercialize his invention, although Allen who had learned of it in the interference did thereafter commercialize it.

---

39 345 F.2d 851, 145 U.S.P.Q. 554 (C.C.P.A. 1965), cert. denied, 382 U.S. 973, 148 U.S.P.Q. 771 (1966).

40 Compare the language of Sections 102(a) and (g). See notes 5 and 34, *supra*.

41 See Walterscheid, *supra*, 64 J.P.O.S. at 467 (1982).

42 Dunlop Co., Ltd. v. Kelsey-Hayes Co., 484 F.2d 407, 179 U.S.P.Q. 129, 134 (1973), cert. denied, 181 U.S.P.Q. 1 (1974).

43 Prior art under Section 102(a) will be discussed in detail in a later article in this series.

44 508 F.2d 64, 184 U.S.P.Q. 385.

45 *Id.*

Based on these facts, Circuit Judge Stevens.[46] speaking for the court, stated:

> As we read this language [of Section 102(g)], the abandonment is irrelevant unless it occurred "before the applicant's invention." The use of the pluperfect tense—"had not abandoned"—plainly refers to an abandonment which occurred "before the applicant's invention."
>
> Moreover, the concept of abandonment contemplates a voluntary decision by the original inventor to terminate any effort to practice his conception. In some circumstances abandonment of a patent application by acquiescing in an adverse ruling by the Patent Office might amount to an abandonment of the invention, but certainly not in the circumstances disclosed by this record. For the invention itself had no more been abandoned when Law had assigned his interest in it to Allen. The practical effect of the interference ruling was to give Allen, rather than Law, the opportunity to profit from Law's idea. Since there was no abandonment of the invention, and since Law's failure to participate in its exploitation was not voluntary, we do not believe he "abandoned" his invention within the meaning of §102(g). Certainly he did not do so "before the applicant's invention."[47]

The opinion and holding in *Allen* have been sharply criticized on the grounds that the Seventh Circuit erred in holding that for the abandonment to be effective under Section 102(g), it had to be "voluntary" and have preceded the date of Prosser's invention.[48] In this regard, it is to be noted that no case law was cited to supported the court's holding in either respect.[49]

If one assumes that a fundamental purpose of the patent law is to make available to the public an enabling disclosure of the invention for which patent protection is sought,[50] then

---

46 Now Mr. Justice Stevens of the U.S. Supreme Court.

47 184 U.S.P.Q. at 386.

48 Pat. L. Persp. §A.3[7] (1975 Dev.).

49 Why the court failed to provide any citation for its view that abandonment under Section 102(g) must be voluntary is unclear. It could readily have cited its own earlier opinion in Amerline Corp. v. Cosmo Plastics Co., 407 F.2d 666, 161 U.S.P.Q. 6, 7 (7th Cir. 1969).

50 And indeed such a purpose is clear from the requirements of 35 U.S.C. 112 that:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and

it would seem to follow that for a prior invention to be treated as prior art which defeats the patent grant, it must be made available to the public. Accordingly, if the prior invention is abandoned and never made available to the public, it should be immaterial whether the abandonment occurred before or after the later invention for which a patent is sought. In this circumstance, the prior invention does not meet the intent of the patent law and hence should not be treated as prior art. The same is true regardless of whether the prior invention was voluntarily or involuntarily abandoned. If there is involuntary abandonment which does not lead to public disclosure, then the public good is not met.[51]

The problem was complicated in *Allen* by the fact that after Law had lost the interference, the winning party, Allen, thereafter "commercialized" Law's invention. The Seventh Circuit's reliance on the word "commercialized" is unfortunate. An invention may be commercialized, i.e., practiced in the market place, without the public ever obtaining an enabling disclosure of how to practice it.[52] While Law's invention was so simple that any commercial use of it would of necessity have disclosed the nature of it,[53] it is the public disclosure rather than the commercial use that is determinative. Accordingly, Allen had in effect made Law's invention publicly available. That is to say, the invention had been abandoned by Law but not by Allen.

But the express language of section 102(g) is:

> A person shall be entitled to a patent unless—

---

shall set forth the best mode contemplated by the inventor of carrying out his invention.

51 This is stated in the full recognition that there is case law to the effect that Section 102(g) abandonment can only occur voluntarily. See, e.g., Amerline Corp. v. Cosmo Plastics Co., 407 F.2d 666, 161 U.S.P.Q. 6, 7 (7th Cir. 1969).

52 See, e.g., Palmer v. Dudzik, 481 F.2d 1377, 178 U.S.P.Q. 608, 615 (C.C.P.A. 1973).

53 It consisted simply of a method of marking the existence of buried utility lines at the time of installation by partially backfilling the trench to a desired level, putting down a tearable plastic indicating sheet at that level and then completing the backfill. When future excavation uncovered the indicating sheet, this would be immediate warning of the line buried underneath.

(g) before the applicant's invention thereof the invention was made in this country by another *who* had not abandoned, suppressed, or concealed it.[54] (Emphasis supplied.)

Unfortunately from the perspective of the Seventh Circuit, that "who" could only refer to Law and not to Allen. It was for this reason presumably that the court sought to analogize the loss of priority to Allen as in effect equivalent to an assignment by Law of his interest in his invention to Allen.[55]

To the extent, however, that this was the premise of the Seventh Circuit, it is totally erroneous. A priority determination in an interference is not and cannot be equivalent to an assignment of a legal right. An assignment assumes that a legal right exists which can in fact be transferred or assigned. But a loss of priority in an interference proceeding is a determination that no legal right in the invention ever existed in the losing party. Thus, the Seventh Circuit's assumption that the loss of priority in the interference had the same effect as an assignment of Law's invention to Allen is simply wrong.

If the Seventh Circuit had sought to predicate its holding on the view that Law's prior invention had been made publicly available and therefore should be considered as a prior invention under Section 102(g) for that reason, the rationale would have been more readily accepted, particularly in view of *Bass*. Perhaps the most appropriate lesson to be drawn from *Allen* is to beware of literal interpretations of the language of the patent statute.

Less than a year after rendering its opinion in *Allen* the Seventh Circuit again entered the fray. In so doing, it once again relied on the premise expressed in *Allen* that "commercialization" of an invention was sufficient to preclude abandonment, suppression, or concealment in the context of Section 102(g). The case was *Dunlop Holdings Ltd. v. Ram Golf Corp.*[56] and the issue was whether a prior invention consisting of a golf ball with a particular type of cover[57] which had been sold and publicly used without a disclosure

---

54 35 U.S.C. 102.

55 See the text accompanying note 47, *supra*.

56 524 F.2d 33, 188 U.S.P.Q. 481 (1975).

57 The cover consisted of a copolymer sold under the tradename Surlyn by DuPont, with and without certain minor additions to the copolymer.

of the material used for the cover had been suppressed or concealed.

The district court had ruled that because of the public use and sale of the prior invention, it had not been suppressed or concealed within the meaning of Section 102(g),[58] and the Seventh Circuit affirmed this holding. The material used to make the cover of the golf ball was a critical feature of the prior invention but the published record indicates that at no time while his golf ball was on sale or in public use did the prior inventor, Wagner, disclose the material of which the cover was made. Implicit in the failure of both the district court and the Seventh Circuit to discuss the issue was a recognition that the material from which the cover was made could not be "back engineered" from the commercially available golf balls. Indeed, the Seventh Circuit acknowledged that

> . . . at best, the evidence establishes a noninforming public use of the subject matter of the invention [by Wagner].[59]

While recognizing the existence of case law[60] suggesting that a public use which does not disclose the inventive concept may amount to concealment under Section 102(g), the court nonetheless found that:

> There are three reasons why it is appropriate to conclude that a public use of an invention forecloses a finding of suppression or concealment even though the use does not disclose the discovery. First, even such a use gives the public the benefit of the invention. If the new idea is permitted to have its impact in the marketplace, and thus to "promote the progress of science and useful arts," it surely has not been suppressed in an economic sense. Second, even though there may be no explicit disclosure of the inventive concept, when the article itself is freely accessible to the public at large, it is fair to presume that its secret will be uncovered by potential competitors long before the time when a patent would have expired if the inventor had made a timely application and disclosure to the Patent Office. Third, the inventor is under no duty to apply for a patent; he is free to contribute his idea to the public, either voluntarily by an express disclosure, or involuntarily

---

58 Dunlop Holdings Ltd. v. Ram Golf Corp., ___F. Supp. ___, 188 U.S.P.Q. 383 (N.D.Ill. 1974).

59 188 U.S.P.Q. at 484.

60 See, e.g., the case cited in note 52, *supra*.

by a noninforming public use. In either case, although he may forfeit his entitlement to monopoly protection, it would be unjust to hold that such an election should impair his right to continue diligent efforts to market the product of his own invention.[61]

At first glance, the reasoning used by then Circuit Judge Stevens[62] on behalf of the Seventh Circuit has a superficial plausibility, but a closer examination reveals that it is contrary to a fundamental purpose of the patent statute, namely, to provide the public with a teaching of how to practice the invention for which protection is sought.

Contrary to the impression the Seventh Circuit would give, the Congress has not interpreted the Constitutional mandate to "promote the progress of science and useful arts"[63] in any purely economic sense but rather has emphasized the need for full enabling disclosure and description of the invention.[64] Moreover, the case law makes clear that to render an invention obvious the prior art references must be enabling, i.e., they must teach one of ordinary skill in the art how to make and use the invention.[65]

Secondly, the court's assumption that the public use will result in competitors' ultimately determining the nature of the invention is defective in several respects. First of all, there is nothing in the record to suggest that this would routinely have been the case and indeed it had not occurred at the time that Dunlop's assignor had made his invention. In addition, it ignores the express language of Section 102(g) indicating that it is the activity of the prior inventor rather than of third parties which determines whether there has been suppression or concealment.[66]

Finally, there is nothing whatever unjust about the fact that an election by a prior inventor not to pursue patent protection may ultimately result in an impairment of his own right to market his prior invention. That is a risk every

---

61 188 U.S.P.Q. at 484–85.

62 See note 46, *supra*.

63 U.S. Const., art. I, §8, clause 8.

64 See the requirements of the first paragraph of 35 U.S.C. 112 as set forth in note 50, *supra*.

65 See, e.g., In re Sasse, 629 F.2d 675, 207 U.S.P.Q. 107 (C.C.P.A. 1980); In re Brown, 329 F.2d 1006, 141 U.S.P.Q. 245 (C.C.P.A. 1964); and In re LeGrice, 301 F.2d 929, 133 U.S.P.Q. 245 (C.C.P.A. 1962).

66 See the text accompanying notes 54, 55, *supra*.

inventor takes when he elects trade secret protection over the patent grant. Contrary to the assertion made by the court, a noninforming public use does not contribute the invention to the public. Unlike the situation with Law's invention in *Allen* wherein public use immediately established the nature of the invention, Wagner's invention was not obvious from the golf balls which he sold or used in public. That being the case, it is difficult to understand the court's view that he contributed it to the public. Again the court's emphasis on commercialization led it to a conclusion not justified by the facts or the law.

Perhaps needless to say, *Dunlop* has also been severely criticized.[67] Even so, in December 1975, less than two months after *Dunlop* was decided, a district court in *Westwood Chemical, Inc. v. Dow Corning Corp.*[68] stated:

> A "prior invention" which will invalidate a patent number (?) under §102(g) need not involve use of the invention in public. Prior private or secret knowledge is available as prior art invalidating a patent under §102(g). This independent work of others is also clearly evidence of obviousness.[69]

This was going well beyond even the liberal views of the Seventh Circuit. No case law was cited in support of the views expressed and *Westwood* can perhaps best be treated as simply an anomaly in the continuing evolution of Section 102(g) prior invention as prior art.

The position taken in *Westwood* is to be contrasted to the holding of another district court in September 1976 in *Farmhand, Inc. v. Lahman Mfg. Co., Inc.*,[70] that a prior invention for which a patent was never applied for and which was never described in a public document or publication was deemed to be abandoned under Section 102(g).[71] This holding was affirmed by the Eighth Circuit.[72]

Certain of the difficulties faced by district courts in attempting to determine whether prior invention is prior art

---

67 See, e.g., Pat. L. Persp. §A.3[1] (1976 Dev.).
68 ___ F. Supp. ___, 189 U.S.P.Q. 649 (E.D.Mich. 1975).
69 189 U.S.P.Q. at 666.
70 ___ F. Supp. ___, 192 U.S.P.Q. 749 (D.S.Dak. 1976).
71 192 U.S.P.Q. at 757.
72 Farmhand, Inc. v. Lahman Mfg. Co., Inc., 568 F.2d 12, 196 U.S.P.Q. 597, 600 (8th Cir. 1978); cert. denied, 197 U.S.P.Q. 848 (1978).

under Section 102(g) were evident in *Norris Industries, Inc. v. Tappan Co.*[73] decided several months after *Farmhand.* The record showed that one Shroeder had reduced to practice his prior invention of the subject matter claimed in the Warner patents involved in the infringement action. Schroeder filed a patent application on an improvement over this first embodiment but never sought to claim the original embodiment in the apparent belief that it was obvious from the prior art.[74] Although a patent issued on the improved embodiment, the published record does not disclose whether the original embodiment which constituted the prior invention was disclosed in the issued patent or was rendered obvious by the disclosure of that patent.[75] Apparently because of the view it took that the Schroeder prior invention was Section 102(g) prior art, the court did not address this issue.

Nonetheless, the court took the position that the patent application filed on the improvement negated any inference that the prior invention was suppressed or concealed.[76] It also held that because Schroeder's original embodiment had not been hidden at the General Electric facility where it had been reduced to practice and his fellow employees had not been admonished about keeping his invention secret, it could not be considered to have been suppressed or concealed.[77] Accordingly, it held that the Schroeder prior invention constituted anticipation of the subject matter of the Warner patents which were declared invalid.[78] The Ninth Circuit thereafter affirmed.[79]

It is questionable whether the failure to keep an invention under wraps in a corporate facility is equivalent to disclosing the invention to the public. Nor does it automatically or routinely follow that suppression or concealment under Section 102(g) requires an affirmative act and intent to

---

73 ___ F. Supp. ___, 193 U.S.P.Q. 521 (C.D.Cal. 1976).

74 193 U.S.P.Q. at 526.

75 Arguably this was not the case because the court failed to find the patents in question invalid under Section 102(e) which it presumably would have done in view of the fact that the Schroeder patents were filed long before the Warner inventions were made. See 193 U.S.P.Q. at 526.

76 193 U.S.P.Q. at 526.

77 193 U.S.P.Q. at 526–27.

78 193 U.S.P.Q. at 531–32.

79 Norris Industries, Inc. v. Tappan Co., 599 F.2d 908, 203 U.S.P.Q. 169 (1979).

suppress or conceal. The failure to take affirmative steps to make the prior invention publicly available may in the appropriate circumstance be a controlling factor. Moreover, whether the filing of a patent application which subsequently issued as a patent on an improvement is conclusive of public disclosure would seem to depend on whether the issued patent had a disclosure which was enabling with respect to the prior invention or at least rendered it obvious when taken in combination with the teaching of other prior art.

Yet another example of the problems faced by district courts in attempting to ascertain whether a prior invention is Section 102(g) prior art is evidenced by *Continental Copper and Steel Industries, Inc. v. New York Wire Co.*[80] decided in December 1976. At issue was the validity of a patent by Stauffer. The record indicated that one Webber had reduced to practice his prior invention and had filed a patent application which was subsequently abandoned. A critical point of contention was whether the process disclosed and claimed in the abandoned application had been abandoned as well.[81] Relying upon *Allen*,[82] the district court held that since there had been no showing of abandonment prior to the filing date of Stauffer, the Webber invention was not abandoned under Section 102(g) and rendered obvious Stauffer's later invention.

According to the court:

> The concept of abandonment of an *invention* is not tied to the question of patent applications or abandonment of an *application*. Instead, the factual issue is whether Webber invented the process and in any way revealed his invention to the public, regardless of whether or when he sought a patent. The court finds that he did reveal his process to a segment of the public prior to the Stauffer application on October 28, 1959. Samples of the product . . . were revealed to the trade in several instances . . . .[83]

The court held that " . . . the process was so obvious that an examination of the finished product was enough to disclose the so-called invention."[84]

---

80 ___ F. Supp. ___, 196 U.S.P.Q. 30 (M.D.Pa. 1976).
81 196 U.S.P.Q. at 32.
82 196 U.S.P.Q. at 35.
83 196 U.S.P.Q. at 37.
84 *Id.*

Based upon the record adduced in *Continental Copper* it is difficult to know whether the holding with respect to Section 102(g) is good, bad, or indifferent. Perhaps it might best be termed "suspect."

It is elementary patent law that the claims define the invention for which the patent grant is sought. Unfortunately, the district court in *Continental Copper* never saw fit to reproduce the claim of Stauffer which it invalidated and the record does not make clear whether it was a process claim or a claim directed to an article of manufacture. The confusion arises from the fact that at one point the court stated "the plaintiff secured the patent for the claim at issue primarily through detailed alteration and refinement of the shape and size of the band."[85] Likewise the portion of the claim that is reproduced refers to certain specific geometric limitations of elements of the product or article and these were said to be what convinced the examiner to allow the claim.[86] But at a later point in the opinion the court indicates that both Webber and Stauffer invented processes.[87] It may be that Stauffer's claim was a process claim with product limitations in it.

In any case, the court relied heavily on the fact that the claims of the abandoned Webber application and the original claims of Stauffer were directed to a nearly identical process,[88] which it believed was readily obvious from examination of the finished Webber product.[89] In so doing, it seems to have failed to clearly address the central question which was not whether the invention as originally claimed by Stauffer in his application was identical to or obvious over that of Webber but rather whether the claim which ultimately issued in the Stauffer patent *and specifically its geometric process limitations* were obvious from the Webber product "revealed to the trade." While the court seems to have concluded that such geometric limitations were obvious over the art of record, it also seems to have relied on its view that the Webber process was obvious from the Webber

85 196 U.S.P.Q. at 33.
86 *Id.*
87 196 U.S.P.Q. at 35.
88 *Id.*
89 196 U.S.P.Q. at 37.

product.[90] But assuming arguendo that this is the case and further assuming that the Stauffer geometric limitations could be produced by the Webber process, the real issue was whether the Stauffer geometric limitations were obvious from the Webber process.

Finally, failing any clear delineation of what the court meant by "revealed to the trade" one can argue whether there was in fact a public disclosure of the Webber invention.

During 1976 yet another district court in *Solvex Corp. v. Freeman*[91] had difficulty in appreciating the nuances of Section 102(g). Indeed, in granting summary judgment holding that a patent to Meyers was unenforceable by virtue of a Section 102(g) prior invention by one Werth, the court appears simply to have ignored the nuances completely.

The invention in question was based on the discovery that polycarbonate basting thread could be removed from garments by agitating them in perchloroethylene dry cleaning solvent. According to the court:

> There is no dispute that Werth had discovered that perchloroethylene had the effect of removing polycarbonate thread from garments prior to Meyers' tests in Cincinnati. As noted, Meyers himself confirms this in his deposition. This fact that Werth had performed the patented Meyers process, albeit without understanding it, at least eight months before Meyers' tests on June 22, 1964 is not contradicted, and is an additional statutory bar to enforcement of the patent.[92]

But it wasn't quite that simple. Meyers had discovered and claimed a process of removing a polycarbonate basting thread through fracturing the thread by contacting it with perchloroethylene and agitating.[93] The result was that the thread broke into small fragments which were removed by the agitation.

Werth had recognized that the agitation action of the solvent removed the thread from the garment and also that the thread was not dissolved in perchloroethylene because it was insoluble therein.[94] But Werth's subsequent patent

---

90 *Id.*
91 ___ F. Supp. ___, 199 U.S.P.Q. 797 (W.D.Va. 1976).
92 199 U.S.P.Q. at 805.
93 199 U.S.P.Q. at 802.
94 199 U.S.P.Q. at 802 and 803.

contained claims that were directed *only* to processes for removing basting threads by *dissolving* them in a dry cleaning solvent.[95] In other words, although he recognized that polycarbonate basting threads were insoluble in perchloroethylene dry cleaning solvent, he nonetheless claimed his prior invention in such a manner as to be limited to a process in which the basting thread is dissolved. For reasons which are known to him and his patent attorney, he did not claim an invention which was the same as that of Meyers, nor did he claim an invention which was generic to that of Meyers.[96]

Although there is little doubt that Werth could have presented claims generic to those of Meyers, he chose not to do so. While he seems not to have suppressed or concealed the fact that polycarbonate threads could be removed from garments by contacting them with perchloroethylene,[97] his failure to encompass such a processs within the ambit of his claims arguably constituted abandonment of that process.[98]

The point of this is that summary judgment was questionable in view of the court's complete failure to address any aspect of the "abandoned, suppressed, or concealed" provisions of Section 102(g).

The position taken by the court in *Solvex* is to be contrasted with the recent refusal of a district court in *Kimball International, Inc. v. Allen Organ Co.*[99] to grant summary judgment of patent invalidity under Section 102(g). In *Kimball* the court pointed out that prior invention under Section 102(g) requires that steps be taken to make the prior invention public. The court noted that merely showing the prior invention to several people raised material issues as to whether the public disclosure requirement had been met. It also ruled

---

95 199 U.S.P.Q. at 801.

96 This is to be contrasted with the situation in *Allen, supra*, between the Law and Allen applications. See text accompanying notes 45, 46. *supra*.

97 He apparently disclosed in his issued patent that this was the case. See 199 U.S.P.Q. at 802. To that extent, he met the requirement set forth in In re Bass, 474 F.2d 1276, 177 U.S.P.Q. 178 (C.C.P.A. 1973).

98 See, e.g., Bendix Corp. v. United States, ___F.2d ___, 199 U.S.P.Q. 203, 219 (Ct.Cl. 1978).

99 ___ F. Supp. ___, 212 U.S.P.Q. 584 (S.D.Ind. 1981).

that a long delay in making the prior invention public could be found by a jury to be abandonment of the invention.[100]

In 1979 the district court for the Southern District of Ohio issued its opinion in *General Motors Corp. v. Toyota Motor Co., Ltd.*[101] That opinion gave the most detailed exposition concerning the use of Section 102(g) prior invention as Section 103 prior art that had been rendered since the C.C.P.A.'s sharply divided opinion in *Bass*.[102]

The court began its analysis by noting that Section 102 prior art always is characterized by a standard of timely public disclosure of pertinent information. But according to the court there has been controversy as to

> . . . whether this standard can be used to divine Section 102(g) pertinent prior art. Many courts have abjured a public disclosure requirement for Section 102(g) pertinent prior art primarily because that statute does not expressly provide for one. * * * Logic suggests that a timely public disclosure standard should be superimposed upon Section 102(g). If this standard were not superimposed upon Section 102(g), many scenarios might occur which would totally frustrate the Patent System's objective of advancing the arts and science.[103]

Only *Sutter Products Co. v. Pettibone Milliken Corp.*[104] was expressly cited as supporting the statement that "many courts have abjured a public disclosure requirement." But *Sutter Products* does not stand for any such proposition. Rather, the holding therein was only that prior invention need not be publicly disclosed *before the time the subsequent invention is made*.[105] In *Sutter Products* the Section 102(g) prior invention was in fact disclosed and claimed in a subsequently issued U.S. patent.[106]

The court then set forth 18 sequences of events or "scenarios" which it perceived as conceivably being encompassed within the ambit of Section 102(g).[107] Of these

---

100 212 U.S.P.Q. at 590.

101 467 F. Supp. 1142, 205 U.S.P.Q. 158 (S.D.Ohio 1979).

102 See note 5a, *supra*.

103 205 U.S.P.Q. at 205–206, n. 27.

104 428 F.2d 639, 166 U.S.P.Q. 100 (7th Cir. 1970). For a discussion of *Sutter Products*, see Walterscheid, *supra*, 64 J.P.O.S. at 475 (1982).

105 166 U.S.P.Q. at 104.

106 166 U.S.P.Q. at 103.

107 205 U.S.P.Q. at 176 *et seq.*

eighteen, the court concluded that eleven would result in situations wherein the prior invention would in fact be considered as Section 102(g) prior art.[108]

To determine whether prior work constitutes prior invention which can be treated as prior art under Section 102(g) against a subsequent invention, the court listed four inquiries that must be made, namely, (a) whether the prior work was performed by the same entity to make the later invention, (b) whether the prior work constitutes invention, (c) whether the prior work was publicly disclosed, and (d) whether it was abandoned, suppressed, or concealed before the date of invention of the later invention against which it is sought to be applied.[109]

At issue in *General Motors* was the validity of a patent to Foster et al. claiming a catalytic converter, i.e., a device which reduces the concentration of pollutants in automobile engine exhaust. Argued to be Section 102(g) prior art against the patent were a sketch of an earlier catalytic converter and still another catalytic converter called the CM-714 converter which had been reduced to practice and tested at General Motors before the invention of the Foster et al. converter.

The court had little difficulty in concluding that the sketch did not constitute Section 102(g) prior invention because the concept embodied therein had never been reduced to practice.[110] Since the CM-714 converter had been reduced to practice prior to the conception of the Foster et al. invention, the question of whether it was Section 102(g) prior invention was deemed to depend on whether it had been publicly disclosed and not abandoned, suppressed, or concealed.

In this regard, the court found that the sale of a CM-714 converter to International Harvester Corporation constituted a public disclosure.[111] Although the court acknowledged that the CM-714 converter had been abandoned by General Motors, it also found that the abandonment did not occur until well after the date of the Foster et al. invention.

---

108 205 U.S.P.Q. at 177.
109 205 U.S.P.Q. at 179.
110 205 U.S.P.Q. at 180–81.
111 205 U.S.P.Q. at 182.

Citing *Allen v. W. H. Brady Co.*[112] the court held that such late abandonment could not preclude the CM-714 converter from being considered as Section 102(g) prior invention.[113] Accordingly, the CM-714 converter was deemed to be prior art under Section 102(g).[114] Finally, the court determined the Foster et al. patent to be invalid as obvious over the teaching of the CM-714 converter taken together with that of another prior art reference.

For reasons which will be discussed in detail in the next article in this series, the Sixth Circuit saw fit to reverse the district court decision in *General Motors*.[115] Nonetheless, the methodical and detailed exposition of Section 102(g) issues therein presents a sharp contrast to the usual practice of many district courts.[116]

The C.C.P.A. entered the fray again with its opinion in *In re Clemens*[117] rendered in June 1980. To understand the factual situation in *Clemens* requires a bit of background. Generally speaking, there is little difficulty in accepting the premise that a prior invention which has been claimed in an issued U.S. patent has not been abandoned, suppressed, or concealed within the meaning of Section 102(g)[118] and hence under the case law developed in the 1970's may be treated as Section 102(g) prior art in determining Section 103 obviousness. But what of the situation wherein the purported prior invention is not claimed in the patent but instead is merely argued to be disclosed therein? That, on its face

---

112 508 F.2d 64, 184 U.S.P.Q. 385 (7th Cir. 1974). See generally the text accompanying notes 44–45, *supra*.

113 205 U.S.P.Q. at 184.

114 *Id.*

115 ___ F.2d ___, 212 U.S.P.Q. 659 (6th Cir. 1981).

116 Compare, for example, the opinion of the district court in Hercules Inc. v. Exxon Corp., ___F. Supp. ___, 207 U.S.P.Q. 1088 (D.Del. 1980) which states that Section 102(g) "defines completed inventions as prior art." 207 U.S.P.Q. at 1102. In so stating, the court completely ignored the "suppressed or concealed" provisions of Section 102(g) or the issue of public disclosure as a requirement for Section 102(g) prior invention.

117 622 F.2d 1029, 206 U.S.P.Q. 289.

118 But such a premise is not axiomatic because an undue delay which is not satisfactorily explained between reduction to practice and filing of the patent application may result in a finding of suppression or concealment. See generally the text accompanying notes 13–21, *supra*.

at least. appeared to be the issue faced by the court in *Clemens*.[119]

Specifically in question was the unclaimed disclosure in a patent to one Barrett. Barrett claimed (a) a particular polymer. (b) the process of making the polymer, (c) a type of VBC-based resin derived from the polymer, (d) the process of making the particular VBC-based resin. and (e) a very broad process of removing a compound from a liquid by treating the liquid with a particular type of VBC-based resin.[120] Barrett also disclosed that ion exchange resins could be used to treat and purify condensate water in a steam regenerating system (a process known as condensate polishing) and that prior art resins had a poor ability to withstand thermal degradation. Finally. he expressly disclosed that his resins had much better thermal stability than certain prior art resins known as CME-based resins.[121]

The type of VBC-based resins invented by Barrett were known as macro-reticular resins. Another type of VBC-based resins known as gellular resins were taught in the prior art.[122] But with the exception of one claim, Clemens et al. claimed a process for using *both* macroreticular and gellular VBC-based resins to remove corrosion products from boiler condensate water at elevated temperatures.[123]

The rejections of the Clemens et al. claims included one which relied on the Barrett disclosure exclusively. As the court pointed out,

> In setting forth the Barrett rejection, both the examiner and the board rejected the claimed invention under 35 USC 103 for being obvious from the invention of another (Barrett) who had not abandoned. suppressed, or concealed it. 35 USC 102(g).[124]

In upholding the Barrett rejection, the board had stated that a patent is prima facie evidence of inventorship of anything disclosed therein.[125] Clemens et al., on the other hand,

---

119 206 U.S.P.Q. at 295.
120 206 U.S.P.Q. at 292.
121 206 U.S.P.Q. at 293.
122 206 U.S.P.Q. at 293.
123 Their claims are reproduced at 206 U.S.P.Q. at 291–92.
124 206 U.S.P.Q. at 297–98.
125 206 U.S.P.Q at 294.

argued that in *Bass*[126] the prior art relied upon under 35 U.S.C. 103 by reason of 35 U.S.C. 102(g) was subject matter which was claimed, as well as disclosed, and that *Bass* should not be extended to cover unclaimed disclosure as prior invention.[127]

The C.C.P.A., in effect, said "You're both wrong." It held that the board's view was incompatible with the requirements of Section 112.[128] But it also emphasized that

> . . . it is a fundamental principle of patent law "that claims are to be construed in the light of the specification and *both* are to be read with a view to ascertaining the invention." United States v. Adams, 383 U.S. 39, 49, 148 USPQ 479, 482 (1966).[129]

With these considerations in mind, the court then held that Barrett's broad process-of-using claims encompassed condensate polishing with macroreticular VBC-based resins.[130] But it went on to state that this was insufficient evidence to show in and of itself that Barrett was the prior inventor of a process using VBC-based resins *of whatever type* in condensate polishing such as claimed by Clemens et al. As the court put it,

> . . . because gellular VBC-based resins were known prior to Barrett's discovery, there is nothing inconsistent about appellants having invented the process of using VBC-based resins in condensate polishing before Barrett invented the macroreticular VBC-based resin composition.[131]

The court stressed that the basic rule is that any proper rejection involving Section 102(g), whether or not combined with Section 103, must be based upon evidence of an invention prior to that claimed in the application against which it is cited.[132] That the patent and application in question are coassigned does not alter the rule.[133] Since the Office had

---

126 See note 5a, *supra*.
127 206 U.S.P.Q. at 295.
128 206 U.S.P.Q. at 297. See the first paragraph of 35 U.S.C. 112 at note 50, *supra*.
129 206 U.S.P.Q. at 297.
130 *Id.*
131 206 U.S.P.Q. at 298.
132 *Id.* See also In re Bulloch, 604 F.2d 1362, 203 U.S.P.Q. 171. 174, n. 12 (C.C.P.A. 1979).
133 *Id.*

not met its burden of showing that the Barrett invention was in fact prior to that of Clemens et al., the rejection based on Sections 102(g) and 103 was reversed.[134]

Had the court stopped there, it would have merely extended the holding of *Bass* to expressly include prior invention disclosed but not claimed in an issued U.S. patent. But it went further and thereby succeeded in adding its quantum of confusion to the question of what properly constitutes Section 102(g) prior invention. That aspect of *Clemens* will be treated in the next of this series of articles.

(To be continued)

134 206 U.S.P.Q. at 299.

Journal of the Patent Office Society

*Edward C. Walterscheid**

THE EVER EVOLVING MEANING OF PRIOR ART** (PART 3)

This is the third in a series of articles intended to explore the complex and changing nature of prior art in the patent law. The first two articles[1] in the series provided an introduction to the scope of the endeavor and began an analysis of Section 102 prior art within the following framework:

I. Section 102 Prior Art

A. *The Language of Section 102*
B. *Prior Invention as Prior Art*
1. *Section 102(g) Prior Invention Prior to* Bass
2. *Section 102(g) Prior Invention as Prior Art According to* Bass
3. *Public vs. Private Knowledge*

This article continues that analysis commencing with subsection 4 under "Prior Invention as Prior Art."

4. *The Revolt Against "Secret" Section 102(g) Prior Art*

During the decade of the 1970's there was a significant expansion of the treatment of prior invention as prior art under Section 102(g).[2] This expansion rather routinely permitted prior invention to be treated as Section 102(g) prior art even though the prior invention was not public knowledge at the time the invention against which it was applied was made.[3] In some instances, district courts used language broad enough to treat prior invention as Section 102(g) prior art regardless of whether it had ever been made public.[4]

---

*Deputy Assistant Director for Legal Affairs, University of California, Los Alamos National Laboratory, Los Alamos, New Mexico 87545

**The Los Alamos National Laboratory requests that the publisher identify this article as work performed under the auspices of the U.S. Department of Energy.

1 E.C. Walterscheid, "The Ever Evolving Meaning of Prior Art (Part I)," 64 J.P.O.S. 457 (1982); "(Part 2)," 64 J.P.O.S. 571 (1982).

2 35 U.S.C. 102 reads in pertinent part:

A person shall be entitled to a patent unless—

* * *

(g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it.

3 See, generally, the case law discussed in Walterscheid, *supra*, 64 J.P.O.S. 571 *et seq.* (1982).

4 See, e.g., Westwood Chemical, Inc. v. Dow Corning Corp., ____F.Supp. ____. 189 U.S.P.Q. 649 (E.D. Mich., 1975).

Several commentators have argued against the use of a "secret" prior invention as Section 102(g) prior art except in the circumstance wherein there has been a priority determination, i.e., an interference proceeding has occurred.[5] During the last several years, certain appellate tribunals have also in effect expressed rather strong reservations against the use of "secret" Section 102(g) prior art and appear to have started a trend toward retrenchment and restriction of the use of prior invention as prior art. Three recent appellate decisions, although disparate in nature, serve to give some indication of the nature of the trend—if indeed such it is.

The first of these was the Court of Customs and Patent Appeals (C.C.P.A.) decision in *In re Clemens*[6] which has been discussed in some detail in a different context in the second of this series of articles.[7] It may be recalled that in *In re Bass*[8] the C.C.P.A. had held

> . . . that the prior invention of another who had not abandoned, suppressed or concealed, *under the circumstances of this case* which include the disclosure of such invention in an issued patent, is available as "prior art" within the meaning of that term in §103[9] by virtue of §102(g).[10]

This was consistent with the usual judicial view during the 1970's that the prior invention in order to be treated as prior art had to have been made publicly available at some reasonable[11] point in time.[12]

---

5 See, e.g., Pat.L.Persp. §A.3[7] (1973 Dev.; 1975 Dev.; 1982 Dev.); and K.F. Jorda, "Section 102(g) Prior Invention as Section 103 Prior Art: Impact on Corporate Research," 58 J.P.O.S. 523 (1976).

6 622 F.2d 1029, 206 U.S.P.Q. 289 (1980).

7 Walterscheid, *supra*, 64 J.P.O.S. at 591 *et seq.*

8 474 F.2d 1276, 177 U.S.P.Q. 178 (1973).

9 §103. Conditions for patentability; non-obvious subject matter

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in Section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10 177 U.S.P.Q. at 182.

11 The case law suggests that if the public disclosure occurred at some unduly long period in time after the prior invention had been reduced to practice, and the delay had no reasonable explanation, the prior invention would be found to have

In *Clemens*, however, the C.C.P.A. explicitly added another very significant restriction which had not until that time (June 1980) been considered as having any particular relevance to the treatment of Section 102(g) prior invention as prior art. Specifically, the court pointed out that in *Bass* at least one of the three Bass co-inventors had actual knowledge of the prior invention before making the Bass invention.[13] It then went on to say:

> Under 35 USC 103, obviousness is determined with reference to "a person having ordinary skill in the art to which said subject matter pertains." In effect, the *Bass* decision imputed to such a person the applicant's own knowledge of another's prior invention. In the case at bar, however, the PTO is imputing to this "person having ordinary skill in the art" knowledge which has not been shown to have been known to either the public or the applicants. We do not consider such an extension of the *Bass* holding to be warranted.
>
> Where an applicant begins with knowledge of another's invention that will be available to the public at a later date as a result of an issued patent, treating this other invention as prior art is justified under facts such as those in *Bass*. No such consideration is present when the applicant does not begin with such knowledge. To the contrary, where this other invention is unknown to both the applicant and the art at the time the applicant makes his invention, treating it as 35 USC 103 prior art would establish a standard for patentability in which an applicant's contribution would be measured against secret prior art. Such a standard would be detrimental to the innovative spirit the patent laws are intended to kindle. Inasmuch as there are no competing policy considerations to justify it, as there is in the case of §102(e) prior art and lost counts, we decline to establish such a standard here.[14]

Some general observations are in order before coming to grips with the essential issues raised by this holding in *Clemens*. First of all, it should be noted that the court prac-

---

been suppressed or concealed. See Walterscheid, *supra*, 64 J.P.O.S. at 571 *et seq.*

12 But as has already been noted, not all courts took this view. See, e.g., Del Mar Engineering Laboratories v. United States, 524 F.2d 1178, 186 U.S.P.Q. 42 (Ct.Cl. 1975); and Westwood Chemical, Inc. v. Dow Corning Corp., ____F.Supp. ____, 189 U.S.P.Q. 649 (E.D. Mich. 1975).

13 206 U.S.P.Q. at 299. This followed from the fact that one of the Bass co-inventors was the sole inventor of a prior invention in question.

14 206 U.S.P.Q. at 299.

ticed a form of sophistry in stating that in effect the *Bass* decision imputed to one of ordinary skill in the art the applicant's own knowledge of another's prior invention. No language can be found in *Bass* which in any way—even inferentially—predicates the holding therein on such an imputation.

Secondly, while the court is indeed correct in suggesting or at least inferring that if the prior invention were known to the public at the time the later invention was made, it would properly be treated as Section 102(g) prior art, pragmatically there is no particularly good reason why there should be reliance on Section 102(g) in such a situation. Rather, it would be much simpler and more straightforward to rely on Section 102(a) instead.[15]

Thirdly, the court's statement commencing with "where an applicant begins with knowledge of another's invention that will be available to the public at a later date *as a result of an issued patent* (emphasis supplied) . . ." might be construed as limiting the court's holding to this particular factual situation.[16] It is doubtful, however, that this was the court's intent, since it is public disclosure that is the key and not necessarily the manner in which the public disclosure is made. Rather, this specific language should be interpreted as meaning that disclosure in an issued patent is clearly sufficient to render the prior invention prior art under Section 102(g) but that other means may serve as well.

With those preliminaries aside, consider now the crux of the court's holding, namely, that when the prior invention is unknown to both the art *and the inventor of the later invention*, then it may not properly be treated as Section 102(g) prior art against that later invention, even though it may thereafter become public knowledge by any means including the issuance of a patent.

---

15 §102. Conditions for patentability; novelty and loss of right to patent
A person shall be entitled to a patent unless—
(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent.
* * *

16 In fact this appears to be precisely the interpretation used by the Fifth Circuit in Shields v. Halliburton Co. See text accompanying notes 75–77, *infra*.

This aspect of the *Clemens* holding has been sharply challenged by Chisum.[17] He argues that:

> First, the court provides no support in authority or policy for the distinction between prior inventions known to the later inventor and those not so known. Second, the short opinion ignores the extensive debate in *Bass* over history, statutory language, case precedents and policy as regards prior invention as prior art.[18]

Although Chisum acknowledges that there is a line of authority pertaining to Section 102(f) prior invention as prior art which treats as the controlling issue whether the later inventor had actual knowlege of the earlier invention.[19] he nonetheless vigorously contends that:

> The knowledge distinction finds no support in the language of either Section 102 or Section 103. Indeed, a fundamental tenet of the law of prior art and obviousness is that the inventor-patentee stands in the shoes of a mythical person of ordinary skill in the art who is presumed to be "fully informed of everything which preceded him, whether such were the actual fact or not."[20] The inventor's personal ignorance of prior art is simply not relevant with such an objective standard of patentability.[21]

Nor does Chisum find particularly persuasive the assertion in *Clemens* that measuring patentability against secret prior art would be detrimental to the purposes of the patent system. He suggests that the knowledge requirement set forth in *Clemens* arbitrarily distinguishes between individual and organized research, a distinction which is precluded by the present language of the patent statute. In Chisum's view, not only does it arbitrarily distinguish, but it does so in a discriminatory fashion in that it tends to make prior invention prior art only in the case of organized research.[22]

The authors of *Patent Law Perspectives*, on the other hand, if not positively delighted with the *Clemens* opinion,

---

17 D.S. Chisum, "Prior Invention and Patentability," 63 J.P.O.S. 35 (1981).

18 63 J.P.O.S. at 410.

19 63 J.P.O.S. at 411, n.44. The use of Section 102(f) prior invention as prior art will be discussed in the next article in this series.

20 The quoted language is from Mast, Foos & Co. v. Stover Mfg. Co., 177 U.S. 485, 493–94 (1900). It has also been quoted in In re Winslow, 365 F.2d 1017, 151 U.S.P.Q. 48 (C.C.P.A. 1966), and Merit Mfg. Co. v. Hero Mfg. Co., 185 F.2d 350, 87 U.S.P.Q. 289 (2d Cir. 1950).

21 63 J.P.O.S. at 410–11.

22 63 J.P.O.S. at 417.

certainly appear satisfied with it.[23] This is not surprising in view of their long antipathy to the use of Section 102(g) prior invention as prior art.[24] Interestingly, the only analytical comment they make concerning the knowledge requirement set forth in *Clemens* is that "the C.C.P.A. seems to have transferred its reliance from Section 102(g) to Section 102(f) as prior art."[25] If by that they meant to state that the C.C.P.A. in *Clemens* has absolutely muddied any distinction between Section 102(f) and Section 102(g) prior invention as prior art, they are entirely correct.[26]

In marked contrast to the views of the C.C.P.A. expressed in *Clemens* is the approach taken by the Sixth Circuit in *General Motors Corp. v. Toyota Motor Co., Ltd.*[27] The opinion by the district court in *General Motors*[28] has been discussed in Part II of this series of articles.[29] It may be recalled that at issue in *General Motors* was the validity of a patent to Foster et al. claiming a catalytic converter, i.e., a device which reduces the concentration of pollutants in automobile engine exhaust. Argued to be Section 102(g) prior art against the patent were a sketch of an earlier catalytic converter and still another catalytic converter called the CM-714 converter which had been reduced to practice and tested at General Motors before the invention of the Foster et al. converter.

The district court found that the sketch did not constitute Section 102(g) prior invention[30] but that the CM-714 converter did.[31] Based on that determination it held that claims 5–8 of the Foster et al. patent were invalid as obvious under Section 103 in view of the teaching of the CM-714 converter taken together with that of another prior art reference.[32]

---

23 Pat.L.Persp. §A.3[7] (1982 Dev.).
24 See the citations given in note 5, *supra*.
25 Pat.L.Persp. at A.3[7]-48.
26 This point will be discussed in the next article in this series.
27 ____ F.2d ____, 212 U.S.P.Q. 659 (1981).
28 467 F.Supp. 1142, 205 U.S.P.Q. 158 (S.D. Ohio 1979).
29 Walterscheid, *supra*, 64 J.P.O.S. at 589 *et seq.*
30 205 U.S.P.Q. at 180–81.
31 205 U.S.P.Q. at 184
32 205 U.S.P.Q. at 190–91.

The Sixth Circuit disagreed and reversed the district court by holding that the CM-714 converter was not Section 102(g) prior invention and hence could not be treated as Section 103 prior art to invalidate the Foster et al. patent.[33] Offered in support of this holding were alternative grounds that the CM-714 converter could not be Section 102(g)/103 prior art because (a) it had never been publicly disclosed,[34] and (b) it was part and parcel of the same invention claimed by Foster et al.[35]

To properly consider these alternative grounds, a bit of background is in order. The district court had found that the CM-714 converter had been publicly disclosed by having been sold to the International Harvester Corporation.[36] It recognized that if the sale had been for experimental purposes related to the subject matter of the invention embodied in the CM-714 converter, it could not have been deemed a public disclosure.[37] But it also expressly determined that "[a]lthough the CM-714 converters purchased by International Harvester were sold for experimental use, *the experimentation which International performed did not relate to the invention embodied in the CM-714 converter.*"[38] [Emphasis supplied.] Accordingly, it held that the experimental use exception did not apply.

But, said the Sixth Circuit:

> The district court did not find that GM's sales were for other than experimental purposes, but, we believe, too narrowly limited experimental purposes that may fit the "experimental use" exception.[39]

---

33 212 U.S.P.Q. at 663.

34 212 U.S.P.Q. at 663. This was in accordance with the prevailing view that to constitute Section 102(g) prior invention, the invention in question must be made available to the public. See generally Parts 1 and 2 of this series of articles. Walterscheid, *supra*, 64 J.P.O.S. at 457 *et seq.* and 571 *et seq.*

35 212 U.S.P.Q. at 662.

36 205 U.S.P.Q. at 182–83.

37 205 U.S.P.Q. at 182, citing Minnesota Mining & Mfg. Co. v. Kent Industries, Inc., 409 F.2d 99, 161 U.S.P.Q. 321 (6th Cir. 1969), and Kalvar Corp. v. Xidex Corp., 384 F.Supp. 1126, 182 U.S.P.Q. 532 (D. Cal 1973), aff'd. 556 F.2d 966, 195 U.S.P.Q. 146 (9th Cir. 1977).

38 205 U.S.P.Q. at 183.

39 212 U.S.P.Q. at 663.

In so doing, it ignored the fact that the district court had relied in no small measure on language from a Sixth Circuit opinion.[40]

Nonetheless, had the Sixth Circuit limited its reversal to this ground, it would have generated little comment pertinent to the use of Section 102(g) prior invention as Section 103 prior art. Unfortunately, it did not and therein lies the rub. Simply put, in holding that the CM-714 converter was part and parcel of the Foster et al. invention, the Sixth Circuit played havoc with a long line of case law extending back at least as early as 1966. To understand why this is so requires a brief look at the relationship between the early catalytic converter sketch (the CM-474 sketch), the CM-714 converter, and the patented converter of Foster et al. and between the persons who worked on them.

According to the findings of fact made by the district court the CM-474 sketch was made by Albert Moore, a draftsman for the Product Engineering Section of General Motors who worked alone on it.[41] A GM Record of Invention indicated that the CM-714 was conceived solely by Andrew Banyas, a Production Engineering staff member, and John Jalbing, a staff member of Product Engineering. As the district court phrased it, "[h]owever, Moore also should be given some credit for the CM-714 converter since it was derived from the CM-714 sketch."[42] The Sixth Circuit would later seize on this seemingly innocuous statement to support its reversal of the district court.[43]

Finally, there was the CM-1090 converter which was the subject of the Foster et al. patent. The inventors listed for this invention were Michael Foster, Albert Moore, and James Haggart.[44]

The district court began its discussion of the applicable law by stating that "a reference may constitute Section 102 pertinent art only if it was developed by an entity which is different from the one which developed the patent-in-suit."[45]

---

40 See note 37, *supra*.
41 295 U.S.P.Q. at 170.
42 *Id.*
43 See text accompanying notes 53 and 54, *infra*.
44 205 U.S.P.Q. at 171.
45 205 U.S.P.Q. at 179.

In re Land[46] was cited in support of this proposition. The C.C.P.A. in *Land* had held in 1966 that an entity A.B was different than either A or B and hence A or B were to be considered as "another" as that term is used in Section 102(e) and therefore could be treated as prior art to the entity A.B.[47] Presumably, the district court was of the view that the term "another" as used in Section 102(g) should have the same connotation as in Section 102(e).

But when is A.B distinct from A or B? According to the district court:

> If several persons collaborate to produce a joint invention, the conception and invention of one of them will be assimilated into the joint invention only if those conceptions and inventions were generated by the collaborative effort which produced the joint invention. [Footnote omitted.] Therefore, a conception or invention which is developed by a joint inventor before commencement of the collaborative effort never can be treated as the conception of a joint invention or as a joint invention because it is not the result of a collaborative effort to produce a joint invention. However, if the prior conception or invention is modified as a result of a collaborative effort, the modified conception or invention may become the conception of a joint invention or a joint invention.[48]

The Sixth Circuit acknowledged in its opinion on appeal that this last sentence best states the law of the circuit.[49]

Applying this law, the district court found that "the CM-474 sketch was the sole conception or invention of Moore rather than a product of a collaborative effort by Moore, Haggart, and Foster."[50] It may also be recalled that the district court had determined that the CM-714 converter was the product solely of Banyas and Jalbing.[51] But said the court, "even if the CM-714 converter were derived from the CM-474 sketch [and as a consequence Moore were treated as a co-inventor thereof], it still would be the product of an entity different from the one which created the . . . [Foster et al.] patent."[52] It was for this reason that the district court

---

46 368 F.2d 866, 151 U.S.P.Q. 621 (C.C.P.A. 1966).
47 151 U.S.P.Q. at 634.
48 205 U.S.P.Q. at 179–80.
49 212 U.S.P.Q. at 661.
50 205 U.S.P.Q. at 180.
51 See text accompanying note 42, *supra*.
52 205 U.S.P.Q. at 181.

considered the CM-714 converter to be applicable prior art even if Moore were viewed as a co-inventor of it.

On appeal, General Motors contended in effect that the patented converter, i.e., the CM-1090 converter, was the joint invention of all five persons noted earlier and that the CM-474 sketch and CM-714 converter represented merely two steps in the development of the patented converter which should be seen as merging into the final product.[53] For the Sixth Circuit to accept this argument it had first to somehow find that Moore had been involved with all three converters, for otherwise there would have been no common inventor, much less a common inventive entity for the three. This it did, by holding that Moore had participated at least indirectly in the work on all three converters. It did this by relying on the district court's statement that Moore "also should be given some credit for the CM-714 converter since it was derived from the CM-474 sketch."[54]

In addition, the Sixth Circuit had not only to distinguish *Land* but also *In re Bass*[55] which was also directly in point. In *Bass* the C.C.P.A. had held that a Section 102(g) prior invention by A.B could be treated as Section 103 prior art to an invention by A.B.C.[56] The best the Sixth Circuit could do was:

> Neither *Land* nor *Bass* indicates that the prior inventions were in any way the product of a concerted effort within a business entity. Under the facts of this case, where numerous "inventors" all worked under the aegis of one employer toward a common goal, it is appropriate to define the concept of joint invention broadly. It is not realistic to require in such circumstances that joint inventors work side-by-side, and that each step in the inventive process be taken by all the firm's collaborators.[57]

Although couched in legal terms, the holding in *General Motors* make sense only as decision based on equity. Indeed, certain of the language used by the Sixth Circuit suggests that it held the view that any other decision would be ineq-

---

53 212 U.S.P.Q. at 662.
54 212 U.S.P.Q. at 662, n.1.
55 474 F.2d 1276, 177 U.S.P.Q. 178 (C.C.P.A. 1973).
56 For a discussion of *Bass*, see Part 1 in this series. Walterscheid, *supra*, 64 J.P.O.S. at 476 *et seq.*
57 212 U.S.P.Q. at 662.

uitable.[58] Why it took this position is not surprising in the context of the findings adduced by the district court.

Thus, the district court found that Toyota had basically copied the CM-1090 converter and manufactured it with all its essential elements.[59] As a consequence, it, a Japanese competitor, by copying its American competitor's design was able to meet Environmental Protection Agency requirements[60] and presumably thereby compete in the lucrative American market. Needless to say, in December 1981 when *General Motors* was decided, this perceived inequity took on added meaning in view of the difficulties being experienced by the American auto industry in competing with its Japanese counterparts.

General Motors presented the authors of *Patent Law Perspectives* with a dilemma. While they commended it as manifesting "a judicial predisposition against the invocation of 35 U.S.C. §102(g) prior art absent the most compelling of circumstances," they also were obliged to recognize that "its legal analysis left much to be desired."[61] They pointed out that the Sixth Circuit focused entirely on the standard of obviousness set forth in Section 103 whereas the pertinent issue was whether the CM-714 converter constituted prior art under any provision of Section 102. As they noted, no attempt was made to analyze the meaning of the term "another" as used in Sections 102(e) and (g) upon which a multitude of prior cases have focused.[62]

Nor is the Sixth Circuit's attempt to distinguish *Land* and *Bass* persuasive. Indeed, a reasonable reading of *Land* leads to exactly the opposite conclusion from that drawn by the Sixth Circuit.

According to the court, there is nothing in *Land* to indicate that the prior inventions were *in any way* the product of a concerted effort within a business entity. In so arguing, it ignored the following express statements in *Land:*

---

58 212 U.S.P.Q. at 663.

59 205 U.S.P.Q. at 172.

60 *Id.*

61 See Pat.L.Persp. §A.3[7] (1982 Dev.).

62 In this regard, *Land* alone has been cited at least ten times for the proposition that A is distinct from A.B and hence is "another" insofar as Section 102 is concerned.

. . . we are dealing with inventors who worked closely together for their common assignee, Polaroid, and with a joint application rejected on patents issued to an individual inventor who is one of the joint inventors. *The application and the reference patents all flowed from the same research out of the same laboratory, were prepared by the same attorneys, are complex, lengthy, interrelated, and contain extensive cross-references.*[63] (Emphasis supplied.)

It is apparent that in an attempt to distinguish *Land* on its facts, the Sixth Circuit simply ignored this language and as a result improperly and erroneously characterized *Land* as failing *in any way* to indicate that the prior inventions were the product of a concerted effort within a business entity.

The same is true with respect to *Bass*. Again the Sixth Circuit ignored the record indicating that the prior art inventions were commonly assigned with the application against which they were cited[64] and that appellants in *Bass* had admitted that one of the inventions argued to be prior art by the Patent and Trademark Office and their invention "were part of the same research and development program."[65]

It has been suggested that if

. . . the Sixth Circuit truly believed that it was applying more expansive notions of joint inventorship to corporate in-house developments, perhaps a more logical conclusion to the court's opinion would have been the findings that the . . . [Foster et al.] patent was in fact the invention of Moore. Foster, Haggart, Banyas and Jalbing, that the nonjoinder of the last two inventors occurred without deceptive intention and that the nonjoinder should be cured by an appropriate order under 35 U.S.C. §256.[66]

Section 256 provides in pertinent part that nonjoinder or misjoinder of joint inventors shall not automatically invalidate a patent and that a court before which the matter is called into question may order correction of the patent on notice and hearing of all parties concerned.

---

63 151 U.S.P.Q. at 632–33.

64 The C.C.P.A. noted that the examiner had relied on the "relationship of the parties and the common ownership" in finding a Rule 131 affidavit deficient to remove the prior invention as prior art. 177 U.S.P.Q. at 182.

65 177 U.S.P.Q. at 187.

66 Pat.L.Persp. §A.3[7] (1982 Dev.).

Had General Motors really perceived that the five employees in question were in fact joint inventors, it could readily have sought this solution. For reasons which are unclear, it did not. One may speculate that it did not because of difficulties of proof. In any case, it is not clear that the Sixth Circuit would have accepted the argument that all five were joint inventors because of its own contention that no one had produced "clear and convincing evidence that the contributions of the unnamed 'inventors' were any more than improvements on Moore's concept."[67] In so stating, the court seems to have ignored the fact that this was a double-edged sword in that it could equally apply to the joinder of Foster and Haggart as inventors of the patent in question.

For the moment enough said about *General Motors*. Let us now turn to the Fifth Circuit opinion in *Shields v. Halliburton Co.*[68] At issue was the validity of a patent to Bassett and Olson for a method of grouting or cementing the annular spacing between a steel jacket and a piling running axially through the jacket for support of off-shore drilling platforms. The basic problem was to somehow effectively remove sea water for a time sufficient for the grout to set. Bassett had originated and actually practiced the concept of using air pressure to keep out sea water while the grouting was introduced and allowed to set. Thereafter, he had disclosed this idea to Olsen who had suggested certain additional features to be incorporated in the method. A patent subsequently issued to Bassett and Olsen covering the various features of the process. Later a reissue patent application seeking still broader claims was filed on behalf of Bassett and Olson and issued as a patent. It was this reissue patent which was at issue in *Shields*.[69]

The basic legal issue faced by the district court was that although Bassett and Olsen were given as co-inventors, the claims said to be infringed were limited to the use of the air pressure feature and did not contain or cover any of the

---

67 212 U.S.P.Q. at 662.

68 667 F.2d 1232 (5th Cir. 1982).

69 See Shields v. Haliburton Co., 493 F.Supp. 1376, 207 U.S.P.Q. 304 (W.D. La. 1980).

additional features suggested by Olsen in his discussions with Bassett. Defendants in the infringement action argued that "since Bassett conceived and reduced to practice . . . the subject matter of the fifteen claims involved before any date ascribed to Bassett and Olsen, the Court should render these claims invalid."[70]

For reasons which are unclear, the district court took this to be an argument of invalidity under Section 102(a) and did not mention Section 102(g) in its opinion.[71] While acknowledging that Bassett was technically "another" with respect to the co-inventive entity of Bassett and Olsen, it nonetheless found the patent in suit "to be a sufficient advancement over the prior work of Bassett to constitute 'invention' by Bassett and Olsen,"[72] and held it valid and infringed.[73]

It goes without saying that defendants were highly perturbed by this ruling. On appeal, they argued that they did not infringe any claim which covered the joint invention of Bassett and Olsen and that the claims limited to coverage of air-pressure grouting alone were the invention of Bassett alone and hence invalid in a patent issued to Bassett and Olsen. The Fifth Circuit pointed out that this argument is premised on the finding of the district court that Bassett's earlier work constituted prior invention by another-and hence presumably prior art.[74] But said the court, this argument must fail because under the facts of this case Bassett cannot be "another" to Bassett and Olsen.[75]

In support of this view, the Fifth Circuit stated:

> The trial judge correctly noted the factual distinction between the case at bar in which the "first" inventor, Bassett, never sought a patent himself, and the cases cited by defendants where the first inventor filed for, or received a patent for his own work, and subsequently filed jointly with a collaborator for newer developments. * * * The district judge found no precedent addressing the type of arguments presented here, and neither have we. Perhaps

70 207 U.S.P.Q. at 313.
71 207 U.S.P.Q. at 314.
72 207 U.S.P.Q. at 313–14.
73 207 U.S.P.Q. at 317.
74 667 F.2d at 1235.
75 667 F.2d at 1237.

this is so because if the "first" inventor's initial work for which no patent was sought constitutes an earlier invention as to any subsequent efforts with a collaborator, no valid joint invention would have to be the result of simultaneous inspiration by the collaborators. * * *

* * *

The cases involving an inventor who first seeks a patent, and then seeks a subsequent joint patent are distinguishable for a fundamental reason. Under the statutes governing patentability, novelty is a condition of patentability. 35 U.S.C. §102. Had Bassett sought a patent for his work on the McDermott platform [the first reduction to practice of air pressure grouting] he must have claimed that the process he had developed was an invention. Had Bassett then collaborated with Olsen, and sought a patent for their joint product they would have been declaring that their work constituted an invention. In such a situation each process would have been the first of its kind. Accordingly, the validity of Bassett and Olsen's patent application would have to be established against Bassett's earlier one. However, as here, where Bassett does some work, seeks no patent, collaborates with Olsen, and subsequently they together seek a patent, the joint application declares that their work submitted as a whole is a single invention—the first of its kind. Because they declare their work to be a single, and first invention, as between the joint inventors there is no earlier invention or prior art against which the joint invention need be established. Thus, the validity of a joint patent issued to two inventors who work in succession is consistent with the normal analytical framework of the patent laws.[76]

Presumably, the case law referred to includes *Land* and its progeny, including *Bass*.[77]

While it is at least directed to the pertinent section of the patent statute, i.e., Section 102, unfortunately the Fifth Circuit's legal reasoning appears to be fully as defective as that of the Sixth Circuit in *General Motors*. The court's argument that "if the 'first' inventor's work for which no patent was sought constitutes an earlier invention as to any subsequent efforts with a collaborator, no valid joint inven-

76 667 F.2d at 1235 and 1236.

77 The 5th Circuit does not specifically reference *Bass*, but it is clearly relevant case law.

tion would be possible" is simply based on false premises. It assumes that there can be no such thing as a collaborative effort which is patentably distinct over the prior invention of one of the collaborators. But if the collaborative invention is unobvious over the prior invention taken together with the teaching of the art then it matters not whether the prior invention is the work of "another." In this situation, the prior invention would not preclude patenting of the collaborative invention.

Nor does it follow that the "first" inventor's work routinely or automatically can be treated as earlier or prior invention which is prior art. For this to be the case, there must not only be conception but also reduction to practice of the earlier invention. In addition, even if reduced to practice, the prior invention must be shown not to have been abandoned, suppressed, or concealed.[78]

The view expressed by the Fifth Circuit that a prior invention by one of the later joint inventors can be prior art only if the prior invention is claimed in a patent application finds no support in the patent statute or the case law.[79] It presupposes that filing a patent application has a special connotation in determining whether prior art invention has occurred. Again neither the statute nor the case law supports such a proposition.

Moreover, a mere declaration on the part of joint inventors that the work claimed is a single and first invention as opposed to the earlier work of any of them individually or in subcombination does not make it so. Such is a necessary but not sufficient condition for patentability. The patent law does not predicate patentability on declarations by the inventors alone.

A somewhat surprising aspect of *Shields* is that the same result, namely, a holding of patent validity, could have been achieved by means which would have been in consonance with existing case law. Indeed, the district court was

78 See generally the case law discussed in Part 2 of this series. Walterscheid, *supra*, 64 J.P.O.S. 571 *et seq.*

79 Indeed, it appears contrary to the view expressed by the C.C.P.A. in *Clemens* that under appropriate circumstances *unclaimed* disclosure in a patent can be treated as Section 102(g) prior invention. See the discussion of *Clemens* in Walterscheid, *supra*, 64 J.P.O.S. at 591 *et seq.*

perfectly aware of the appropriate avenue to take but failed to proceed down it. That avenue and the reason the court failed to follow it were stated as follows:

> There is no evidence of deceptive intent, nor advantage to the plaintiffs due to the addition of Olsen to the patent. Since the Court finds that Bassett and Olsen are joint inventors, there is no misjoinder, and even if there were, it would be technical, by error and without intent to deceive anyone and is subject to correction by the Court, pursuant to §256.[80] [Footnotes omitted.]

In holding that Bassett and Olsen were joint inventors, presumably of all claims including those directed to the air pressure grouting method which did not contain limitations attributed to the ideas of Olsen, the court failed to address the issue of whether these latter claims could properly be those of the joint inventors when they originated with the work of Bassett alone. The C.C.P.A. took notice of exactly this type of situation in *In re Sarett*[81] when it stated:

> It should be clear that the patent could not *legally* contain a claim to Sarett's *sole* invention under existing law because it would not have been the invention of the *joint* patentees. This rule of law forces the filing of distinct applications in many situations resembling that before us and creates complexities and delays which could be avoided under a less rigid statute. Cf. 35 U.S.C. 111, 116, and 256.[82] (Emphasis in the original.)

In effect, the C.C.P.A. stated that under the present patent statute the situation faced by the district court called for a holding of misjoinder with respect to the claims attributable to Bassett alone. Thus, under the circumstances presented, the court could readily have found misjoinder and proceeded appropriately under Section 256. Had it done so, there would have been no need whatever for the Fifth Circuit to create case law restricting the scope of Section 102(g) prior invention.

While it is possible to reconcile the views of the Fifth and Sixth Circuits, those views appear antithetical to those of the C.C.P.A. expressed in *Clemens*. Although the three

---

80 207 U.S.P.Q. at 313.
81 327 F.2d 1007, 140 U.S.P.Q. 474 (1964).
82 140 U.S.P.Q. at 479, n.7.

appellate opinions all have as their ultimate result a significant restriction of the scope of Section 102(g) prior invention, the pragmatic effects are quite different. Chisum. it may be recalled, protested the arbitrary and discriminatory nature of the knowledge requirements in *Clemens*.[83] It was his view that *Clemens* discriminated against organized research. Presumably, he would acknowledge that *General Motors* and *Shields* have the reverse effect and instead discriminate against individual research.

Although one can only speculate as to whether the C.C.P.A. would have reached the same issues in *General Motors* and *Shields*,[84] had it done so it would likely have found just the reverse of the Fifth and Sixth Circuits. That is to say, under its own prior decisions the prior inventions in those two cases would have been by "another" and were known to the later inventors against which they were applied. Accordingly, there is a strong presumption that the C.C.P.A. under the facts of those cases would have found the prior invention to be Section 103 prior art by virtue of Section 102(g).

Until recently one could have simply noted that these cases represent merely another example of the disparate views expressed by the various circuits with respect to the patent law. But now the various circuits no longer have jurisdiction over patent appeals. Instead, as of October 1, 1982, all appeals from the district courts and the Patent and Trademark Office are to the new U.S. Court of Appeals for the Federal Circuit (C.A.F.C.).[85] The C.A.F.C. was established through a merger of the C.C.P.A. and the Court of Claims. It is not surprising therefore that one of the first orders of business of the new court, sitting en banc.[86] was to declare that the holdings of its predecessor courts "shall be binding as precedent in this court."[87]

Taken at face value, this suggests that the *Clemens* approach is the one likely to be pursued with regard to

---

83 See text accompanying note 22. *supra*.

84 Speculation is all that is possible in that the C.C.P.A. had no jurisdiction over infringement actions.

84 Federal Courts Improvement Act of 1982, P.L. 97-164.

86 The new court has 12 judges.

87 South Corp. v. United States. 690 F.2d 1368 (Fed. Cir. 1982).

interpretation of Section 102(g) prior invention as Section 103 prior art. This, in turn, would appear to presage a shift from Section 102(g) prior invention to Section 102(f) prior invention for use as Section 103 prior art.[88] As a practical matter, this raises the question of whether there is any difference between Section 102(g) prior invention as prior art and Section 102(f) prior invention as prior art. This question will be discussed in some detail in Part 4 of this series of articles.

88 Pat.L.Persp. §A.3[7] (1982 Dev.).

*Edward C. Walterscheid**

THE EVER EVOLVING MEANING OF PRIOR ART** (PART 4)

This is the fourth in a series of articles intended to explore the complex and changing nature of prior art in the patent law. The first three articles[1] in the series provided an introduction to the scope of the endeavor and began an analysis of Section 102 prior art within the following framework:

I. SECTION 102 PRIOR ART

A. *The Language of Section 102*

B. *Prior Invention as Prior Art*

1. *Section 102(g) Prior Invention Prior to Bass*
2. *Section 102(g) Prior Invention as Prior Art According to Bass*
3. *Public vs. Private Knowledge*
4. *The Revolt Against "Secret" Section 102(g) Prior Art*

To this point, the analysis of prior invention as prior art has been limited to Section 102(g) prior invention. This article continues the analysis by turning to Section 102(f) prior invention.

5. *Section 102(f) Prior Invention Prior to Dale Electronics*

On its face, the language of Section 102(f) would seem quite straightforward. A person shall be entitled to a patent *unless he did not himself invent the subject matter sought to be patented.* Simple enough—if you didn't invent it, you can't patent it in your name.[2] But what is meant by the

*Deputy Assistant Director for Legal Affairs, University of California, Los Alamos National Laboratory, Los Alamos, New Mexico 87545.

**The Los Alamos National Laboratory requests that the publisher identify this article as work performed under the auspices of the U.S. Department of Energy.

1 E. C. Walterscheid, "The Every Evolving Meaning of Prior Art (Part 1)," 64 J.P.O.S. 457 (1982); "(Part 2)," 64 J.P.O.S. 571 (1982); "(Part 3)," 64 J.P.O.S. 632 (1982).

2 This at least was the view taken in the Reviser's Note which indicates that the purpose of Section 102(f) is to identify the necessity that the inventor be the party to apply for the patent. See 35 U.S.C.A. 102(f) at p. 446. This is to be contrasted with the practice of various foreign jurisdictions of allowing patents to be applied for in the name of an assignee.

clause "he did not himself invent the subject matter sought to be patented?"

Clearly, it suggests that there was prior invention by someone else. But does it mean that he did not himself invent the subject matter because it was already invented by someone else or does it mean that he did not *independently* invent it but rather derived his knowledge of it from either the first inventor or some third party. Unfortunately, the legislative history is silent on this point.

This has caused some confusion in the interference context where the Court of Customs and Patent Appeals (C.C.P.A.) in *Applegate v. Scherer*[3] has emphasized that a derivation case is quite unlike a case involving independent inventors, saying:

> The board's opinion herein twice speaks of the issue as "priority" and, of course, expresses its decision as an award of "priority" to Scherer, which is a mere formality compelled by 35 U.S.C. 135 which treats all interferences as involving an issue of priority. It is evident, however, that in an originality case the issue is not who is the *first* or *prior* inventor but who *made* the invention. Applications "interfere" when one applicant gets the invention from the other, by fair means or foul, as well as when each makes the invention independently. In awarding "priority" to the *sole* inventor in an originality or derivation case, it should be realized that this is merely the employment of patent law jargon which is not to be taken literally. It might be well on the next revision of the statutes to use language suited to all situations so that the board does not have to make an award of "priority" where no issue of priority exists.[4]

Nonetheless, because of interference case law involving derivation, the language of Section 102(f) has come to generally be interpreted as limited to situations involving originality, i.e., those wherein the later purported inventor has in fact derived knowledge of the invention from another source.[5]

---

3 332 F.2d 571, 141 U.S.P.Q. 796 (1964).

4 141 U.S.P.Q. at 798, n. 1.

5 See, e.g., D. S. Chisum, "Sources of Prior Art in Patent Law," 52 Wash. L. Rev. 1, 12 (1976), and particularly footnote 58 thereof which cites only interference case law.

Why interference case law should be relied on to support this interpretation of the language of Section 102(f) is unclear. The only subsection of 35 U.S.C. 102 which appears to have any relevance to interference law is Section 102(g).[6] Indeed, the legislative history of Section 102(g) indicates that "it relates to the question of priority of invention between rival inventors"[7] and "retains the present rules of law governing the determination of priority of invention."[8] Unlike Section 102(g), the legislative history of Section 102(f) makes no reference to priority of invention. Thus, while essentially all of the early case law pertaining to Section 102(g) was derived from interference practice,[9] the same cannot be said for Section 102(f).

This does not mean that a good case cannot be made for interpreting Section 102(f) as being limited to the situation wherein derivation has occurred. As early as 1953, the District Court for the Eastern District of Arkansas sought to do precisely that in *V. D. Anderson Co. v. Helena Cotton Oil Co.*[10] At issue in that case was whether the inventor of the patent in question had actual prior knowledge of a foreign process "in all material respects similar to the process later patented."[11]

At the time the patent issued the effect of knowledge or use in a foreign country on patentability in this country was governed by former 35 U.S.C. 72 which read as follows:

> Whenever it appears that a patentee, at the time of making his application for the patent, believed himself to be the original and first inventor or discoverer of the thing patented, the same shall not be held to be void on account of the invention or discovery, or any part thereof, having been known or used in a foreign

---

6 Section 102(g) provides that a person shall be entitled to a patent unless—
> before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

7 H. R. Rep. No. 1923, 82d Cong., 2d Sess. at 7. The Senate Report, S. Rep. No. 1979, 82d Sess., is identical in all pertinent respects.

8 *Id.* at 18.

9 Walterscheid, *op cit.*, 64 J.P.O.S. at 468.

10 117 F.Supp. 932, 100 U.S.P.Q. 413.

11 100 U.S.P.Q. at 423.

country, before his invention or discovery thereof, if it had not been patented or described in a printed publication.

The interpretation to be given to this language in former 35 U.S.C. 72 was suggested more than a century ago in *Roemar v. Simon*[12] wherein the Supreme Court stated:

> . . . it is clear that proof of prior use in a foreign country will not supersede a patent granted here, unless the alleged invention was patented in some foreign country. *Proof of such foreign manufacture and use, if known to the applicant for a patent, may be evidence tending to show that he is not the inventor of the alleged new improvement:* but it is not sufficient to supersede the patent if he did not borrow his supposed invention from that source, unless the foreign inventor obtained a patent for his improvement, or the same was described in some printed publication.[13] [Emphasis supplied.]

Thus it was clear that derivation would preclude patentability under former Section 72, but the problem faced by the Arkansas court was that it was required to act under the new Patent Act of 1952,[14] and former Section 72 did not exist, per se, in the new Act.

Without providing any indication on what basis it made the determination, the court stated that under the new Act Sections 102(a), (b), and (f)[15] were relevant.[16] It concluded that if the patentee Dunning had had actual knowledge of a

---

12 95 U.S. 214 (1877).

13 95 U.S. at 218.

14 Section 4 of the Act of July 19, 1952, c. 950, 66 Stat. 815 provided that the Act should take effect January 1, 1953 and should apply to unexpired patents granted prior to that date except where otherwise provided. See Title 35 U.S.C.A., note preceding Section 1.

15 Sections 102(a), (b), and (f) read as follows:

> A person shall be entitled to a patent unless—
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States, or
>
> * * *
>
> (f) he did not himself invent the subject matter sought to be patented,
>
> * * *

16 100 U.S.P.Q. at 423.

foreign process which was in all respects similar to his patented process. then,

> . . . under such circumstances it might well be argued with respect to the former statute [Section 72] that Dunning could not have "believed himself to be the original and first inventor or discoverer of the thing patented," and it could likewise be argued with respect to the present statute [Section 102(f)] that "he did not himself invent the subject matter sought to be patented."[17]

In other words, the court equated former Section 72 with new Section 102(f) and seemed to clearly suggest that Section 102(f) should be interpreted as had former Section 72.[18]

While plausible, this view of Section 102(f) as a successor to former Section 72 would gain added credence if there were any direct evidence for it in Federico's "Commentary on the New Patent Act"[19] or the Reviser's Note. Unfortunately, neither are particularly supportive of this view. Federico, for example, makes no reference to former Section 72 in connection with Section 102(f) but instead states:

> The first clause of paragraph (a) indicates that prior knowledge or use in a foreign country will not defeat the right to a patent; a separate section, R.S. 4923 [section 72 of former Title 35], in the old statute duplicated this provision and this old section has been omitted as its provisions are covered here and elsewhere.[20]

The Reviser's Note is even more explicit:

> Paragraph (a) together with section 104 contains the substance of title 35 U.S.C. 1946 ed., §72 (R.S. 4923 [derived from Act July 8, 1870, c. 230, §62, 16 Stat. 208]).[21]

In other words, these commentaries suggest that the successor to former Section 72 is to be found in Section 102(a) rather than Section 102(f).

Be that as it may, any broader interpretation of the language of Section 102(f) other than in the context of originality or derivation would play havoc with the express

---

17 *Id.*

18 *Id.* It did this by reference to *Roemar* and to other case law providing a similar view that if derivation occurred from a foreign source, a U.S. patent would be invalid.

19 35 U.S.C.A. at page 1 *et seq.* (1954 ed.).

20 35 U.S.C.A. at page 18 (1954 ed.).

21 35 U.S.C.A. 102(f) at page 446 (1954 ed.).

language of Sections 102(a) and (g).[22] But the narrow interpretation of derivation is like the narrow interpretation of anticipation, i.e., it can only occur if the complete invention is obtained from a single source. This, however, would seem to limit Section 102(f) prior invention to use as prior art only where there is a full anticipation and preclude it from being used as Section 103 prior art.[23] Indeed, this may have been the basis for the statement by Judge Rich of the C.C.P.A. in 1973 that Section 102(f) has "no relation to §103 and no relevancy to what is 'prior art' under §103."[24] Should an obvious variation of a Section 102(f) prior invention be patentable? The situation arises in two contexts—when the prior invention has been kept secret or when it has been known or used only in foreign countries. In almost any other circumstance the issue could be addressed by another provision of Section 102 and hence there would be no need to consider whether Section 102(f) plays a role in determining whether the prior invention is Section 103 prior art. Many years would pass before the question would be faced by a court, although several early opinions skirted around the issue.[25]

Nonetheless, it has recently been argued that

> Historically, 35 USC 102(f) and its predecessors have been applied to an applicant who has acquired actual knowledge of particular subject matter or information from another person, and thereafter seeks to patent either the same subject matter or obvious variants of that acquired subject matter or information. See, particularly, *The Stelos Co., Inc. v. Hosiery Motor-Mend Corp.*, 295 U.S. 237 (1935), where Stephens acquired information of De Marr's invention while in Mexico, and was granted a patent on an "improved method" differing from De Marr's method (described

22 It would render meaningless the phrase "in this country" as used in both Sections 102(a) and 102(g). See notes 6 and 15. *supra*.

23 §103. Conditions for patentability; non-obvious subject matter.

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

24 In re Bass, 474 F.2d 1276, 177 U.S.P.Q. 178, 189 (1973).

25 See text accompanying notes 71–79. *infra*.

in De Marr's abandoned U.S. patent application) in only obvious details "insufficient to raise the method to the dignity of invention."[26]

Needless to say, a Supreme Court opinion would be impressive authority on the point, *if* it in fact supported the position argued. Unfortunately, the foregoing interpretation of the opinion has several defects which render the argument at best suspect.

First of all, *Stelos* makes no reference whatever to any statutory provision that can remotely be considered as a predecessor to Section 102(f). It is difficult to perceive how an opinion which makes no mention of a statutory provision can be argued as applying that particular provision to a particular fact pattern. Secondly, the opinion does not indicate that the prior invention of De Marr was treated as prior art against the invention in question. Rather, it suggests that the various elements of the claimed invention were known to the art in this country.[27] Moreover, the Court noted that "certain prior patents were cited against the claims [of De Marr] and the application was abandoned."[28] The clear inference is that the De Marr claims were either anticipated or rendered obvious by the prior art patents. If that were true for De Marr it would also be true for Stephens. There would accordingly be no need whatever to rely on the prior invention of De Marr and no language of the Court suggests that it did so.

Writing in the mid-1960's, Woodcock gave a detailed exposition of the case law relating to the question of what

---

26 Editor's Note, 63 J.P.O.S. 612 (1981).

27 The pertinent portion of the opinion reads as follows:

> Pivoted latch needles are old in the art. Holders which have an opening to give room for the insertion of a needle, such as that of an egg-cup, are old for use in darning. The method of reforming loops in knitted goods with pivoted latch needles was known prior to the application for this patent. The combination of the use of the egg-cup type holder and the pivoted latch needle did not entitle Stephens to a patent; and the addition of the element that the needle should be held at an angle to the plane of the fabric, if that is in fact what the claim means, is insufficient to raise the method to the dignity of invention.

295 U.S. at 243.

28 295 U.S. at 240–41.

is prior art.[29] His analysis is of considerable historical interest because it provides not only a discussion of Section 102 case law but also of the relevant case law prior to 1952, i.e., before Section 102 was enacted. Interestingly, he makes no mention of *Stelos* and indeed makes no reference whatever to Section 102(f). What is remarkable about the omission is that every other subsection of 35 U.S.C. 102 is discussed. Apparently, he did not consider Section 102(f) to be a prior art provision of the statute.

Why Woodcock ignored the existence of Section 102(f) is unclear, particularly because by 1965 a number of cases had applied Section 102(f) as a basis for a prior art determination of patent validity.[30] While these cases did not provide any clear opinions concerning the relationship, if any, between Section 102(f) and Section 103, they did suggest that Section 102(f) prior invention could properly be treated as prior art in the purely anticipatory sense.

In addition, several of the early cases seem to have implicitly treated Section 102(f) prior invention as Section 103 prior art without actually so stating.[31] In at least two other instances a district court invalidated several patents under Section 102(f) without any showing that the purported

---

29 V. E. Woodcock, "What is Prior Art," pp. 87–215 in *The Law of Chemical, Metallurgical and Pharmaceutical Patents*, H. J. Forman, ed. (Central Book Company, Inc., New York, 1967).

30 See, e.g., Seismograph Service Corp. v. Offshore Raydist, Inc., 135 F.Supp. 342, 107 U.S.P.Q. 104, 111–112 (E.D. La. 1955), mod., 293 F.2d 5, 119 U.S.P.Q. 146, 159 (5th Cir. 1958); Hobbs v. Wisconsin Power & Light Co., 250 F.2d 100, 115 U.S.P.Q. 371 (7th Cir. 1957); Thomson Machinery Co. v. Larose, 197 F.Supp. 636, 131 U.S.P.Q. 63 (E.D. La. 1961); General Steel Products, Inc. v. Lorenz, 204 F.Supp. 518, 132 U.S.P.Q. 574 (S.D. Fla. 1962); Lorenz v. Berkline Corp., 215 F.Supp. 869, 137 U.S.P.Q. 29 (E.D. Ill. 1963); and Merry Mfg. Co. v. Burns Tool Co., 206 F.Supp. 53, 134 U.S.P.Q. 487 (N.D. Ga. 1962), aff'd, 335 F.2d 239, 142 U.S.P.Q. 342 (5th Cir. 1964).

31 See, e.g., Seismograph Service Corp. v. Offshore Raydist, Inc., 135 F.Supp. 342, 107 U.S.P.Q. 104, 111–112 (E.D. La. 1955), mod., 293 F.2d 5, 119 U.S.P.Q. 146, 159 (5th Cir. 1958); and Hobbs v. Wisconsin Power & Light Co., 250 F.2d 100, 115 U.S.P.Q. 371 (7th Cir. 1957). Neither case specifically addresses the issue whether Section 102(f) prior invention can be used as Section 103 prior art, yet that basically appears to have been the reasoning in each instance used to invalidate the patent in question. In *Hobbs* the Seventh Circuit stated:

> Clearly related questions arise in the determination of whether the patentee, Hobbs, was the inventor of the subject matter of the patent (see 35 U.S.C.A. Section 102(f)) and the determination of whether there was anticipation by, and lack of invention over, the prior art as to this purported invention (see 35 U.S.C.A. Sections 102(e) and 103).

later inventors had in fact derived their invention from the original inventor or a third party.[32]

During the period 1966–1972 a number of decisions invalidated patents on the basis of lack of originality under Section 102(f) in that the patented invention was found to have been derived from another.[33] None of these cases specifically considered the question of whether Section 102(f) prior invention could be treated as Section 103 prior art. But in 1966 the district court in *Henry J. Kaiser Co. v. McLouth Steel Corp.*[34] skirted the issue without actually reaching it.

The patent in question claimed a method for refining iron into steel.[35] It was undisputed that at least one of the patentees had detailed conversations in Europe with two European steelmakers, Dr. Durrer and Dr. Hellbruegge, prior to making the invention covered by the patent, and that these conversations were relevant to the subject matter claimed in the patent.

When an infringement action was brought, these conversations became an issue. As the district court put it:

> Defendant in this case has also raised an issue that the patentees of the patent in suit did not themselves invent the subject matter sought to be patented, but rather that the invention was entirely disclosed to the patentees by Dr. Durrer and Dr. Hellbruegge. Such a defense arises under 35 U.S.C. §102(f), which provides that a person shall not be entitled to a patent if "he did not himself invent the subject matter sought to be patented." . . . Section 103 clarifies Section 102 by adding a further requirement of nonobviousness for patentability, even if the invention is not "identically disclosed or described" to the patentee by someone else. Thus

---

115 U.S.P.Q. at 373

The court apparently used the term "anticipation" in the context of "rendered obvious." But in view of the reliance on Section 102(e), there was no need to treat the validity of the patent under Section 102(f).

32 See General Steel Products, Inc. v. Lorenz, 204 F.Supp 518, 132 U.S.P.Q. 574 (S.D. Fla. 1962); and Lorenz v. Berkline Corp., 215 F.Supp. 869, 137 U.S.P.Q. 29 (E.D. Ill. 1963).

33 See, e.g., Koehring Co. v. National Automatic Tool Co., Inc., 257 F.Supp. 282, 150 U.S.P.Q. 777, 782 (S.D. Ind. 1966); Armour Pharmaceutical Co. v. Richardson-Merrell, Inc., 264 F.Supp. 1013, 153 U.S.P.Q. 106, 109 (D. Del. 1967); Westwood Chemical, Inc. v. Owens-Corning Fiberglas Corp., 317 F.Supp. 201, 168 U.S.P.Q. 79, 91 (N.D. Ohio 1970); Elmwood Liquid Products, Inc. v. Singleton Packing Corp., 328 F.Supp. 974, 170 U.S.P.Q. 398, 409 (M.D. Fla. 1971).

34 257 F.Supp. 372, 150 U.S.P.Q. 239 (E.D. Mich. 1966).

35 150 U.S.P.Q. at 248.

Section 103 makes clear that the test as to whether the patentee themselves invented the subject matter is whether it was "identically disclosed or described" to them by Dr. Durrer and Dr. Hellbruegge.[36]

This rather novel approach of predicating a derivation requirement for Section 102(f) on the language of Section 103 appears to have been unique to this court.[37] Be that as it may, the court found no Section 102(f) prior invention.[38]

Had this been the only issue relating to prior invention, the case would have been similar to the others decided during the same period. But the question arose as to whether the earlier work of Dr. Durrer and Dr. Hellbruegge which had been transmitted to the patentees rendered their invention obvious under 35 U.S.C. 103. Under the particular facts of the case, the court answered in the negative, saying:

> The work of Drs. Durrer and Hellbruegge creates no issue as to the obviousness of the invention by the patentees, since such work does not constitute prior art under section 103. Both the statutory language and legislative history of section 103 made clear that the term "prior art" as used in section 103 refers only to "what was known before as described in section 102." S. Rep. No. 1979, 82d Cong., 2d Sess. (1952) at 6; H. R. Rep. No. 1923, 82d Cong., 2d Sess. (1952) at 7. Prior use in a foreign country is not prior art as set forth in section 102, which section refers, among other things, to inventions "known or used by others" or "in public use or on sale" in this country only, and makes no mention of inventions known, used or sold by others in a foreign country. Furthermore, defendant has admitted that the work of Dr. Durrer and Dr. Hellbruegge is not a prior use which could invalidate the patent in suit [footnote omitted] and that "use in a foreign country is of no legal effect as far as this lawsuit is concerned." . . . Hence, this Court

---

36 150 U.S.P.Q. at 266.

37 Insofar as can be ascertained, no other court has attempted to define the meaning to be given to Section 102(f) by reliance on language from Section 103. In In re Bass, 474 F.2d 1276, 177 U.S.P.Q. 178 (C.C.P.A. 1973), Judge Baldwin in a concurring opinion noted that Section 103 does not require that *everything* referred to in Section 102 must be considered as "prior art" as that term is used in Section 103. Having said that, he was careful to point out that a literal reading of the language of Section 103 might easily lead to the conclusion that "prior art" was intended to include only that material in Section 102 in which something is "disclosed or described." He suggested that based on the legislative history of the predecessor language to that which resulted in the patent Act of 1952 the Congressional intent was not so narrow. 177 U.S.P.Q. at 193.

38 150 U.S.P.Q. at 275.

is not faced with the question whether the subject matter of the patent in suit would have been obvious to persons skilled in the art familiar with the work of Dr. Durrer and Dr. Hellbruegge.[39]

In essence, the court seemed to be saying that the work of Dr. Durrer and Dr. Hellbruegge, while prior invention, was not Section 102(f) prior invention and hence could not be Section 103 prior art.

On March 21, 1970, the Patent and Trademark Office, apparently for the first time, presented a rejection of certain claims as "unpatentable under 35 USC 102(f) and 35 USC 103."[40] Stiefel states that this rejection was subsequently upheld by the district court for the District of Columbia and by the Court of Appeals for the District of Columbia Circuit.[41] However, a perusal of the reported opinions, *Corning Glass Works v. Schuyler, Comr. Pats.*[42] and *Corning Glass Works v. Brenner, Comr. Pats.*,[43] does not lead to any such clear cut conclusion.

The background was as follows. The examiner had rejected the claims of the applicant, Ellen Mochel, as obvious over a combination of prior publications and patents and in particular a publication by one Kistler.[44] Mochel attempted to swear behind the Kistler publication date by means of a Rule 131 affidavit. But, during prosecution of the claims in question, she admitted that she was aware of Kistler's work prior to its publication and prior to making her own invention. Because of this admission, the Board of Appeals issued a new rejection of the Mochel claims as "unpatentable under 35 USC 102(f) and 35 USC 103."[45] Thereafter, Mochel's

---

39 150 U.S.P.Q. at 258.

40 M. R. Stiefel, "Section 102(f) as a Basis for Section 103 Prior Art—Myth or Reality," 61 J.P.O.S. 734, 739 (1979).

41 *Id.*

42 323 F.Supp. 1345, 169 U.S.P.Q. 193 (D. D.C. 1971).

43 470 F.2d 410, 175 U.S.P.Q. 516 (D.C. Cir. 1972).

44 175 U.S.P.Q. at 520. Although the published record does not expressly so state, presumably the Kistler publication was cited as Section 102(a) prior art.

45 Stiefel, *op cit.*, 61 J.P.O.S. at 738–39. Exactly why the Board of Appeals sought to proceed under Section 102(f) is unclear, particularly in view of the fact that it was apparently a case of first impression and there was case law suggesting two other alternative grounds on which to predicate a rejection based on the admission that the work of Kistler was prior to that of Mochel. Thus, for example, in Ex parte Robbins, 156 U.S.P.Q. 707 (1957), Examiner in Chief Federico indicated that even where a Rule 131 affidavit served to remove a patent as a reference, the invention claimed in the patent could be treated as prior invention under Section

assignee, Corning Glass Works, sought to have this new rejection reversed by means of an action under 35 U.S.C. 145.[46]

The district court opinion in *Corning Glass Works* is a model of obfuscatory brevity. It makes no mention whatever of the statutory basis for the obviousness rejection which it purportedly upheld nor does it cite any case law whatever. Stiefel argues, however, that the Office's "post trial memorandum, which was adopted by and ratified by the District Court, makes clear that the PTO had made [an obviousness rejection based upon Section 102(f)/103]."[47]

But this appears at least in some degree contrary to the following language of the opinion:

> The Court is convinced that the claimed result thus outlined is the result of mere routinization and experiment and it would have been obvious to a person of ordinary skill in the art when the prior art references were examined in relation thereto.[48]

This language suggests reliance on prior art references rather than prior invention as the basis for finding obviousness. But if references were in fact the basis, then Section 102(a) rather than Section 102(f) would seem to be the provision relied on for Section 103 obviousness.[49]

102(g) and therefore prior art under Section 103 if the facts of the case were such as to show that the invention claimed in the patent had been made prior to the invention against which it was cited as prior art. Clearly, the Kistler invention had not been suppressed or concealed. Presumably, it had also been made in this country and therefore met all the requirements of Section 102(g). But on the supposition that it had not been made in this country and therefore could not be treated as prior art under Section 102(g), under the holding in *Henry J. Kaiser, supra*, it could not be used as Section 102(f) prior invention either.

Alternatively, the Board of Appeals could have relied on the holding in In re Lopresti, 333 F.2d 932, 142 U.S.P.Q. 176 (C.C.P.A. 1964), that the admission that Kistler was prior invention was in and of itself sufficient to permit Kistler to be used as Section 103 art.

46 Section 145 reads in relevant part:

> An applicant dissatisfied with the decision of the Board of Appeals may . . . have remedy by civil action against the Commissioner in the United States District Court for the District of Columbia. . . . The court may adjudge that such applicant is entitled to receive a patent for his invention, as specified in any of his claims involved in the decision of the Board of Appeals, as the facts in the case may appear and such adjudication shall authorize the Commissioner to issue such patent on compliance with the requirements of law.

47 Stiefel, *op cit.*, 61 J.P.O.S. at 738.

48 169 U.S.P.Q. at 193.

49 Section 102(a) is reproduced in note 15, *supra*.

Although the D.C. Circuit agreed that the Mochel method claims were obvious over the invention of Kistler, it did so not on the basis of Section 102(f) prior invention but rather on the basis of the "admission" that Kistler was prior art.[50] Cited in support of this view was the C.C.P.A. opinion in *In re Lopresti*.[51]

In that case claims of an application by Lopresti et al. were rejected as obvious under Section 103 in view of the teaching of a commonly assigned patent to Craggs et al. which was filed two days earlier than the Lopresti et al. application and therefore held to be applicable prior art as expressly provided in Section 102(e).[52] The patent disclosed the invention of Lopresti et al., and Rule 131 affidavits were filed in an effort to overcome the patent as an effective reference. The C.C.P.A. held that these affidavits were effective to overcome the reference insofar as it disclosed the invention of Lopresti et al. but were insufficient to overcome the disclosure of the invention of Craggs et al. because Lopresti et al. had acknowledged in both their specification and their brief on appeal that their invention was an improvement over that of Craggs et al.

In the view of the court Lopresti et al. had admitted that the invention of Craggs et al. was "prior art" as to their invention, "and the case must be decided on the assumption it is prior art notwithstanding the affidavits."[53] Since the court was also of the view that the invention of Lopresti et al. was obvious over that of Craggs et al., the Section 103 rejection was upheld.

In *Lopresti* the Rule 131 affidavits showed completion of the invention of Lopresti et al. prior to the effective date of the Craggs et al. patent,[54] and thereby overcame that patent as "prior art" under Section 102(e).[55] Rather than determining if there was any other proper statutory basis within Section 102 for using the Craggs et al. patent as prior

---

50 175 U.S.P.Q. at 523.
51 333 F.2d 932, 142 U.S.P.Q. 176 (1964).
52 142 U.S.P.Q. at 177.
53 142 U.S.P.Q. at 178.
54 142 U.S.P.Q. at 177.
55 See the concurring opinion of Judge Rich in In re Hellsund, 474 F.2d 1307, 177 U.S.P.Q. 170, 176 (1973).

art to support the Section 103 rejection,[56] the court merely assumed—quite arbitrarily[57]—that the admission made the Craggs et al. invention as described in the patent prior art with respect to the invention of Lopresti et al.

Thus. by its reliance on *Lopresti*. the D.C. Circuit cannot be said—despite Stiefel's contention to the contrary—to have upheld a rejection predicating the use of the Kistler prior invention as prior art on Section 102(f).

Nor was *Lopresti* the only opinion the D.C. Circuit could have relied on to support its holding in *Corning Glass Works*. In *In re Facius*[58] the applicant had sought to avoid the disclosure of a prior filed U.S. patent by means of a Rule 131 affidavit in which he argued. among other things. that the particular subject matter disclosed in the patent was "his own design."[59] The C.C.P.A. commented on the position taken by the solicitor for the Office as follows:

> The solicitor urges that. by appellant's own admission. the patent disclosure was appellant's starting point and that the prior art referred to in Section 103 includes an applicant's admission as to the starting point for his invention. We agree where that "starting point" is what the applicant admits to be *in the prior art*.[60]

Facius would thus seem to be in the same vein as *Lopresti*.

Moreover, at the very time that Mochel's claims were winding their way through the judicial process in the District of Columbia, the C.C.P.A. had rendered an opinion in *In re Garfinkel*[61] involving a remarkably similar set of circumstances. Again the assignee of the application in question was Corning Glass Works. Again the primary art reference was the Kistler publication. Again a Rule 131 affidavit had been filed and found ineffective because of the admission by Garfinkel that he had known of the work of Kistler prior to the time he made his own invention.

---

56 Had it done so. the issue of whether prior invention by another in the United States is a proper basis for ex parte rejection under Section 102(g) coupled with Section 103 would have been decided nine years earlier than it finally was in In re Bass, 474 F.2d 1276, 177 U.S.P.Q. 178 (C.C.P.A. 1973).

57 The assumption is stated in a single sentence with no reasoning or citation of case law provided to support it.

58 408 F.2d 1396, 161 U.S.P.Q. 294 (1969).

59 161 U.S.P.Q. at 297–98.

60 161 U.S.P.Q. at 302.

61 437 F.2d 1000, 168 U.S.P.Q. 659 (C.C.P.A. 1971).

It is interesting to note that in the *Garfinkel* published opinion there is no indication that the Office sought to rely on Section 102(f) as the basis for treating the Kistler prior invention as Section 103 art. Rather, the Solicitor placed his emphasis on *Lopresti*.[62] The C.C.P.A. agreed, saying "[b]ecause appellant has from the beginning treated the information in Kistler as 'prior art,' we will do likewise," citing *Lopresti*.[63] Judge Almond, speaking for the court, candidly admitted that the statutory basis, if any, for treating the Kistler article as prior art was unclear, stating:

> From the record we are uncertain whether the type of "prior art" referred to is of the §102(f) or §102(g) variety or whether it is of the "known . . . in this country" type as in §102(a). What is clear, however, is that appellant had admitted that as to him the information in Kistler is prior art of some type.[64]

Once again the court was saying that by his own admission an applicant was estopped to deny that the content of a particular reference was prior art as to his invention.

The D.C. Circuit in *Corning Glass Works* was fully aware of the C.C.P.A. opinion in *Garfinkel*[65] and could readily have cited it as well as *Lopresti* in support of its view that the admission by Mochel was sufficient in and of itself to render Kistler's work prior art.

Although it might be contended that the holdings in *Lopresti* and *Garfinkel* find ready support in Section 102(g), subsequent opinions by the C.C.P.A. make quite clear that the reliance was on the admission itself and not on any statutory basis in Section 102 for treating the prior work as prior art under Section 103. Thus, for example, in *In re Hellsund*[66] the majority opinion of Judge Almond[67] and the concurring opinion of Judge Baldwin[68] set forth the court's view that once an applicant admits that a disclosure is prior art it can be treated as such to support a Section 103 rejection regardless of whether a basis for doing so can be found in

---

62 168 U.S.P.Q. at 662.
63 *Id.*
64 *Id.* at n. 2.
65 See, e.g., 175 U.S.P.Q. at 520.
66 474 F.2d 1307, 177 U.S.P.Q. 170 (1973).
67 177 U.S.P.Q. at 173.
68 177 U.S.P.Q. at 177.

Section 102. Moreover, in *In re Nomiya*[69] a unanimous C.C.P.A. held that an admission against interest which did not and could not fall under any part of Section 102 nonetheless could be used as prior art, without more, to support a Section 103 rejection.[70]

As the foregoing discussion of the relevant case law shows, in the first 20 years after enactment of the Patent Act of 1952 there had been no judicial opinion expressly holding that Section 102(f) prior invention could be used to show Section 103 obviousness. That, however, was about to change. Or was it?

6. *Section 102(f) Prior Invention as Prior Art According to Dale Electronics*

Stiefel entitled his 1979 article "Section 102(f) as a Basis for Section 103 Prior Art—Myth or Reality." One of the truly remarkable aspects of that article is that it not only created, but has fostered, the myth that the First Circuit in *Dale Electronics, Inc. v. R.C.L. Electronics, Inc.*[71] found a patent in question invalid as obvious over a Section 102(f) prior invention. As will be shown, the actual decision in *Dale Electronics* appears to be based on a more mundane holding that the claimed invention was obvious over that which was publicly known in the art, i.e., Section 103 obviousness was predicated on Section 102(a) and not Section 102(f).

According to Stiefel, the First Circuit in *Dale Electronics* "stated that Section 102(f) *did* embrace prior art that could be used under Section 103."[72] He apparently drew this conclusion from the following language of the First Circuit's opinion:

> Section 102 refers to the conditions which foreclose invention. Among them are that "the invention was known * * * by others," §102(a), and that the supposed inventor "did not himself invent the subject matter," §102(f). Since §102 is the referent for §103,

---

69 509 F.2d 566, 184 U.S.P.Q. 607 (1975).

70 For a discussion of *Hellsund* and *Nomiya*, see E. C. Walterscheid, "Meeting the Duty of Candor Without Making an Admission Against Interest," 60 J.P.O.S. 717 (1978).

71 488 F.2d 382, 180 U.S.P.Q. 225 (1st Cir. 1973).

72 Stiefel, *op cit.*, 61 J.P.O.S. at 739.

we draw the conclusion that if the facts that the whole of an invention was known to others or that none of the invention was created by the patent applicant bar entitlement under §102, the condition of knowledge by others or the borrowing by the applicant of a sufficient body of lore to make the invention obvious bars entitlement under §103.[73]

To the extent the court's language can be interpreted as indicating that Section 102(f) prior invention can be used as Section 103 prior art, it would appear to be naught but dictum.

Although acknowledging that the trial court opinion is "not altogether clear" and the appellate opinion is "not crystal clear" on the point, Stiefel nonetheless contends that both courts relied upon what a salesman disclosed to the inventor Hay as being "prior art" to Hay.[74] In support of this view, he noted the following excerpt from the trial court opinion[75]:

Hay's use of beryllium oxide was the result of a suggestion by a salesman, what he observed at a public trade show, and the published material of plaintiff's supplier of beryllium oxide cores, National Beryllia Corporation.[76]

He ignores entirely, however, the very next sentence of the trial opinion which reads:

In short, it was the prior art, *consisting of the National Beryllia publications, particularly the graph*, that made the use of beryllium oxide cores obvious to Mr. Hay.[77] [Emphasis supplied.]

In other words, the trial court relied expressly on the publications and not the disclosure of the salesman in finding obviousness. Needless to say, reliance on publications as prior art is not based on Section 102(f).

Nor did the First Circuit rely on the salesman's disclosure as being determinative in sustaining the finding of obviousness. It stated:

The existence of widespread literature in the 1950's and early 1960's including advertisements, concerning the increasing feasi-

73 180 U.S.P.Q. at 227.
74 Stiefel, *op cit.*, 61 J.P.O.S. at 740–41.
75 Stiefel, *op cit.*, 61 J.P.O.S. at 739–40.
76 178 U.S.P.Q. at 265.
77 *Id.*

bility for many uses of the highly conductive and insulative BeO would have suggested to a wider reader than Hay what in fact he learned from the salesman—that BeO had arrived at the point where it might be excellent material for a resistor core. The National Beryllia graph, described constantly by Hay as a publication, provided Hay with the precise information as to purity required in a high performance resistor. Hay struck a rich lode only after all of the technology had led him to the marked spot. The knowledge of BeO's qualities and the new processes that made it more readily available combined in drawing the map. Hay needed only the knowledge of one skilled in the art to come upon the discovery. His advantage was only one of time. That is not enough.[78]

A reasonable conclusion to be drawn from this language is that the Section 102(a) prior art would have rendered the invention obvious *if Hay had never talked to the salesman*. That is to say, Hay learned nothing inventive from the salesman because the salesman's disclosure—such as it was—was already widely known in the art. This clearly suggests that the basis for upholding obviousness of the claimed invention was Section 102(a) rather than Section 102(f).

In the almost 10 years that have passed since the opinion in *Dale Electronics*, several courts have held claims invalid as anticipated under Section 102(f),[79] but no judicial decision has been found which has either upheld the rejection of claims or the invalidation of claims based on the use of Section 102(f) prior invention as Section 103 prior art. This, however, has not deterred the Office from pursuing the chimera of using Section 102(f) prior invention as prior art.

7. *The View From the Patent and Trademark Office*

As has previously been noted,[80] as early as 1970 the Office sought to reject claims of an application as obvious over a Section 102(f) prior invention. This approach received at least a temporary set-back from Judge Rich's 1973 state-

---

78 180 U.S.P.Q. at 229.

79 See, e.g., Reynolds Metals Co. v. The Continental Group, Inc., 525 F.Supp. 950, 210 U.S.P.Q. 911 (S.D. Ohio 1981); Mayview Corp. v. Rodstein, 620 F.2d 1347, 205 U.S.P.Q. 302 (9th Cir. 1980); Solvex Corp. v. Freeman, 199 U.S.P.Q. 797 (W.D. Va. 1976); and Campbell v. Spectrum Automation Co., 513 F.2d 932, 185 U.S.P.Q. 718 (6th Cir. 1975).

80 See the text accompanying notes 40–46, *supra*.

ment in *In re Bass*[81] that Section 102(f) has no relationship to Section 103 and no relevancy to what is prior art under Section 103.[82]

The Board of Appeals re-entered the fray in 1981 with its opinion in *Ex parte Andresen*.[83] It presented the issue succinctly as

> . . . whether the admittedly prior activities of another, of which activities the appellant had knowledge at the time he made the invention now claimed, may be combined with three patents, to render the claimed subject matter unpatentable under 35 U.S.C. 102(f)/103.[84]

In response to an inquiry from the examiner, the applicant Andresen had admitted, in a paper filed August 18, 1977, that the invention of one Rasmussen (as disclosed in a later issued U.S. patent) not only predated his own invention but that he was aware of it prior to making his own invention.[85] The issue came up under Section 102(f) because the Rasmussen work could not be treated as Section 102(g) prior invention in that it was not performed "in this country."[86]

The Board began its analysis by stating that Judge Rich's comment concerning Section 102(f) in *Bass* was simply "non-controlling dicta" since no Section 102(f) issue was involved in that case.[87] It then quoted certain portions of Federico's commentary and the committee report on Section 103 and concluded:

> . . . it appears to us that the commentator and the committee viewed section 103 *as including all of the various bars to a patent as set forth in section 102.*[88] [Emphasis supplied.]

---

81 474 F.2d 1276, 177 U.S.P.Q. 178 (C.C.P.A. 1973).

82 177 U.S.P.Q. at 189. It is interesting to note that in the companion case of In re Hellsund, 474 F.2d 1307, 177 U.S.P.Q. 170 (C.C.P.A. 1973), the examiner had postulated a prior invention was available as prior art under Sections 102(a), (f), or (g), but the Board of Appeals limited its affirmance of the rejection of Section 102(g). 177 U.S.P.Q. at 173.

83 212 U.S.P.Q. 100.

84 212 U.S.P.Q. at 101.

85 *Id.*

86 212 U.S.P.Q. at 102.

87 212 U.S.P.Q. at 101.

88 212 U.S.P.Q. at 102.

It went on to state that:

> The decision in the *Dale Electronics* case . . . is directly applicable to the issue of a rejection based upon 35 U.S.C. 102(f)/103. and is therefore here controlling.[89]

Finally, it suggested that based on certain language from the opinion in *In re Clemens*[90] the C.C.P.A. "may not now look with complete disfavor at this approach."[91]

Having found no fault with the approach, the Board affirmed the Section 103 rejection predicated on the use of Section 102(f) prior invention as prior art.

A closer look at the Board's rationale, however, shows that it is not nearly as compelling as the Board would have us believe. In this regard, it is interesting to note that the Board cited no judicial authority for its view that Section 103 prior art "includes all of the various bars to a patent as set forth in section 102." The reason for this omission is not surprising, because there is no extant case law which supports it. Indeed, the views of the C.C.P.A. judges are directly contrary.

Thus, while Judge Rich and Judge Baldwin disagreed mightily in *Bass* as to whether Section 102(g) prior invention could be treated as Section 103 prior art, they were in full accord that at least certain provisions of Section 102 were *not* prior art provisions. According to Judge Rich:

> Of course, (c), (d), and (f) have no relation to §103 and no relevancy to what is "prior art" under §103. Only the remaining portions of §102 deal with "prior art." Three of them, (a), (e), and (g), deal with events prior to applicant's *invention* date and the other, (b), with events more than one year prior to the U.S. *application* date. These are the "prior art" subsections.[92]

Judge Baldwin, in turn, emphasized that "[n]or does section 103 require that *everything* referred to in section 102 must be considered as 'prior art' as that term is used therein."[93] He pointed out that the legislative history of Section 103 is

---

89 *Id.*
90 622 F.2d 1029, 206 U.S.P.Q. 289 (C.C.P.A. 1980).
91 212 U.S.P.Q. at 102, n. 4.
92 177 U.S.P.Q. at 189.
93 177 U.S.P.Q. at 193.

not "inconsistent with the proposition that *some* of the material in 102 would *remain* as merely 'anticipatory prior art' ".[94]

Nor is it clear that the "decision" in *Dale Electronics* is in any way controlling on the Board. As has been previously emphasized,[95] the decision in *Dale Electronics* appears to have been based on a holding that the claim in question was obvious over Section 102(a) prior art. Thus, the decision itself should have no pertinency to the issue faced by the Board in *Andresen*. To the extent that the First Circuit in *Dale Electronics* may have suggested that obvious variants of a Section 102(f) prior invention might be unpatentable under Section 103, that view, according to the Board's own logic, would seem to be non-controlling dicta.

Likewise, by the Board's own logic, its comments relating to *Clemens* must be dicta and thus non-controlling because the only issue extant in *Clemens* involved Section 102(g). Moreover, as will be shown later in this article, the holding in *Clemens* is such as to lead to exactly the opposite conclusion from that drawn by the Board, i.e., it suggests that Section 102(f) prior invention should not be treated as Section 103 prior art.

Be that as it may, the Board has more recently in *In re Smith*[96] cited *Andresen* to support a rejection of certain of the claims of a reissue application for Section 103 obviousness over Sections 102(f) and (g) prior invention. The reissue application named Smith and McLaughlin as co-inventors. The examiner rejected 14 of the reissue claims under Section 102(f) on the ground that McLaughlin was the sole inventor and therefore the entity Smith and McLaughlin did not invent the subject matter claimed. The remaining 15 claims of the reissue application were allowed.[97] The Board upheld this rejection, but also determined that the remaining reissue claims were unpatentable under Sections 102(f) and (g), coupled with Section 103, saying:

We hold that the [a]ppellants before us, i.e., the joint inventorship entity of McLaughlin and Smith, did not invent any of the

---

94 177 U.S.P.Q. at 193, n. 3.
95 See text accompanying notes 68–76, *supra*.
96 24 P.T.C.J. 441 (1982).
97 *Id.*

subject matter sought to be patented and that before their invention the claimed subject matter was made in this country by another, namely McLaughlin alone, a different inventorship entity. We also conclude that under the peculiar facts of record in this case, the rejections under 35 USC 102(f) and 102(g) in effect merge, and that the "non-obviousness" requirement of 35 USC 103 should be coupled with the requirements of both 35 USC 102(f) and 102(g) to reject the claims not before us on appeal.

* * *

We are convinced that in the case at bar the evidence is fully supportive of our finding that McLaughlin was the sole inventor of all the subject matter sought to be patented, and that McLaughlin and Smith began their collaboration with knowledge of McLaughlin's prior invention. The invention of McLaughlin . . . is thus prior art to appellants here, and our situation falls directly within the *Bass* doctrine . . . With regard to our coupling of 35 USC 103 obviousness with 35 USC 102(f) to deem the claims not on appeal also unpatentable, we are aware that generally 102(f) is not considered a "prior art" subsection of the "novelty and loss of right" statutory provisions [noting Judge Rich's opinion in *Bass*]. However, we must in this peculiar instance concur fully with our colleagues who decided the appeal in *Ex parte Andresen* . . . . that section 102(f), as well as 102(g), should be coupled with 103 obviousness to reject the claims of appellants who have "acquired particular subject matter or information from another, and thereafter seek(s) to patent either the same or obvious variants of that acquired subject matter or information."[98]

Chisum, while generally approving the notion of coupling Section 102(f) prior invention with Section 103 obviousness, has argued that situations such as that in *Smith* represent a clear exception to any such notion and that the prior invention of A should not be treated as prior art against A & B for the purpose of Section 103 obviousness absent a clear statutory bar.[99] Indeed, the holding in *Smith* appears diametrically opposite to that of the Fifth Circuit in *Shields v. Halliburton Co.*[100] decided some two months prior to *Smith*. While the opinion and holding in *Shields* have been

98 24 P.T.C.J. at 442.

99 D. S. Chisum, "Sources of Prior Art in Patent Law," 52 Wash. L. Rev. 1 (1976).

100 667 F.2d 1232 (5th Cir. 1982).

rather sharply criticized in Part 3 of this series of articles,[101] it must nonetheless be recognized that if *Smith* represents the correct interpretation of the statute then a significant number of U.S. patents are invalid for it is not an uncommon practice for joint inventors to be listed on a patent application under exactly the same circumstances found in *Smith* to invalidate the claims under 35 U.S.C. 102(f) and 35 U.S.C. 103. It may well be that the positions taken by Chisum and the Fifth Circuit represent greater reality than does that of the Office in *Smith*.

8. *Reconciling the Use of Section 102(f) and Section 102(g) Prior Invention and Admissions Against Interest as Section 103 Prior Art*

With the possible exception of *Dale Electronics*, no judicial opinion has been found which has expressly treated Section 102(f) prior invention as Section 103 prior art. The C.C.P.A. could readily have expressly so held in *In re Fout*,[102] but for reasons not of record declined the option.

In *Fout* the solicitor on behalf of the Office set forth the issues as follows:

> 1. Are the steps recited in the preamble of appellants' claim 1 available as evidence of prior art under 35 USC 103 with respect to appellants, by virtue of their admissions in the record and the Jepson form of the claim?
>
> 2. In light of appellants' acknowledgment that "they did not invent the process claimed in the preamble portion" of claim 1, and other circumstances of this case, is that process available as evidence of prior art under 35 USC 103 with respect to appellants by virtue of 35 USC 102(f)?
>
> 3. In light of appellants' acknowledgment that their invention was subsequent in time to the process invention claimed in the preamble portion of claim 1, and other circumstances of this case, is that process available as evidence of prior art under 35 USC 103 with respect to appellants by virtue of 35 USC 102(g)?[103]

By so setting forth the issues, the solicitor gave the C.C.P.A. an excellent opportunity to discourse on the relationship

---

101 Walterscheid, *op cit.*, 64 J.P.O.S. at 646–48.

102 675 F.2d 297, 213 U.S.P.Q. 532 (C.C.P.A. 1982).

103 Brief for the Commissioner of Patents and Trademarks, Patent Appeal No. 81-547.

between Sections 102(f) and (g) and admissions against interest. Unfortunately, the court failed to do so, and from its opinion one would never know that issues 2 and 3 above existed. Rather, insofar as the court was concerned the issue was "whether the . . . invention, set forth in the preamble, constitutes 'prior art' under 35 USC 103."[104]

The so-called Pagliaro invention was described in the preamble and Fout et al. took the position that their concession that they did not invent the Pagliaro process was not an admission that it was "legally available as prior art against the claims."[105] The C.C.P.A. responded that it

> . . . has recognized that section 102 is not the *only* source of section 103 prior art. [Footnote omitted.] Valid prior art may be created by the admissions of the parties. [Citing *Nomiya, Hellsund, Bass, Garfinkel,* and *Lopresti.*]
>
> * * *
>
> We hold that appellants' admission that they had actual knowledge of the prior Pagliaro invention described in the preamble constitutes an admission that it is prior art to them. The Pagliaro process was appellants' acknowledged point of departure, and the implied admission that the Jepson format preamble of claim 1 describes prior art has not been overcome. It is not unfair or contrary to the policy of the patent system [footnote omitted] that appellants' invention be judged on obviousness against their actual contribution to the art.[106]

The court's reference to the use of the Jepson format as creating an implied admission that the preamble is prior art was necessitated by the opinion in *In re Ehrreich*[107] to that effect.[108]

Compare now the situation in *Fout* with that in *In re Clemens*.[109] In *Clemens* the C.C.P.A. held that:

---

104 213 U.S.P.Q. at 534. The court also stated that if the preamble could be so used, a second issue was whether when combined with the other cited art, the preamble rendered the claimed subject matter obvious to a person of ordinary skill in the art at the time the invention was made. It held that it could and did.

105 213 U.S.P.Q. at 535.

106 213 U.S.P.Q. at 535–36.

107 590 F.2d 902, 200 U.S.P.Q. 504 (C.C.P.A. 1979).

108 For a critical analysis of *Ehrreich*, see E. C. Walterscheid, "The Preamble of Jepson-Type Claims as Prior Art," 62 J.P.O.S. 85 (1980).

109 622 F.2d 1029, 206 U.S.P.Q. 289 (C.C.P.A. 1980).

Where an applicant begins with knowledge of another's invention that will be available to the public at a later date as a result of an issued patent, treating this other invention as prior art is justified under facts such as those in *Bass*. No such consideration is present when the applicant does not begin with such knowledge.[110]

As has been pointed out in Part 3 of this series, it is doubtful that the court intended to limit its holding in *Clemens* to public disclosure in an issued patent, since it is the public disclosure that is the key and not necessarily the manner in which the public disclosure is made.[111] The critical point, however, is that by this language the court held that a prior invention known to the inventor of a later invention, such prior invention later becoming public knowledge, as by the issuance of a patent, may be treated as Section 102(g) prior art against the later invention, but only under these precise circumstances.

The Pagliaro invention found to be prior art in *Fout* was made in this country and was not suppressed, abandoned, or concealed, i.e., it was publicly disclosed.[112] That being the case, the C.C.P.A. could have found the invention of Fout et al. to be obvious over the Section 102(g) prior invention of Pagliaro et al., citing *Clemens* and *Bass* with which it appears factually indistinguishable.[113]

The authors of *Patent Law Perspectives* have recently suggested that based on the holdings in *Clemens* and *Fout* the C.C.P.A. has established two distinct classes of "prior art" against which patentability under Section 103 is to be measured.[114] The first class, which they call "public prior art," is said to be that generally defined in Sections 102(a), (b), (d), and (e). The second class, called "private prior art," is said to consist of all information derived from others actually known to the patent applicant prior to the date of his invention, apparently regardless of whether or not that

---

110 206 U.S.P.Q. at 299.

111 Walterscheid, *op cit.*, 64 J.P.O.S. at 635.

112 See In re Pagliaro, 657 F.2d 1219, 210 U.S.P.Q. 888 (C.C.P.A. 1981).

113 While there was no Jepson-type claim in *Bass*, the real issue in *Fout* was whether the admitted prior invention of another of which Fout et al. were aware could be used as prior art against the later invention of Fout et al. This, in turn, paralleled the factual situation in *Bass*.

114 1 Pat. L. Persp. §2.3[2](2d ed.) at pp. 2–67 and 2–68.

information would have fallen within some section of 35 U.S.C. 102 or would have been prior art to the public at large.

According to these commentators.

> . . . the court could have preserved the applicability of both "public" and "private" prior art without abandoning 35 U.S.C. §102 as the statutory definition of prior art by relying on 35 U.S.C. §102(f) as tantamount to a prior art section.[115]

The difficulty with this approach is that it effectively removes and does away with the constraints on the use of "prior art" set forth in Sections 102(a) and (g) and renders such constraints meaningless. As Stiefel has pointed out, for a prior invention to be prior art under Section 102(g), the work must (1) have occurred "in this country," (2) have been actually reduced to practice, and (3) have not been suppressed, abandoned, or concealed; however, none of these requirements apply to Section 102(f) prior invention used as Section 103 prior art.[116] It may well be for this reason alone that the C.C.P.A. has refused to treat Section 102(f) prior invention as Section 103 prior art. For to do so is in effect to judicially amend and write out of the statute certain express language of Section 102(g).

Unfortunately, the approach adopted by the C.C.P.A. in *Fout* not only appears to suffer from the same defect but presents the added problem of permitting decisions on patentability to be predicated on nonstatutory "prior art." Consider for a moment the treatment of the so-called "admission" in *Fout*. The court held that the acknowledgement by Fout et al. that they had prior knowledge of the Pagliaro invention constituted, *without more*, an admission that that invention was prior art as to them.[117] In other words, by the simple fact of acknowledging that they had prior knowledge of the Pagliaro invention Fout et al. are deemed to have admitted that that invention is prior art with respect to their invention. But they in point of fact made no such admission!

The net result of this approach is to shift the burden of

---

115 *Id.* at p. 2–68.
116 Stiefel, *op cit.*, 61 J.P.O.S. at 743.
117 213 U.S.P.Q. at 536.

proof to an applicant to somehow show that this prior knowledge does not constitute prior art. Yet there is language in *Hellsund* and *Nomiya* which suggests that the applicant is estopped from doing that by the very fact of the admission.[118] But no rationale or logic is advanced for why this should be the case. Rather, all that is stated in *Fout* is that:

> It is not unfair or contrary to the policy of the patent system that appellants' invention be judged on obviousness against their actual contribution to the art.[119]

Assuming arguendo that this is the patent equivalent of the flag, apple pie, and motherhood, it still does not explain why applicants' invention should not be judged against the standard set forth in Section 102(g) rather than a judge-made standard which entirely ignores the statutory mandate.

Thus, for example, assume that Fout et al. could have shown that the Pagliaro invention had been abandoned, suppressed. or concealed.[120] Under such circumstances, the Pagliaro invention could *not* be treated as Section 102(g) prior invention. If it could not be treated as prior art by virtue of Section 102(g), why should the so-called admission somehow make it applicable art? In point of fact, given such circumstances, Fout et al. can well be argued to have made a significant contribution to the art by making publicly available not only their invention but that of Pagliaro which otherwise would never have seen the light of day, i.e., be made publicly available. Indeed, it is for precisely this reason that under interference law a later inventor may be awarded priority because the first inventor suppressed, abandoned, or concealed his invention.[121]

Nor does the existence of Section 102(f) change this conclusion. The purpose of the patent statute is to promote the progress of the useful arts *in the United States*. For that reason, the statute does not treat "prior art" arising outside the United States in the same manner as that developed

118 See. e.g., Judge Baldwin's concurring opinion in *Hellsund*, 177 U.S.P.Q. at 177; see also *Nomiya*, 184 U.S.P.Q. at 611.

119 213 U.S.P.Q. at 536.

120 While this was in fact not the case, one could never know this from the opinion in *Fout*.

121 See, e.g., Klug v. Wood, 212 U.S.P.Q. 767 (Bd. Pat. Int. 1981); Shindelar v. Holdeman, 628 F.2d 1337, 207 U.S.P.Q. 112 (C.C.P.A. 1980); and Peeler v. Miller. 535 F.2d 647, 190 U.S.P.Q. 117 (C.C.P.A. 1976).

within this country. As but one example, while a U.S. patent is prior art as of its filing date, a foreign patent is not. In another context, work performed publicly in the United States is prior art, but public knowledge in a foreign country, without more, does not constitute prior art.

If by means of Section 102(f), prior invention in a foreign country could somehow have a greater impact as prior art than prior invention in this country in that a "secret" foreign invention could be prior art whereas a "secret" domestic invention could not, such would be contrary to the whole tenor of the statute which gives advantage to actions taken in this country over those performed abroad.

The argument that this problem is avoided by applying Section 102(f) to actions in this country as well as abroad is specious. As has been previously noted, the C.C.P.A. has not adopted such a position although it could readily have done so. More importantly, to take this view simply reads out of Section 102(g) the provision that a person shall be entitled to a patent unless "before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it." Simply put, that which could not be treated as prior art under Section 102(g) should not be permitted to become prior art under Section 102(f).

In *Clemens* the C.C.P.A. engrafted onto the statutory constraints of no abandonment, suppression, or concealment an additional requirement of derivation before a Section 102(g) prior invention could be treated as Section 103 prior art.[122] The net result, however, was that under Section 102(g) a prior invention could have been derived from an earlier inventor and yet not be Section 103 prior art because it had been abandoned, suppressed, or concealed. It is for this reason that *Clemens* can be read as effectively precluding the use of Section 102(f) prior invention as Section 103 prior art. To do otherwise is to effectively remove the constraints in Section 102(g).

How then should "secret" prior invention, i.e., prior invention which has not been publicly disclosed in this coun-

---

122 206 U.S.P.Q. at 299. For a critique of this aspect of *Clemens* see Walterscheid, *op cit.*, 64 J.P.O.S. at 635 *et seq.*

try, published, patented, or disclosed in a filed U.S. patent application which subsequently issues as a patent, and thus is not prior art under Sections 102(a) or (e), be treated? Because "secret" prior invention, even if derived from another, ought not be viewed as Section 103 prior art if it has been abandoned, suppressed, or concealed, the use of such prior invention should be limited to the conditions set forth in Section 102(g) regardless of whether the prior invention has been made in this country and regardless of whether there has been any "admission," express or implied.

Such is probably too much to hope for, however. Why should the district courts or the Office worry about statutory constraints set forth in Section 102(g) when it is so much easier to rely on an express or implied "admission" a la *Fout* and its ancestry?[123] Unfortunately, as Stiefel has suggested in a different context,[124] to pose the question is to answer it.

Nonetheless, it would be wise to recall certain of the concerns expressed by Judge Rich in *Hellsund* in 1973:

> The opinion *declines to consider what, if any, statutory basis exists for using an applicant's admission* as establishing "prior art" under §103.
>
> By refusing to consider §102(g) or to relate the use of the admission of prior invention . . . to it in any way, the opinion *discards safeguards* carefully written into §102(g) to prevent the use of prior abandoned, suppressed, or concealed inventions as "prior art."[125] [Emphasis in the original.]

Although these concerns were raised in the context of "admissions," they apply equally well to the use of Section 102(f) prior invention as Section 103 prior art. They are as valid today as they were in 1973.

---

123 Chisum has argued that "nothing can be prior art under Section 103 without a statutory basis in Section 102." 52 Wash. L. Rev. at 26. But as the C.C.P.A. expressly stated in *Fout:*

> This court has recognized that section 102 is not the *only* source of section 103 prior art. [Footnote omitted.] Valid prior art may be created by the admissions of the parties.

213 U.S.P.Q. at 535. This is an open invitation to the Office and district courts to rely on "admissions," express or implied, and to ignore the statutory constraints set forth in Section 102.

124 Stiefel, *op cit.*, 61 J.P.O.S. at 743.

125 177 U.S.P.Q. at 174.

APPENDIX 6

THE "DECENT BURIAL" OF PATENT LICENSEE ESTOPPEL

In 1845 a patentee granted to licensees the right to manufacture a machine for ginning cotton and wool and received[1] in return a right to a percentage of their profits. The licensees breached the contract and claimed, as a justification, that the patent was invalid.[2] The Supreme Court held that the licensees were estopped from asserting this defense,[3] thereby establishing the doctrine of licensee estoppel. In June 1969, the doctrine was repudiated in *Lear, Inc. v. Adkins*.[3] This note will briefly explore the doctrine, the rationales offered to support it, and the exceptions created to bypass it. An examination will then follow of the *Lear* case and its possible influence on future patent agreements.

Estoppel Prior to Lear, Inc. v. Adkins

Estoppel has most often arisen in two distinct but closely related situations involving the transfer of patent rights - estoppel of an assignor and estoppel of a licensee.[4] In the assignment of a patent the inventor ostensibly transfers to the assignee all rights under his patent, retaining nothing for himself save the right to receive royalties.[5] If after the assignment the inventor commences or continues to manufacture the patented device, he presumably is guilty of infringement, and his assignee is given a federal cause of action against the inventor.[6] Numerous federal courts have held that the inventor may not defend on the basis that his invention was invalidly patented.[7] A patent license, however, is a transfer to another of a limited right under the patent to manufacture, use, or sell the patented device at a prescribed royalty, free from a claim of infringement by the inventor.[8] The inventor retains title to the patent

1. Kinsman v. Parkhurst, 59 U.S. (18 How.) 289 (1855).
2. *Id.* at 293.
3. 395 U.S. 653 (1969).
4. Assignee and licensor estoppel cases have arisen less frequently. *See, e.g.*, Stubnitz-Greene Spring Corp. v. Fort Pitt Bedding Co., 110 F.2d 192 (6th Cir. 1940) (licensor estoppel); Brown v. L.V. Marks & Sons Co., 64 F. Supp. 352 (E.D. Ky. 1946) (assignee estoppel).
5. *See* 4 A. DELLER, WALKER ON PATENTS § 335 (2d ed. 1965) [hereinafter cited as DELLER].
6. 35 U.S.C. § 271 (1964).
7. *See, e.g.*, Faulks v. Kemp, 3 F. 898 (C.C.S.D.N.Y. 1880).
8. *See* 4 DELLER § 381.

and may retain the right to manufacture, sell, or license the patent to others. A patent license is a contract, and a cause of action thereunder will normally arise under state law if the licensee breaches by nonpayment of royalties.[9] In the past, courts have refused to permit a licensee to assert the invalidity of the licensed patent when he is sued for nonpayment of royalties.[10]

Real property law served the courts well as a rationale for the estoppel doctrine.[11] A grantor conveying property by deed is estopped from claiming any title inconsistent with the deed or from denying a material fact in the deed.[12] Analogously, if one conveys a potential right to exclude the public from an invention, he is prevented from derogating from the transferred title by claiming patent invalidity.[13] Similarly, when a landlord leases property and puts the tenant in possession, the latter is estopped to deny that the landlord had good title in a suit for rent.[14] Under the same rationale, a licensee was prohibited from asserting patent invalidity in a suit for royalties under a licensing agreement.[15] But just as an evicted tenant could contest the validity of the landlord's title in an action for past rent,[16] the courts held that a licensee could test the validity of the patent in a suit for royalties where he showed an "eviction," such as a prior judgment of invalidity of the patent at issue.[17]

By invoking the estoppel doctrine, courts have sought to prevent unfair dealings between the parties. Thus in one case involving a licensee's denial of the validity of his licensor's patent, the Court held that after entering into the agreement and manufacturing under

---

9. *Id.* § 380.

10. *See, e.g.*, United States v. Harvey Steel Co., 196 U.S. 310 (1905).

11. *See* Treece, *Licensee Estoppel in Patent and Trademark Cases*, 53 IOWA L. REV. 525 (1967).

12. *See* 6 R. POWELL, REAL PROPERTY § 937 (1969).

13. *See, e.g.*, Westinghouse Elec. & Mfg. Co. v. Formica Insulation Co., 266 U.S. 342, 350 (1924).

14. *See, e.g.*, Goode v. Gaines, 145 U.S. 141 (1892).

15. *See, e.g.*, Barber Asphalt Paving Co. v. Headley Good Roads Co., 284 F. 177 (D. Del. 1922).

16. *See, e.g.*, Merryman v. Bourne, 76 U.S. (9 Wall.) 592 (1869).

17. *See, e.g.*, Drackett Chem. Co. v. Chamberlain Co., 63 F.2d 853, 854 (6th Cir. 1933). The assignee of certain patents licensed the right to use the patents in the grocery trade to licensee. Both the assignee and licensee joined in an infringement action against a third party, and the court found that the patent was invalid. It was then held in a suit for royalties by the assignee against the licensee that the previous judgment constituted the eviction, releasing the licensee from his obligation to pay royalties. *Id. See also* White v. Lee, 14 F. 789 (C.C.D Mass. 1882).

it, a strong presumption arose that the claim of patent invalidity was made to avoid payment of the agreed upon royalties.[18] This rationale was present also in the majority opinion by Justice Holmes in *United States v. Harvey Steel Co.*,[19] where it was found unjust to allow the licensee to use the process introduced to him by the patentee and permit him later to claim invalidity, thereby allowing an escape from royalty payments.[20] Similarly, in *Faulks v. Kamp*,[21] when an assignor attempted to assert invalidity of the patent after assignment, the Court in order to reach a just result, found an implied warranty that the assignor had title to what he conveyed.[22] Since they were primarily concerned with the equities of the contracting parties, these Courts neglected the public policy considerations inherent in the federal law of patents.

Several exceptions to the estoppel doctrine arose.[23] As stated previously, the licensee was not estopped if he was "evicted."[24] Another exception permitted an assignor being sued by his assignee for infringement to *narrow* the claims of the patent in question by evidence tending to show the state of the art, so long as this narrowing did not nullify the patent in an attempt to deny infringement. The Supreme Court, in *Westinghouse Electric & Manufacturing Co. v. Formica Insulation Co.*,[25] reasoned that if the state of the art was not examined, courts would be deprived of the best means of measuring what the patent included.[26]

---

18. Eureka Co. v. Bailey Co., 78 U.S. (11 Wall.) 488, 491-92 (1870). *But see* Handler, *Antitrust: 1969*, 55 CORNELL L. REV. 161, 186-88 (1970).

19. 196 U.S. 310 (1905). The patent holder entered into a contract with the government for the use of his patented process and later brought suit for royalties. The government asserted invalidity as a defense even though there had been no prior determination of patent invalidity.

20. *Id.* at 318-19.

21. 3 F. 898 (C.C.S.D.N.Y. 1880).

22. "[I]n justice [assignors] ought not to be heard to say that they had it not and did not sell it, and to be allowed to derogate from their own grant by setting up that it did not pass." *Id.* at 904. St. Paul Plow Works v. Starling, 140 U.S. 184 (1890), is often cited to support the same proposition, but in that case the lower court admitted evidence concerning the novelty of the patent, and this admission was not held to be error by the Court.

23. *See* Cooper, *Estoppel to Challenge Patent Validity: The Case of Private Good Faith vs Public Policy*, 18 W. RES. L. REV. 1122, 1138-54 (1967).

24. See note 17 *supra* and accompanying text.

25. 266 U.S. 342, 351 (1924).

26.

> [But] the result proved to be an anomaly: if a patent had *some* novelty *Formica* permitted the old owner to defend an infringement action by showing that the invention's novel aspects did not extend to include the old owner's products; . . . if a

Courts further limited the estoppel doctrine where countervailing public policy considerations warranted protection. In *Sola Electric Co. v. Jefferson Electric Co.*[27] a licensing agreement stipulated that the prices, terms, and conditions of sale throughout the licensed territory should not be more favorable to the licensee's customers than those set by the patentee. The patentee sought recovery of unpaid royalties and an injunction to restrain subsequent sales not made in accordance with the contract. The Supreme Court held that the doctrine of estoppel was in conflict with the prohibitions against price fixing of the Sherman Act and refused to apply estoppel since the invalidity of the patent would necessarily render the agreement illegal.[28] Similarly, the Court has also held that it would be against the policy of the patent laws to estop an assignor from asserting in an infringement suit the defense that the assigned patent was a copy of an expired one, since a patent becomes part of the public domain upon its expiration.[29] Furthermore, the Supreme Court has declined to grant injunctive relief to enforce a contract wherein the licensee agreed not to contest the validity of the patent, reasoning that the public interest in eliminating worthless patents was as important as the patentee's interest in protecting his monopoly.[30] These numerous

---

patent had *no* novelty at all, the old owner could not defend successfully since he would be obliged to launch the direct attack on the patent that *Formica* seemed to forbid. Lear, Inc. v. Adkins, 395 U.S. 653, 665 (1969).

But see Casco Prods. Corp. v. Sinko Tool & Mfg. Co., 116 F.2d 119 (7th Cir.), *cert. denied*, 312 U.S. 693 (1940) (scope can be narrowed even if patent reduced to a nullity). *See also* Ball & Socket Fastener Co. v. Ball Glove Fastening Co., 58 F. 818, 823 (1st Cir. 1893).

27. 317 U.S. 173 (1942).

28. "Local rules of estoppel which would fasten upon the public as well as the petitioner the burden of an agreement in violation of the Sherman Act must yield to the Act's declaration that such agreements are unlawful, and to the public policy of the Act which in the public interest precludes the enforcement of such unlawful agreements." *Id.* at 177. *See also* MacGregor v. Westinghouse Elec. & Mfg. Co., 329 U.S. 402 (1947); Edward Katzinger Co. v. Chicago Metallic Mfg. Co., 329 U.S. 394 (1947). Here the licensors sought *only* to collect royalties but the Court held that the existence of the price fixing clause was enough to bring the validity of the patent into question.

29. *See* Scott Paper Co. v. Marcalus Mfg. Co., 326 U.S. 249 (1945). The assignee acquired a patent from the assignor who later made use of the patent. As a defense to the assignee's suit for infringement, the assignor asserted that the patent was a copy of an expired patent and therefore a part of the public domain at the time he allegedly infringed. Interpreted narrowly, the case establishes another exception to the doctrine of estoppel which arises when the patent allegedly infringed was based on a prior-expired patent. Interpreted broadly, however, the case could have been read to overrule estoppel in that all invalid patents are part of the public domain, whether they are invalid because they are copies or otherwise. The same policy that warranted another exception to the doctrine of estoppel also would seem to have warranted repudiation of the doctrine.

30. *See* Pope Mfg. Co. v. Gormully, 144 U.S. 224 (1892). The patentee-plaintiff licensed

exceptions had so eroded the estoppel doctrine that the next step, complete repudiation, was a logical one."[31] Consequently, in *Lear, Inc. v. Adkins*[32] the Supreme Court explicitly renounced the doctrine of licensee estoppel.[33]

Lear, Inc. v. Adkins: *The Court's Holding*

In 1953, John Adkins, an employee of Lear, agreed to grant the company a license on all ideas that he might develop during the term of his employment on a mutually satisfactory royalty basis. In 1955, he applied to the Patent Office for a patent on improvements on a gyroscope and then entered into a detailed contract with Lear concerning royalties. The contract could be terminated if the Patent Office refused to grant a patent on the "substantial claims" of Adkins' original application or if the patent issued but was subsequently held invalid. After Adkins' application had been rejected twice, Lear, believing that a patent would never be granted, notified Adkins that it would no longer pay royalties on the gyroscopes produced at Lear's Michigan plant.[34] In 1960, upon narrowing his claims considerably, Adkins received a patent. After two conflicting lower court determinations,[35] the California Supreme

his bicycle patent to the defendant on condition that he manufacture only certain types of bicycles and that he agree not to challenge the validity of the plaintiff's patent. Alleging that the licensee breached the latter provision, the patentee prayed for an accounting for the machines made in violation of the agreement and for an injunction from further manufacture. The licensee defended on the grounds of patent invalidity. *See also* Mercoid Corp. v. Mid-Continent Inv. Co., 320 U.S. 661, 666 (1944).

31. In 1947 Justice Frankfurter exclaimed: "If a doctrine that was vital law for more than ninety years will be found to have now been deprived of life, we ought at least to give it decent public burial." *MacGregor v. Westinghouse Elec. & Mfg. Co.*, 329 U.S. 402, 416 (1947) (dissenting). For an argument that the precedent to *Lear* did not point to the complete repudiation of licensee estoppel see Dodds, *After Lear v. Adkins – What?*, 51 J. PAT. OFF. SOC'Y 621, 623-29 (1969).

32. 395 U.S. 653 (1969).

33. Automatic Radio Mfg. Co. v. Hazeltine Research, Inc., 339 U.S. 827 (1950) was the last express approval of the doctrine and was the specific case overruled in *Lear*.

34. Payments were continued for two more years on the gyros produced in Lear's California plant, which were apparently closer in design to the device described in Adkins' patent application, before Lear notified Adkins that it was terminating the agreement.

35. *See* Adkins v. Lear, Inc., 52 Cal. Rptr. 795, 801 (Ct. App. 1966). The trial court directed a verdict of $16,000 for Adkins on the gyros manufactured in California, holding that Lear was estopped by its licensing agreement from questioning the validity of the inventor's patent. Because Lear claimed the Michigan gyros were developed independently of Adkins' invention, the trial judge directed the jury to award the inventor a recovery only if it were satisfied that the invention was novel within the meaning of the federal patent laws. The jury returned an $888,000 verdict for Adkins, but Lear was granted judgment notwithstanding the

Court held that the 1955 contract had not been properly terminated and consequently the doctrine of estoppel barred Lear from questioning the validity of the patent.[36] The state court also rejected Lear's contention that the Michigan gyros, as opposed to others manufactured in California, were a natural extension of the prior art and found at least partial reliance on Adkins' invention, whether or not this invention met the standards required for the issuance of a patent, and therefore reinstated the jury verdict below.[37]

Since interpretation of specific provisions of the licensing agreement was held to be uniquely a matter of state law the United States Supreme Court considered only the state court's reliance on the doctrine of estoppel which barred Lear from proving that the patent was invalid.[38] In deciding the estoppel question, the Court first noted that past efforts to accommodate the common law of contracts with federal patent law had failed.[39] Analyzing the "typical" licensing situation where a patent is licensed after issuance rather than while the application is pending,[40] the Court found the equities of the patentee-licensor to be weak when weighed against the public's interest in the free access to ideas that are part of the public domain.[41] The public right to the use of inventions not the subject of *valid* patents had to be safeguarded in spite of traditional contract law requirements. Since the licensee often is the only one with sufficient economic incentive to contest the patent's validity, the Court viewed him as the most appropriate person to champion the public interest.[42] The licensor would not be unduly burdened by

verdict on the basis that Adkins' invention had been completely anticipated by prior art. Both sides appealed to the California Court of Appeals where it was held that Lear was within its contractual rights in terminating the royalty obligations in 1959 and that if Adkins desired to recover damages after that date he had to bring an infringement action in the federal courts. The court held further that Lear had to pay pre-1959 royalties on both the Michigan and California gyros under the contract regardless of the validity of the patent. Both parties again appealed.

36. Adkins v. Lear, Inc., 67 Cal. 2d 882, 435 P.2d 321, 64 Cal. Rptr. 545 (1967).

37. *Id.* at 907-15, 435 P.2d at 336-41, 64 Cal. Rptr. at 560-65.

38. 395 U.S. at 661-62.

39. *Id.* at 668.

40. *Id.* at 669-71.

41. *Id.* at 670-71. As used in this note "public domain" refers generally to those ideas in which there are no protected private interests. It has been suggested that the *Lear* Court's use of the phrase would not include ideas not generally known and that this use raised but did not answer the issue of state law protection of unpatented secret ideas. *See* Adelman & Jaress, *Inventions and the Law of Trade Secretes After* Lear v. Adkins, 16 WAYNE L. REV. 77, 82-83, 85 (1969); notes 84-106 *infra* and accompanying text.

42. 395 U.S. at 670. *See also* Brief for Petitioner at 36.

allowing the licensee to contest validity, the Court reasoned, since his case would be buttressed by the presumption that the Patent Office's ex parte legal conclusion of patentability was correct.[43] Consequently, in order to enable the licensee to contest validity and rid the public of worthless patents, the licensee estoppel doctrine was overruled.[44]

The Court then addressed itself to the particular fact situation of the *Lear* case where the licensing agreement was consummated four years *prior* to the granting of the patent.[45] Adkins' claim to royalties for the full patent term of 1960 to 1977 was rejected as overbroad.[46] Applying the policy of the patent laws despite the limiting contract term, the claim to royalties until such time as the patent was held invalid as required by the 1955 agreement was also rejected by the Court.[47] If the collection of royalties was allowed until an adjudication of the patent's validity, the licensor would have a strong economic incentive to use dilatory court tactics. Moreover, use of such delaying tactics might deter licensees from challenging patent validity and thereby protecting the public interest, especially in an area where extended legal proceedings could last longer than the actual useful life of a patent. The *Lear* decision thus makes it clear that a licensee will be permitted to avoid royalties *after* the issuance of the patent from the time he stops payment, provided he is successful in proving patent invalidity.[48]

Prior to *Lear*, any party with standing, other than the estopped assignor or licensee, could contest the validity of a patent.[50] By looking to the policy behind the patent and antitrust laws in order

43. 35 U.S.C. § 282 (1964).

44. 395 U.S. at 671.

45. *Id.* at 671-75.

46. *Id.* at 672-73.

47. *Id.* at 673-74.

48. *Id.*

49. *Id.* at 674. The *Lear* decision is to be retroactively applied since "the public's interest in the elimination of specious patents would be significantly prejudiced if the retroactive effect of today's decision were limited in any way." *Id.* n.19.

50. A party sued for patent infringement may raise the defense of invalidity. 35 U.S.C. § 282 (1964). Similarly, a party being threatened or charged with infringement by a patentee may seek a declaratory judgment of invalidity under 28 U.S.C. § 2201 (1964). *See, e.g.*, Welch v. Grindle, 251 F.2d 671 (5th Cir. 1957); Tuthill v. Wilsey, 182 F.2d 1006 (7th Cir. 1950); E.J. Brooks Co. v. Stoffel Seals Corp., 160 F. Supp. 581 (S.D.N.Y. 1958); I-T-E Circuit Breaker Co. v. McGraw Elec. Co., 121 F. Supp. 435 (E.D. Pa. 1954).

to enable the licensee[51] to contest validity, the *Lear* court reached a desirable result. Federal legislation, especially the antitrust laws, reflects an obvious disapproval of economic monopolies.[52] The patent is an exception to this general rule made in order to encourage inventors to disclose their ideas for public use and thereby promote further invention by making the prior art accessible to prospective inventors.[53] In effect, the government is contracting with the patentee to disclose his ideas to the public in return for a seventeen year monopoly. However, this monopoly is sanctioned by the government only if the inventor is benefiting the public with a truly novel invention.[54] If the Patent Office's ex parte determination is incorrect, the patentee is granted an exclusive right to an invention when he is not entitled to one — a monopoly that is against public policy — and this exclusive right must be defeated. By enabling another litigant, frequently the one with the strongest economic incentive, to contest patent validity, the public will more effectively be rid of these unnecessary monopolies.

When the validity of the patent is questionable, it is in the licensee's interest, as well as that of the public, to force litigation by stopping royalty payments and subjecting himself to suit by the licensor, for, if successful, the licensee would be freed from further royalties,[55] and the public would be relieved of the burden of an invalid patent. If the licensee is unsuccessful, he would normally be liable only for the royalties he was already obligated to pay under the contract. However, there are sufficient factors to deter the licensee from forcing needless litigation by withholding royalties when he does not have a sound basis for asserting invalidity. The litigation expense may be great enough to assure that only truly doubtful patents will be challenged.[56] Further, where a frivolous

51. Although *Lear's* facts are restricted to the licensing situation, an assignor will probably now be permitted to contest validity as well. See note 63 *infra* and accompanying text.

52. *See* W. BALLARD, PATENTS AND FREE ENTERPRISE 1-12 (1947). *See generally* Sherman Act, 15 U.S.C. §§ 1-7 (1964); Clayton Act, 15 U.S.C. §§ 12-27 (1964).

53. *See* L. AMDUR, PATENT FUNDAMENTALS 51-52 (1948); W. BALLARD, *supra* note 52, at 12-13; L. WOOD, PATENTS AND ANTITRUST LAW 15-16 (1942); STAFF OF HOUSE COMM. ON THE JUDICIARY, 84th Cong., 2d Sess., ANTITRUST PROBLEMS IN THE EXPLOITATION OF PATENTS 1 (Comm. Print 1956).

54. L. AMDUR, *supra* note 53, at 51-52; 1 DELLER § 31 (1964); J. NORMAN, PATENTS 18 (1853). There are other situations such as the misuse of patent power where the patent monopoly will not be sanctioned by the courts. *See, e.g.*, B.B. Chemical Co. v. Ellis, 314 U.S. 495 (1942); Leitch Mfg. Co. v. Barber Co., 302 U.S. 458 (1938).

55. 395 U.S. at 674.

56. *See* Note, *A Reconsideration of the Patent System as a Problem of Administrative*

attempt to escape royalties is shown, the Court may award the licensor reasonable attorney's fees.[57] Moreover, although a breach of the covenant to pay royalties usually is not grounds for cancellation of the license,[58] if the breach defeats the whole consideration of the agreement, as when the licensee not only stops paying royalties but also ceases *manufacture under the license*, the *agreement may be* terminated by the licensor.[59] In such a case, if the patent were valid, the licensee would presumably remain liable for royalties incurred prior to the cessation, and any further attempt to manufacture the article may subject the licensee to an infringement suit.[60] Consequently, although the licensee has ample incentive to contest the validity of the patent in that he may avoid further royalty payments, there is sufficient deterrence to inhibit him from bringing bad faith claims when there is no real question of validity.[61]

Lear holds that the obligation to pay royalties ends when the licensee stops paying royalties after the issuance of the patent if the patent is subsequently invalidated.[62] Further, although the facts of *Lear* are confined to a licensing agreement, in view of the Court's compilation of assignment as well as licensing cases in developing its argument, the same policy will require that estoppel be repudiated in the assignment context.[63] There are, however, several important

Law, 55 HARV. L. REV. 950, 957, 969 (1942); Note, *Gratuitous Findings of Validity: A Judicial Gift to Potentees*, 61 YALE L.J. 98, 103 (1952).

57. This remedy is to be used sparingly. *See* Union Nat'l Bank v. Superior Steel Corp., 9 F.R.D. 117 (W.D. Pa. 1949). But when unjustified litigation is clearly shown, the remedy is available. *See* Phillips Petroleum Co. v. Esso Standard Oil Co., 91 F. Supp. 215 (D. Md), *aff'd*, 185 F.2d 672 (4th Cir. 1950).

58.

> It will not do to say that a forfeiture has taken place, *ipso facto*, by the non-payment of the stipulated royalties, and that, therefore, all handling of the patented articles by the defendant since then has been an infringement. The law does not arm one party to a contract with the power to determine in his own favor a condition of [that] kind . . . . Even where the contract provides that the failure to pay shall render it null and void, the defendant has a right to be heard as to the facts upon which such annulment is made to depend. Standard Dental Mfg. Co. v. National Tooth Co., 95 F. 291, 294 (C.C.E.D. Pa. 1899).

See also White v. Loe, 3 F. 222 (C.C.D. Mass. 1880).

59. *See, e.g.*, Oscar Barnett Foundry Co. v. Crowe, 219 F. 450 (3d Cir. 1915); Ruby v. Ebsary Gypsum Co., 36 F.2d 244 (W.D.N.Y. 1929).

60. Once the license is terminated the licensee has no further patent protection. *See* 4 DELLER § 411.

61. Besides being so protected from bad faith claims of invalidity, the licensor will benefit if his patent withstands the rigors of an adversary proceeding, for the contest holding it valid will strengthen the patent by making further contests of validity less likely.

62. 395 U.S. at 674.

63. *Id.* at 663-68.

questions left unanswered by the opinion. May the parties avoid the *Lear* result by a consent judgment?[64] If payments are made after the patent is issued and before the suit contesting validity is commenced, can the licensee recoup these past royalty payments?[65] Does federal patent policy bar enforcement of a contract regulating access to an unpatented or patent-pending secret idea?[66]

Can the Parties Avoid Lear *by a Consent Judgment?*

The public policy voiced in *Lear* supports the "full and free competition in the use of ideas which are in reality a part of the public domain."[67] Since this policy was frustrated by a judicially-created doctrine barring the licensee from the defense of patent invalidity, the doctrine was judicially repudiated.[68] Although the remainder of the license may still be enforceable,[69] a contract clause similarly prohibiting the defense of invalidity would also be void as against public policy and therefore unenforceable.[70] However, does incorporation of the agreement in a consent judgment alter this

64. See notes 67-79 *infra* and accompanying text.

65. See notes 80-83 *infra* and accompanying text.

66. See notes 84-106 *infra* and accompanying text.

67. 395 U.S. at 670.

68. *Id.* at 670-71.

69. Generally, contracts in conflict with public policy are illegal or void. *See, e.g.*, Kaiser-Frazer Corp. v. Otis & Co., 195 F.2d 838 (2d Cir.), *cert. denied*, 344 U.S. 856 (1952); Kalos v. Saliaris, 116 F.2d 440 (4th Cir. 1940); Coyne v. Superior Incinerator Co., 80 F.2d 844 (2d Cir. 1936). However, if an agreement based on legal consideration contains several promises, and the illegal promise may be separated, the remainder of the contract will be enforceable. *See, e.g.*, Brown v. R.&R. Engineering Co., 264 F.2d 219 (3d Cir. 1959); Kosuga v. Kelly, 257 F.2d 48 (7th Cir. 1958), *aff'd*, 353 U.S. 516 (1959).

70. *See* Katzinger Co. v. Chicago Metallic Co., 329 U.S. 394 (1947). Here the Court stated that a contract clause not to challenge the validity of the licensor's patent could "no more overrule Congressional policy than [could] . . . an implied estoppel." *Id.* at 401-02. *Cf.* Pope Mfg. Co. v. Gormully, 144 U.S. 224, 233-36 (1892). Although not explicitly reaching the question, the *Lear* Court pointed toward the same result. When faced with the question of whether Lear would be required to pay royalties during the time in which the patent was being challenged, the Court refused to enforce the portion of the license agreement which provided that royalties were due until the determination of patent invalidity. The Court stated that

> [t]he parties' contract . . . is no more controlling on this issue than is the State's doctrine of estoppel which is also rooted in contract principles. The decisive question is whether overriding federal policies would be significantly frustrated if licensees could be required to continue to pay royalties during the time they are challenging patent validity in the courts. 395 U.S. at 673.

On the theory that this provision would significantly frustrate overriding federal policies, the Court declined to enforce it. The same federal policies would seem to warrant the Court's refusal to enforce a contract provision disabling the licensee from contesting the patent's validity.

result? In other words, if the licensor brings an infringement suit[71] against the prospective licensee, or the licensee seeks a declaratory judgment[72] of invalidity, in each case the validity of the patent being at issue, and the licensee promptly consents to a judgment upholding the patent's validity, should the judgment be res judicata?[73]

Res judicata is based on the public policy of putting an end to litigation,[74] but this policy gives way if there is an overriding policy that must be honored.[75] There must therefore be a balancing:[76] On one side is the policy of finalizing litigation and on the other is the public interest in permitting patent monoplies only when based on valid patents. When the judgment merely incorporates an agreement between the parties without an adversary determination of patent validity,[77] this latter policy will be frustrated by giving the consent judgement res judicata effect just as it was frustrated by licensee estoppel or by a contract provision prohibiting the licensee from contesting validity.

In weighing these policies, the Second Circuit has afforded more protection to the public interest involved in the removal of the unwarranted monopoly accorded an invalid patent.[78] It has held that

---

71. 35 U.S.C. § 271 (1964).

72. 28 U.S.C. § 2201 (1964).

73. For a discussion of consent judgments as res judicata, see Annot., 2 A.L.R.2d 514 (1946).

74. *See* RESTATEMENT OF JUDGMENTS § 1, comment a (1942).

75. *See, e.g.*, Mercoid Corp. v. Mid-Continent Inv. Co., 320 U.S. 661 (1944), United States v. U.S. Fidelity and Guar. Co., 309 U.S. 506 (1940); Kalb v. Feverstein, 308 U.S. 506 (1940); Keokuk & W.R.R. v. Missouri, 152 U.S. 301 (1894); *In re* Di Carlo's Estate, 3 Cal. 2d 225, 44 P.2d 562 (1935); People *ex rel* Arkansas Valley Sugar Beet & Irrigated Land Co. v. Burke, 72 Colo. 486, 212 P. 837 (1923). *See also* cases collected at Annot., 88 L. Ed. 389, 390 (1944).

76. *See, e.g.*, Addressograph-Multigraph Corp. v. Cooper, 156 F.2d 483 (2d Cir. 1946); Pierson v. Pierson, 15 N.J. Misc. 117, 189 A. 391 (Ch. 1937). *See generally* Annot., 2 A.L.R.2d 514, 532 (1946).

77. *Cf.* Fruehauf Trailer Co. v. Gilmore, 167 F.2d 324 (10th Cir. 1948) (consent judgment not res judicata in tort action where court in first suit performed merely the administrative function of recording the parties' agreement).

78. *See* Addressograph-Multigraph Corp. v. Cooper, 156 F.2d 483, 485 (2d Cir. 1946).

> [O]n grounds of public policy . . . in a decree entered by consent, either an adjudication of infringement, or a grant of some relief from which infringement may be inferred, is essential before any effect of res judicata can be given to it on the issue of validity . . . . [W]e think the public interest in a judicial determination of the invalidity of a worthless patent is great enough to warrant the conclusion that a defendant is not estopped by a decree of validity, at least when this decree was by consent, unless it is clear that in the litigation resulting in the decree this issue of validity was genuine. *Id.* at 485.

But see Brunswick Corp. v. Chrysler Corp., 408 F.2d 335 (7th Cir. 1969), where the court upheld the prior consent judgment but did not consider public policy in reaching its result.

when a prior adjudication of validity has been made through a consent decree, the defendant is not estopped by the decree unless it is clear that genuine litigation was involved in the original proceeding.[79] Such an approach would seem consistent with the emphasis placed on the public interest in *Lear*. Indeed, to do otherwise would allow the *Lear* result to be avoided by ignoring the very interests it sought to protect.

May a Licensee Recoup Royalties Paid After the Issuance of the Patent and Prior to the Suit for Royalties?

Although a licensee could not contest validity prior to *Lear*, an alleged infringer, or a third party with standing to bring a declaratory judgment action, could assert patent invalidity.[80] If the patent was held invalid in this third party suit, the licensee was normally freed from further royalty payments, since the consideration flowing to the licensee failed once the patent was proved invalid.[81] However, prior to the holding of invalidity, the contract was supported by sufficient consideration: freedom from an infringement suit and deterrence of competitors. Therefore, no recoupment of past royalties was allowed.[82] This rationale should apply no matter who proves patent invalidity and effectuates the eviction. *Lear* merely expanded the class that may prove invalidity and therefore should not change the disallowance of recovery of past royalties.

Moreover, the policy behind *Lear* would be more effectively promoted by disallowing recoupment. The *Lear* Court enabled the licensee to contest validity in order to rid the public of needless patents.[83] By denying recoupment the Court would not inhibit the licensee but would put pressure on him to test the patent's validity as soon as he has a sound basis for so doing, for until the suit is brought the licensee would be obligated to pay royalties under the

79. Addressograph-Multigraph Corp. v. Cooper, 156 F.2d 483, 485 (2d Cir. 1946).

80. See note 50 *supra* and accompanying text.

81. *See* Drackett Chem. Co. v. Chamberlain Co., 63 F.2d 853, 854 (6th Cir. 1933). *See also* White v. Lee, 14 F. 789 (C.C.D. Mass. 1882), where the court stated that in a suit for royalties, "a plea or answer that the patent is void, is not, of itself, a sufficient defense, but that evidence of what may be called an *eviction* is such a defense." *Id.* at 791 (emphasis added). With no "eviction" the defense of invalidity is not available so royalties must be continued. See note 17 *supra* and accompanying text.

82. *See* Drackett Chem. Co. v. Chamberlain Co., 63 F.2d 853, 854 (6th Cir. 1933).

83. 395 U.S. at 670-71.

contract. Recoupment of past royalties should therefore be disallowed because a contract supported by sufficient consideration would be enforced until its consideration failed and the *Lear* policy would be promoted.

Does Federal Patent Policy Bar Enforcement of a Contract Regulating Access to an Unpatented or Patent Pending Secret Idea?

Justice Black, concurring and dissenting in *Lear*, agreed with the holding of the Court but stated that it should have gone one step further and held that licenses based on unpatentable or patent pending inventions that are later deemed unpatentable could not be enforced.[84] In order to understand the issues involved in this question, a brief discussion of the patent system's relationship to the law of trade secrets is in order.

The paramount purpose of the federal patent law is "[t]o promote the progress of science . . . ."[85] To meet this objective Congress has offered the inventor a seventeen year monopoly, an exception to the antitrust laws, in exchange for disclosure of his invention.[86] The inventor is free to keep his idea secret,[87] but if he does so, the right to exclude others from his invention is limited to that protection afforded him by the law of trade secrets.[88] An important objective of trade secret law is to protect the inventor's discovery from fraudulent disclosure.[89] He has a right to prohibit

---

84.

> [N]o State has a right to authorize any kind of monopoly on what is claimed to be a new invention, except when a patent has been obtained from the Patent Office under the exacting standards of the patent laws. One who makes a discovery may, of course, keep it secret if he wishes, but private arrangements under which self-styled "inventors" do not keep their discoveries secret but rather disclose them, in return for contractual payments, run counter to the plan of our patent laws, which tightly regulate the kind of inventions that may be protected . . . . The national policy expressed in the patent laws, favoring free competition and narrowly limiting monopoly, cannot be frustrated by private agreements . . . . 395 U.S. at 676-77.

The majority opinion raised the issue but expressly reserved judgment for a future case. *Id.* at 674-75; *see* Adelman & Jaress, *supra* note 41, at 78.

85. U.S. CONST. art. I, § 8, cl. 8.

86. *See* L. AMDUR, *supra* note 53, at 52.

87. *Id.*

88. The inventor may contract with the person to whom he discloses his invention not to disclose it to others and sue under the contract upon breach. *See* 12 R. MILGRIM, BUSINESS ORGANIZATIONS, TRADE SECRETS §§ 3.01-.05 (1969) [hereinafter cited as MILGRIM]. In the absence of a contract, he is protected by operation of law. *See id.* §§ 4.01-.03.

89. *See* Doerfer, *The Limits on Trade Secret Law Imposed by Federal Patent and Antitrust*

those to whom he confidentially discloses his invention from revealing and independently using it, but he cannot exclude anyone who independently develops the device through research or by examination of the manufactured product.[90] This limited protection is based on nondisclosure in contrast to the required disclosure of the patent laws, for once the invention is no longer secret, the protection ends.[91] Consequently, although both state trade secret law and federal patent law promote invention, there is a conflict: Public disclosure of the invention terminates trade secret protection, while public disclosure is required to obtain patent protection.

Despite the conflict, patent and trade secret law should generally co-exist, except in the situation of the "potentially perpetual secret" where disclosure may not occur within the period protected by the patent laws.[92] Congress did not intend that its patent legislation be preemptive.[93] Disclosure in return for a monopoly is the *means* to meet the objective of promoting science on the theory that access to other inventions will spur further discovery.[94] Trade secret protection also presumably promotes invention. If an investor knew that after successfully developing his invention he would have no protection against one who fraudulently copies the device and manufactures it without the burden of development costs, the inventor would be discouraged from further efforts. Moreover trade secret law only temporarily conflicts with the *means* which Congress has chosen to promote invention through the patent laws, for whether the inventor

Supremacy, 80 HARV. L. REV. 1432, 1435-39 (1967) [hereinafter cited as Doerfer]. *See also* Handler, *Antitrust: 1969*, 55 CORNELL L. REV. 161, 186-87 (1970).

90. *See* MILGRIM § 5.04[1].

91. *Id.* at § 2.03. *See also* Doerfer 1434-35.

92. Adelman and Jaress describe "potentially perpetual secrets" as being "usually process inventions where an examination of the resulting product does not disclose the method of manufacture, or chemical formulations whose composition cannot be analyzed." Adelman & Jaress, *supra* note 41, at 92. A patent will not be issued when the invention is put to public use for more than a year prior to the patent application. 35 U.S.C. § 102(b) (1964). Therefore, it has been suggested that state trade secret law protection of "potentially perpetual secrets" should be limited to the one year period. Adelman, *Trade Secrets and Federal Pre-Emption-The Aftermath of Sears and Compco*, 49 J. PAT. OFF. SOC'Y 713, 729-32 (1967). It might be suggested, however, that the decisional standards of what constitutes a "potentially perpetual secret" will involve both state and federal courts in impossible technicalities and may lead to the abandonment of trade secret law. Alternatively, it may be argued that these "potentially perpetual secrets" rarely ripen into perpetual secrets and should be tolerated without the abandonment of trade secret law. *Cf.* Doerfer 1448.

93. *See* Note, *The* Stiffel *Doctrine and the Law of Trade Secrets*, 62 NW. U.L. REV. 956, 964-66 (1968).

94. *See* Doerfer 1440-41.

relies exclusively on trade secret protection or whether he uses it only *during* the patent pending period, the conflict will soon be resolved: Disclosure will usually be accomplished in the former situation by commercialization[95] and in the latter by the issuance of the patent.

When an inventor licenses his invention but relies exclusively on trade secret protection, or relies on such protection while his patent application is pending, would enforcement of his contract frustrate the policy of the patent and antitrust laws? The refusal of the *Lear* Court to answer that question precipitated the concurrence by Justice Black.[96] He argued that enforcement of a contract calling for royalties on the invention while a patent is pending would indeed frustrate federal policies if the invention is later deemed unpatentable, and that by enforcing such agreements the state was illegitimately creating a monopoly.[97] To support his proposition he cited *Sears, Roebuck & Co. v. Stiffel Co.*[98] and *Compco Corp. v. Day-Brite Lighting Co.*[99] in which an Illinois unfair competition law prohibiting a manufacturer from copying an unpatentable device was held to be preempted by the federal patent law. While it is true that the state's action in denying an independent manufacturer the opportunity to copy an unpatentable article by its unfair competition law—thereby granting an exclusive right to an invention to the inventor though he did not have a patent—must be overturned, it does not follow that all licenses of unpatentable or patent pending inventions are unenforceable.

By enforcing a contract based on an unpatented or patent pending invention, state law is not creating a monopoly in contravention of the patent laws since the licensee, under the common law of trade secrets, does not acquire the protection of the patent laws or its equivalent. Trade secret law provides that if a

95. *See* Adelman & Jaress, *supra* note 41, at 91-92. The exception to this position, however, is the "potentially perpetual secret." See note 92 *supra* and accompanying text.

96. 395 U.S. at 676-77. The majority of the Court held that the state court had not satisfactorily passed on the issue as yet so it decided to reserve the question for later determination. *Id.* at 674-75. Justice White, in a concurring opinion, reasoned that the Court should not pass on the issue since: (1) if the patent were determined valid on remand, the issue would be moot, (2) if the patent were held invalid and the state had a chance to pass on the issue it might accommodate federal and state law so as to dispense with the need for further review, and (3) the parties had not briefed or prepared the issue adequately. *Id.* at 682.

97. *Id.* at 677.

98. 376 U.S. 225 (1964).

99. 376 U.S. 234 (1964). For a recent discussion of *Sears, Compco*, and related trade secret decisions, see Adelman & Jaress, *supra* note 41, at 80-84.

member of the public develops the same device through independent research, such person is not prohibited from exploiting it.[100] If a member of the public can, under these circumstances, exploit the invention there is no monopoly, and the contract should be enforced.[101] Moreover, by enforcing such contracts, the courts would be furthering the policy of the federal patent laws promotion of invention for there is a greater economic incentive for an inventor to produce when he is assured that his discovery, even if not patentable, may be licensed for profit. There is a need for such incentive, for unpatentable, as well as patentable inventions, "promote the progress of science," and the former do not involve the grant of a legal monopoly.

Though not creating a monopoly, it is possible that state law enforcement of these licenses may create an unreasonable restraint of trade.[102] If the restrictive convenants are not too broad[103] and are necessary to accomplish a legitimate business purpose it is unlikely that there will be antitrust problems.[104] A covenant not to disclose the invention qualifies as a necessary restriction[105] since once the invention is disclosed, trade secret protection terminates and the underlying discovery becomes accessible to the public in general. Moreover, despite the disclosure restriction, unpatented and patent pending licenses promote invention by giving the inventor a "head start" toward recouping research and development costs.[106] Although there may be some restraint on trade by the disclosure

100. *See* MILGRIM § 5.04[1].

101. *See* United States v. E.I. du Pont de Nemours & Co., 353 U.S. 586, 593 (1957) (quoting Transamerica Corp. v. Board of Governors, 206 F.2d 163, 169 (3d Cir. 1953)). An Illinois law of unfair competition gave the holders of the trade secrets in *Stiffel* and *Compco* the power "to prevent the copying of an article which represents too slight an advance to be patented . . . ." Sears, Roebuck & Co. v. Stiffel Co., 376 U.S. 225, 231-32 (1964). When the holder of the trade secret does not have this power to exclude competitors from his secret at will, no monopoly results.

102. *See* R. CALLMANN, THE LAW OF UNFAIR COMPETITION, TRADEMARKS AND MONOPOLIES § 57(c) (3d ed. 1968).

103. For an example of an agreement that was held to be too broad, see United States v. National Lead Co., 63 F. Supp. 513 (S.D.N.Y. 1945), *aff'd*, 332 U.S. 319 (1947).

104. *See* R. CALLMANN, *supra* note 102, at § 57(c).

105. "[S]o far as these contracts limit the communication of what the [inventor] might have refrained from communicating to anyone, there is no monopoly . . . and no contract in restraint of trade, either under the [Sherman Act] or at common law." Board of Trade v. Christie Grain & Stock Co., 198 U.S. 236, 252 (1905). *But see* Associated Press v. United States, 326 U.S. 1, 15-16 n.14 (1945).

106. *See* 395 U.S. at 682 n.2 (White, J., concurring); Adelman & Jaress, *supra* note 41, at 88-91; Doerfer 1451.

restriction, this minimal restraint should not be held to be *unreasonable since the restraint is necessary to effectuate a licensing* agreement in furtherance of a legitimate business purpose which promotes invention.

Therefore, trade secret law, in general, and licenses of unpatented and patent pending inventions in particular, stimulate invention, the primary purpose of the patent law, and this stimulation outweighs the non-disclosure and minimal restraints on trade brought about by trade secret law and licensing agreements under its sole protection. Consequently, the *Lear* holding should not be extended as proposed by Justice Black, but patent and trade secret law should co-exist through enforcement of non-patent and patent pending licenses.

CONCLUSION

Lear broadly represents an attempt to strictly circumscribe the existence of lawful patent monopolies. The legal right to invalidate a patent has been given to the party with the greatest economic interest in its elimination. The licensee who has developed a sophisticated marketing system and can absorb the costs of litigation will not hesitate to challenge voidable patents, because he can immediately realize a profit free of royalty costs. This incentive of economic self-interest should not be frustrated through devices such as consent judgments or by royalty recoupment; otherwise "the public . . . [will] continually be required to pay tribute to would-be monopolists without need or justification."[107] Nevertheless, post-*Lear* patent policy should not bar the enforcement of contracts regulating access to unpatented or patent pending secret ideas and thereby lead to the demise of state trade secret law.

---

107. 395 U.S. at 670.

PATENT LAW - ESTOPPEL - DOCTRINE OF LICENSEE ESTOPPEL OVERRULED; STATE PROTECTION OF UNPATENTED INVENTIONS QUESTIONED - *Lear, Inc. v. Adkins*.*

The federal patent laws,[1] granting statutory monopolies for inventions, represent an exception to the general federal policy of maximizing competition. In order to limit the anti-competitive effects of the patent system, the Supreme Court has construed patents strictly[2] and, in a series of decisions, consistently narrowed the scope of patentee's rights.[3] In addition, the Court has relied upon the supremacy clause to strike down state unfair competition laws which conflict with the system of patent monopolies established by federal law.[4] In *Lear, Inc. v. Adkins*,[5] the Court formally removed a barrier to challenging the validity of patents by overruling the doctrine of licensee estoppel.[6] In so doing, however, the Court questioned but left unanswered the issue of whether the states may protect the owners of unpatented inventions who wish to disclose their ideas to manufacturers for the payment of royalties. The *Lear* case thus raises the larger question of the permissibility of state protection of secret inventions and ideas outside the federal patent system.

Plaintiff Adkins was hired by Lear in 1953 to help develop an improved gyroscope for the company. In 1954, Adkins applied for a patent on the inventions which he had developed and executed a licensing agreement with Lear, under which Lear agreed to pay royalties for the use of Adkins' methods during the pendency of his patent application and thereafter until a patent was either finally refused,[7] or

---

* 395 U.S. 653 (1969).

[1] *See* 35 U.S.C. §§ 1-293 (1964).

[2] United States v. Masonite Corp., 316 U.S. 265, 280 (1942).

[3] The patent cannot be used to secure any monopoly beyond that contained in the patent, Morton Salt Co. v. G.S. Suppiger Co., 314 U.S. 488, 492 (1942); the patentee's control over the product when it leaves his hands is sharply limited, United States v. Univis Lens Co., 316 U.S. 241, 250-52 (1942); the patent monopoly may not be used in disregard of the antitrust laws, International Business Machs. Corp. v. United States, 298 U.S. 131, 136-38 (1936); when the patent expires the monopoly created by it expires, Kellogg Co. v. National Biscuit Co., 305 U.S. 111, 120 (1938).

[4] See, e.g., Compco Corp. v. Day-Brite Lighting, Inc., 376 U.S. 234 (1964); Sears, Roebuck & Co. v. Stiffel Co., 376 U.S. 225 (1964). See text accompanying notes 20-24 infra.

[5] 395 U.S. 653 (1969).

[6] Id. at 671. This doctrine prohibited a licensee from contracting to use a patented device and then suing to have the patent declared invalid. The effect of declaring the patent invalid would be to allow the licensee to continue using the device while avoiding all royalty payments. The underlying principle was that the licensee should not be allowed to reap the benefits afforded by the license while arguing that the patent which provided the major consideration for the agreement was invalid. Thus, principles of contract law and unjust enrichment were at the core of licensee estoppel.

[7] The Patent Office does not have to make a final judgment on the inventor's initial application. Generally, the original application seeks patent protection

if issued, held to be invalid. By 1959 Adkins had not yet obtained a patent despite several amendments to his original patent application. Lear terminated the contract and refused to continue paying royalties for inventions which it had concluded were not patentable. A patent was subsequently issued to Adkins and he brought suit against Lear for breach of the license agreement. At trial Lear sought to invalidate the patent by showing that Adkins' improvements were obvious from the prior art and that Adkins was therefore not justified in collecting royalties for their use. The trial court held that Lear was estopped from challenging the validity of the licensor's patent. The California District Court of Appeals held Lear was within its contractual rights in terminating the license and did not have to pay royalties for the use of the gyroscopes after this repudiation.[8] The California Supreme Court rejected this contention and held licensee estoppel prevented Lear from challenging the validity of the patent.[9] On certiorari, the United States Supreme Court held that the licensee estoppel doctrine should be discarded. The case was remanded to the California Supreme Court for further proceedings to determine the validity of the patent.[10]

The question of licensee estoppel did not present a difficult issue for the Court. Although it had at one time been referred to as "the general rule,"[11] the doctrine had in fact been eroded to the point where it had little vitality at the time of the *Lear* case. In each case where licensee estoppel was raised, the Court had developed a new exception to allow a challenge of the patent, and hence the "general rule" was rarely applied.[12] Commentators generally agreed that the

---

on as broad a claim as possible. When this happens and the inventor is not entitled to such broad protection, the Patent Office rejects the application while giving the inventor the right to amend his claim. This process of rejection and amendment continues until the Patent Office either allows the claims and grants a patent or rejects all of the inventor's claims. The Patent Office acts on the average application from two to four times, so that the process in *Lear* was typical. See 395 U.S. at 658-59.

[8] Adkins v. Lear, Inc., 52 Cal. Rptr. 795 (Dist. Ct. App. 1966), rev'd, 67 Cal. 2d 882, 435 P.2d 321, 64 Cal. Rptr. 545 (1967), rev'd, 395 U.S. 653 (1969). The court determined that since the Patent Office had rejected Adkins' claims, the basis of the contract failed and the contract was validly terminated. Id. at 804. Adkins was prevented from invoking licensee estoppel for the court held validity of the patent was not in issue. Id. at 805.

[9] 67 Cal. 2d 882, 435 P.2d 321, 64 Cal. Rptr. 545 (1967).

[10] 395 U.S. at 676. On remand, the California Supreme Court is holding in abeyance its decision on the extent to which California can act to enforce the contractual rights of owners of unpatented secret ideas until the federal district in California determines the validity of Adkins' patent. The trial in federal court has been tentatively set for April 20, 1970.

[11] Automatic Radio Mfg. Co. v. Hazeltine Research, Inc., 339 U.S. 827, 836 (1950).

[12] The exceptions to licensee estoppel began in 1924 when the Court held that while the validity of the patent could not be directly challenged, evidence could be introduced to narrow the claims made in the patent. Westinghouse Elec. & Mfg. Co. v. Formica Insulation Co., 266 U.S. 342 (1924). The licensee, while not being allowed to directly attack the validity of the patent, could avoid pay-

rule had been so limited as to be almost nonexistent.[13] Furthermore, the conflict of licensee estoppel with federal policy was direct, and licensee estoppel did not significantly further the state interest involved. Since the licensee was often the only person with sufficient economic incentive to challenge a patent, the estoppel applied to him insulated many invalid patents by effectively preventing challenges to their monopoly status. Hence licensee estoppel served to thwart the federal policy that patent rights be restricted to their most limited scope, and that a monopoly should not be given to an inventor whose patent is in fact invalid. More importantly, perhaps, the Court found that state considerations of commercial fairness did not require recognition of the doctrine of licensee estoppel. Since the issuance of a patent represented only a legal conclusion by the Patent Office,[14] reached in an ex parte proceeding, that an invention met statutory standards, it did not seem unfair to the Court to require a licensor to defend his patent status when challenged in court. If his invention had in fact not warranted a patent, the licensor had no right to exact royalties for it in the first place. The Court reasoned that the issue of patent validity not only presented a federal question, but it also bore upon the sufficiency of consideration for a licensing agreement,[15] and thus the interests of both patent and contract law were served by allowing the licensee to raise the issue.[16]

---

ment of royalties by showing he was manufacturing, using or selling a device or process disclosed in an expired patent, Scott Paper Co. v. Marcalus Mfg. Co., 326 U.S. 249 (1945); the mere existence of price-fixing clauses in a license agreement was enough to enable the licensee to challenge the validity of the patent, Sola Elec. Co. v. Jefferson Elec. Co., 317 U.S. 173 (1942); the licensee could introduce evidence of prior art to show the claims were not novel, Casco Prods. Corp. v. Sinko Tool & Mfg. Co., 116 F.2d 119 (7th Cir. 1940), cert. denied, 312 U.S. 693 (1941).

[13] See, e.g., Cooper, Estoppel to Challenge Patent Validity: The Case of Private Good Faith vs. Public Policy, 18 Western Res. L. Rev. 1122 (1967); Treece, Licensee Estoppel in Patent and Trademark Cases, 53 Iowa L. Rev. 525 (1967); Note, Estoppel To Deny Validity—A Slender Reed, 23 N.Y.U. Intra. L. Rev. 237 (1968).

[14] 395 U.S. at 670.

[15] 395 U.S. at 679 (White, J., concurring).

[16] Because the *Lear* decision enables licensees consciously to enter into agreements which they intend to later disavow, it should be noted that the Court may have only struck down the doctrine of estoppel based upon a party's status as a licensee. The Government noted in its amicus curiae brief that the elimination of the doctrine of licensee estoppel would in no way interfere with the doctrines of equitable or promissory estoppel. Brief for United States as Amicus Curiae at 23 n.13, Lear, Inc. v. Adkins, 395 U.S. 653 (1969). Unfortunately, this brief states no authority for its reasoning. Contrary to the brief, the arguments used by the Court in *Lear* in eliminating licensee estoppel could also be applied in striking down equitable or promissory estoppel. Thus the argument that other remedies will exist for the licensor fails to materialize. But in the case of bad faith and unfair dealing, courts should be able to invoke some principle to protect the integrity of commercial transactions (e.g., where a manufacturer obtains a license to use a patented invention, knowing that the patent is in fact invalid). By making the licensing agreement, the manufacturer can immediately employ the device without having

By eliminating licensee estoppel the Court has not given any guidelines to be followed by a licensee in challenging the validity of the patent. The licensee has two alternatives: he can terminate the license agreement before he challenges the validity of the patent; or he can continue to operate under the contract while challenging the patent. This latter alternative allows the licensee to challenge the patent with impunity, for if he were to lose the validity lawsuit, he would only be obligated to pay the royalties which he would have been required to pay under the contract. This would act as an incentive to try to avoid the contract obligations while maintaining rights under the contract; an action which would be in conflict with the state interest of maintaining commercial fairness. The first alternative which was followed by Lear is the proper procedure to be followed in challenging the patent's validity. The licensee should be forced to repudiate the contract first and then have to defend himself against the ensuing infringement lawsuit. Thus if the licensee lost, he would have lost all of his contractual rights while being held liable for damages as an infringer. The Court did not raise or attempt to resolve the procedure to be employed by a licensee in challenging the validity of a patent. The Court should have made clear that before challenging the patent, the licensee must repudiate the contract.

The Court in *Lear*, however, went on to raise a more important issue in dicta. The facts in *Lear* presented two distinguishable licensing situations: (1) where an inventor has licensed the use of his invention after receiving a patent for it, and (2) where the license covers an unpatented invention, either because the patent application is pending or because the inventor has yet to apply for a patent. Although only the first situation existed in *Lear*, the Court saw a much broader patent issue in situations of the second type. Since such situations involve state protection of ideas and inventions which are unprotected under federal patent law, the Court saw a potential conflict of state law with federal policy. In part, because this issue had not been raised by the parties,[17] the Court declined to rule upon it, leaving it to the states to "reconsider the theoretical basis of their decisions"[18] regarding contractual protection of unpatented secret inventions and to determine whether state and federal interests could be accommodated. Resolution of this issue could have a serious impact on state protection of trade secrets.[19]

---

to spend time developing it on his own. As soon as the device is put into use, the manufacturer ceases paying royalties and is relieved from paying all royalties if and when the patent is declared invalid. Certainly, the inventor should be entitled to some protection since the manufacturer has been unjustly enriched by the use of fraud to obtain the invention and the protective covering of the license agreement.

[17] 395 U.S. at 674-75.

[18] Id. at 675.

[19] A trade secret may consist of any formula, pattern, device or compilation of information which is used in one's business, and which gives him an

The Court's questioning of state protection of contracts involving unpatented ideas represents a continuation of an approach begun in two important 1964 decisions, *Sears, Roebuck & Co. v. Stiffel Co.*,[20] and *Compco Corp. v. Day Bright Lighting, Inc.*[21] In *Stiffel*, Stiffle manufactured a pole lamp on which it had received a patent. Sears manu-

> opportunity to obtain an advantage over competitors who do not know or use it. It may be a formula for a chemical compound, a process of manufacturing, treating or preserving materials, a pattern for a machine or other device, or a list of customers.

Restatement of Torts § 757, at 5 (1939). There are 2 general classes of trade secrets: industrial and commercial. See Adelman, Trade Secrets and Federal Pre emption The Aftermath of *Sears & Compco*, 49 J. Pat. Off. Soc'y 713, 725 (1967). Commercial trade secrets include customer lists, sales procedures, market surveys and other business procedures not involved in the production aspects of a company. These secrets cannot be patented. Industrial trade secrets which include secret processes, machines, formulas and designs used in marketing products are the secrets which the patent laws were designed to disclose and protect.

Trade secrets can but do not have to meet the rigid qualifications for patents. Mycalex Corp. v. Pemco Corp., 64 F. Supp. 420, 423 (D. Md. 1946), aff'd, 159 F.2d 907 (4th Cir. 1947); Restatement of Torts § 757, at 6 (1939). Thus the requirements of utility, 35 U.S.C. § 101 (1964), novelty, id. § 102, and non-obviousness, id. § 103, do not have to be met. But trade secrets must constitute a commercial advance and be an idea previously unused. A comprehensive comparison of patents with trade secrets is contained in R. Milgrim, Trade Secrets at 8-10 & 8-11 (1967). In order to constitute consideration for a contract relating to a trade secret, the idea must be new to the one to whom it is proffered. Masline v. New York, New Haven & Hartford R.R., 95 Conn. 702, 112 A. 639 (1921); Burwell v. Baltimore & O.R.R., 31 Ohio App. 22, 164 N.E. 434 (Ct. App. 1928). The ability to make contracts involving trade secrets had rarely been questioned before *Lear*. Even in *Lear*, the lower courts never questioned the right of either party to make this contract. Adkins v. Lear, Inc., 52 Cal. Rptr. 795 (Dist. Ct. App. 1966), rev'd, 67 Cal. 2d 882, 435 P.2d 321, 64 Cal. Rptr. 545 (1967), rev'd, 395 U.S. 653 (1969). The common law has always given the inventor the right to make, use and sell his invention. Rawlings v. National Molasses Co., 394 F.2d 645 (9th Cir. 1968); Chemical Foundation, Inc. v. General Aniline Works, Inc., 99 F.2d 276 (3d Cir. 1938). The inventor was considered to have an inchoate right of property in an invention which he could sell, assign or otherwise dispose. Mullins Mfg. Co. v. Booth, 125 F.2d 660 (6th Cir. 1942); Cook Pottery Co. v. J.H. Parker & Son, 89 W. Va. 7, 109 S.E. 744 (1921). License agreements made during the pending of a patent application have not been questioned in cases involving contracts similar to that made between Lear and Adkins. American Gage & Mfg. Co. v. Maasdam, 245 F.2d 62 (6th Cir. 1957); Kraus v. General Motors Corp., 120 F.2d 109 (2d Cir. 1941). Similarly, the right to enter into a contract before an application for a patent has been filed has been upheld. Fur Grooving & Shearing Co. v. Turano, 39 F. Supp. 877 (S.D.N.Y. 1941). It has always been assumed that an unpatented invention might be the subject of an enforceable contract for payment of royalties for its use. Young v. Ralston-Purina Co., 88 F.2d 97 (8th Cir. 1937). An agreement to pay royalties prior to the issuance of a patent cannot be repudiated even if the patent proves to be invalid. Myers v. Gerhardt, 344 Ill. 620, 176 N.E. 713 (1931). Liability, consisting of damages and/or injunction, for breach of a license is imposed by the courts. Filtex Corp. v. Amen Atiyeh, 216 F.2d 443 (9th Cir. 1954); Aktiebolaget v. United States, 194 F.2d 145 (D.C. Cir. 1951).

[20] 376 U.S. 225 (1964).

[21] 376 U.S. 234 (1964).

factured and sold an exact copy more cheaply. The patent was invalidated by a district court, but Sears was enjoined from copying this lamp under the Illinois unfair competition laws which prohibited the copying of articles in the public domain. Reasoning that competitors had the right under the federal patent laws to copy any product which was not protected by a patent, the Court held for Sears and struck down the statutes as an encroachment upon the federal patent system. In deciding the case, however, the Court stated broadly that states could not, even indirectly, "give protection of a kind that clashes with the objectives of the federal patent laws."[22] In *Compco*, the defendant had marketed lighting fixtures similar to plaintiff's. Using similar reasoning as in *Stiffel*, the Court once again held that the unfair competition laws could not be used to prohibit copying of a competitor's unpatented product.[23] These laws could not be used to defeat the purposes of the patent system.

Stiffel and *Compco* were widely discussed and several commentators interpreted them as placing the entire body of state trade secret law in jeopardy since trade secrets in unpatented ideas and devices arguably belonged in the public domain, and any protection of them would be in derogation of the patent system.[24] The Court's suggestion in *Lear* that its decision would require the states to reconsider to what extent, if any, they could properly protect "unpatented secret ideas"[25] thus seems designed to continue, if not increase, the controversy initiated in 1964. The California Supreme Court seems hesitant to reconsider the protection presently afforded unpatented secret ideas;[26] however, one federal district court in *Painton & Co. v. Bourns, Inc.*,[27] has recently decided this issue. The district court in agreeing with Justice Black's dissent in *Lear* concluded that "federal patent law requires an inventor to submit his ideas to the Patent Office before he can compel consideration for the use of his idea."[28] It was decided

---

[22] 376 U.S. at 231. See note 35 infra.

[23] 376 U.S. at 238.

[24] See, e.g., Adelman, supra note 19; Doerfer, The Limits on Trade Secret Law Imposed by Federal Patent and Antitrust Supremacy, 80 Harv. L. Rev. 1432 (1967); Peterson, The Legislative Mandate of *Sears* and *Compco*: A Plea for a Federal Law of Unfair Competition, 69 Dick. L. Rev. 347 (1965); Note, The *Stiffel* Doctrine and The Law of Trade Secrets, 62 Nw. U.L. Rev. 956 (1968); Comment, 37 U. Colo. L. Rev. 86 (1964).

[25] 395 U.S. at 675.

[26] See note 10 supra.

[27] No. 68 Civ. 3834 (S.D.N.Y., Feb. 4, 1970). This is the second recent case decided by Judge Motley in the Southern District in which the unanswered issue of *Lear* was raised. In Epstein v. Dennison Mfg. Co., 164 U.S.P.Q. 291 (S.D.N.Y. 1969), the court acknowledged *Lear*. However, the court, noting that no New York decision after *Lear* had answered this question, resorted to pre-*Lear* law to answer the issue before it. Thus, this court initially avoided reconsidering its basis for enforcing the rights of owners of unpatented secret ideas.

[28] No. 68 Civ. 3834, at 5-6 (S.D.N.Y., Feb. 4, 1970).

that the patent policy would be undercut if inventors could enforce agreements for compensation for secret ideas, and thus no state protection could be given to trade secret contracts.[29]

The basic purposes behind the patent system are to encourage invention by offering a reward to the inventor in the form of a patent monopoly, to stimulate the investment of additional capital for the development and marketing of inventions, and to encourage early public disclosure of ideas which might otherwise be kept secret.[30] The federal goal of maximum public disclosure of competitive ideas is arguably thwarted by the state protection involved in *Stiffel, Compco* and *Lear*. To the extent that state law protects trade secrets or upholds contracts involving undisclosed inventions, it encourages, or at least protects, commercial secrecy. In some cases, such protection can result in benefits beyond those provided by the patent system; trade secret protection or private licensing contracts may extend for an unlimited time while a patent monopoly is limited to seventeen years.[31] Furthermore, after *Lear*, an inventor who licenses his patented invention faces the possibility that his right to royalties will be defeated by a successful challenge of his patent by his licensee; the licensee of an unpatented invention faces no such problem.

In practice, however, the protection currently afforded unpatented devices serves the federal goals of encouragement of invention and early disclosure of competitive ideas. Indeed by removing protection from all but patented inventions, the result would be less, rather than more, disclosure. If Adkins had been afforded no protection in *Lear* he would have had the option of either keeping his idea secret until a patent issued or disclosing the idea to the world gratuitously. Absent an increase in philanthropic inventors, such a situation is likely to delay disclosure until the often lengthy process of patent application is completed.[32] Moreover, the protection of early disclosure on a limited scale enables an inventor to recover the development costs of his invention and continue his experimentation. The self-employed inventor, in particular, must spend considerable sums of money in developing his ideas. The licensing of his as-yet-unpatented ideas allows the inventor to gain money and better equipment with which to continue his research. At the same time, such licensing allows the competitive use

---

[29] Id. at 4. The court here did not decide whether an inventor, having made a patent application could be compensated for his disclosure before the patent issued. Id. at 6. Judge Motley did not raise the important issue of whether owners of trade secrets which never can be patented, i.e. customer lists, could receive royalties for disclosure of these secrets. The decision here implies that even contracts dealing with this type of trade secret could not be protected by state law. This implication would undermine the entire area of trade secrets.

[30] Report of the President's Commission on the Patent System at 2-3 (1966).

[31] 35 U.S.C. § 154 (1964).

[32] The process of patent application usually runs over two years. See text accompanying notes 34-39 infra. In *Lear*, Adkins' patent was issued five years after his initial application.

of the inventor's ideas without waiting for a completed patent application. Thus the protection afforded by state trade secret and contract law enables earlier disclosure of competitive ideas, albeit on a more limited basis than under the patent system. The position that federal patent policy should overrule any state protection of unpatented ideas also ignores the fact that many valuable competitive ideas may not come within the ambit of the patent system[33] or may not warrant a seventeen year monopoly under the statute, yet still merit some protection. These considerations suggest that state law, where it does not directly conflict with the federal patent system, can serve a complementary function in encouraging the development and disclosure of competitive ideas. Also if trade secrets were no longer afforded protection, stealing and breach of trust would be encouraged. Thus a person could steal another's secret without having to worry about being punished civilly under state law because the present trade secret law could no longer be used to prosecute him. If license agreements calling for the payment of royalties for unpatented ideas were struck down, the impact could easily be avoided by the inventor selling his invention rather than licensing it. Surely the Court would not interfere with a person's right to make a bona fide sale of his own property.

Perhaps out of the recognition of the practical consequences of upsetting state law regarding trade secrets, state and lower federal courts have generally given *Stiffel* and *Compco* a restrictive interpretation,[34] and those instances where courts have followed the Supreme Court's broad language seem to indicate the practical limits of the *Stiffel* and *Compco* doctrine.[35] The key factor in the two decisions seems not to have been the fact that protection was given to unpatented products, but rather the type of protection which was given. The Illi-

[33] See note 19 supra.

[34] In Servo Corp. of America v. General Elec. Co., 337 F.2d 716 (4th Cir. 1964), cert. denied, 383 U.S. 934 (1966), Servo charged GE with acts of unfair competition in copying techniques and methods developed by Servo which GE had obtained through employees of Servo. The court granted Servo relief under the theory of unjust enrichment. Id. at 725. In stating that trade secrets need not be covered by patents, the court distinguished this case from *Stiffel* and *Compco* on the grounds that confidential relationships were involved. The presence of confidential relationships was also held controlling in Schulenburg v. Signatrol, Inc., 33 Ill. 2d 379, 212 N.E.2d 865 (1965), cert. denied, 383 U.S. 959 (1966). The court in holding *Stiffel* and *Compco* inapposite concluded that they do not cover a situation of industrial espionage. Id. at 386, 212 N.E.2d at 869. In other cases, courts have adopted *Stiffel* in theory, but protected trade secrets on other grounds. E.g., Winston Research Corp. v. Minnesota Mining & Mfg. Co., 350 F.2d 134 (9th Cir. 1965). See Doerfer, supra note 24, at 1452-53. But see Van Prods. Co. v. General Welding & Fabricating Co., 419 Pa. 248, 270, 213 A.2d 769, 781 (1965) (Cohen, J., concurring).

[35] In Titelock Carpet Strip Co. v. Klasner, 142 U.S.P.Q. 405 (Cal. Super. Ct. 1964), the defendant, a former employee of the plaintiff, deceptively gained access to plaintiff's place of business and obtained parts of plaintiff's machine which he copied in almost every detail. Holding that it was without power to restrict copying, the state court held that plaintiff must rely upon federal patent law for such protection.

nois unfair competition laws, by preventing in certain circumstances the copying of unpatented products, gave protection of a scope commensurate with that provided by the patent system; the developers of such products enjoyed a monopoly, despite their failure to meet federal standards for such monopoly protection.[36] Since the state law in effect granted a patent to an unpatented product it circumvented the federal system.[37]

Although the courts have generally limited *Stiffel* and *Compco*, and several commentators have urged that they be restricted to the proposition that state unfair competition laws may not provide protection equivalent to a patent,[38] three dissenting justices in *Lear* felt that *Stiffel* and *Compco* were sufficiently broad to preclude state en-

---

[36] The Court in *Stiffel* and *Compco* held that the Illinois unfair competition laws conflicted with federal patent policy. Doerfer, supra note 24, has argued that although *Stiffel* purports to be an expression of federal supremacy in patent law, it is better understood as an expression of federal antitrust policy. Id. at 1461. The Illinois laws were harmful to free competition because competitors could not market products of identical appearance. If the state policy could only be protected in a way which harms competition, then a balance must be struck between the state policy and the federal interest in the perpetuation of the antitrust policy. Id.; but cf. Eastern R.R. Presidents Conference v. Noerr Motor Freight, Inc., 365 U.S. 127, 136 (1961); Perker v. Brown, 317 U.S. 341, 350-52 (1943). This interpretation is more accurate than framing it as a conflict with federal patent policy for the law here prevented copying of unpatented articles, thus making an exception to antitrust laws which forbid monopolies except on patented ideas. The Illinois laws had hurt competition and provided a barrier against new entry, both of which run counter to the antitrust laws and not the patent laws.

Lear, on the other hand, can best be analyzed with respect to federal patent policy. The patent laws give monopolies to inventions meeting high standards. Patent policy is aided by the elimination of licensee estoppel because undeserving monopolies can be eliminated. Patent laws do not preserve competition, but, rather, in the interest of new technology, inhibit it by conferring exclusionary rights to patentees.

[37] The patent system was not designed to extend an inventor's common law rights, but rather to give a new and different right. Early decisions recognized that an inventor acquired a property right in his invention and that he was free to utilize his invention secretly. United States v. Dubilier Condenser Corp., 289 U.S. 178, 186 (1933). Indeed, because the common law placed no restrictions upon public use of an invention which had become public knowledge, an inventor was forced to keep his invention secret if he wished to profit from it. R. Ellis, Patent Assignments and Licenses § 4 (2d ed. 1943). The patent system developed as an incentive to inventors to disclose their inventions to the public. In return the inventor received a right of exclusion under a patent monopoly. The patent laws did not require that an invention be submitted for patenting, and patents were often referred to as contracts between the government and inventor in which the inventor exchanged full disclosure of his invention for a patent. Id. For these reasons, states would appear to encroach upon the federal area only when they presumed to grant the "exclusive right" which the Constitution empowers Congress to grant. U.S. Const. art. I, § 8, cl. 8. State protection, more than the grant of monopoly power obtainable only under federal law, seems to have been envisioned at the time of the adoption of the patent system.

[38] See Treece, Patent Policy and Preemption: The *Stiffel* and *Compco* Cases, 32 U. Chi. L. Rev. 80, 96 (1964); Note, The *Stiffel* Doctrine and the Law of Trade Secrets, 62 Nw. U.L. Rev. 956, 973 (1968).

forcement of contracts licensing unpatented inventions. Justice Black, joined by Chief Justice Warren and Justice Douglas, argued that one who makes a discovery has the option of keeping it secret, but that when the secret is disclosed under a contractual arrangement, the patent laws are violated.[39] Unless *Stiffel* and *Compco* are read broadly, however, to require that all inventions find protection under the federal statute or go unprotected,[40] the state protection involved in *Lear* is distinguishable from that in the earlier cases. The enforcement of contractual arrangements such as that between Lear and Adkins is not equivalent to the grant of a patent monopoly by the state. Although Adkins had the right to royalties from Lear, he gained no rights against third parties because anyone who discovered the secret invention by lawful means was free to use it. Under trade secret law, the inventor was only afforded protection against people who unlawfully discovered the secret. When the gyroscope was used competitively by Lear, other competitors were free to copy it without restriction.

Because neither the protection in *Lear*, nor the protection given to trade secrets generally, amounts to the monopoly protection which can be granted under the federal patent system, such state protection should not be construed as in conflict with it. Despite the *Painton* decision,[41] *Lear* should not be construed to work any major changes in the protection currently afforded unpatented secret ideas. Trade secrets must be given continued state protection. The elimination of state protection for unpatented devices would have a great impact on present industrial practices. Forty per cent of the patented inventions commercially used were put into use before patent applications were filed.[42] Fifty per cent were put into use while the application was pending and only 10 per cent after the issuance of the patent.[43] Corporations generally file for 50 per cent or less of the patentable inventions developed by their employees.[44]

Since the elimination of licensee estoppel will enable a greater number of challenges to patents, particularly if *Lear* is applied retroactively,[45] the practical consequences of *Lear* may be as important

[39] 395 U.S. at 677 (Black, J., dissenting in part).

[40] See note 37 supra.

[41] No. 68 Civ. 3834 (S.D.N.Y., Feb. 4, 1970). See note 27 supra and accompanying text.

[42] Sanders, Speedy Entry of Patented Inventions Into Commercial Use, 6 P.T.C.J. Res. & Ed. 87 (1962).

[43] Id.

[44] Id. at 114.

[45] Retroactive application of *Lear* is of importance to existing license agreements that both have and do not have clauses preventing the licensee from challenging the validity of the licensed patent. The issue of retroactive application when such a clause exists has been raised and decided in Kearney & Trecker Corp. v. Giddings & Lewis, Inc., 164 U.S.P.Q. 173 (E.D. Wis. 1969). Here all of plaintiff's license agreements contained clauses preventing the licensees from challenging the validity of the licensed patents. This type of clause prior to *Lear* had been held valid. Automatic Radio Mfg. Co. v. Hazeltine Research, Inc., 339 U.S. 827 (1950). The court in *Kearney* faced the issue of whether this clause provides

as the legal uncertainty it has engendered. The likely increase in lawsuits will underscore an important problem in the existing legal system for testing patent validity—the conflict between the procedures used by the Patent Office and those of the courts for determining the validity of patents. The high mortality rate of patents in the courts has been a continuing phenomenon for over twenty years. Between 1953 and 1963, 57.4 per cent of the patents contested in the courts of appeals were invalidated.[46]

The Patent Office is faced with tremendous administrative burdens in the granting of patents, which often result in the approval of patents of uncertain validity.[47] There is a backlog of 200,000 patent applications with the average period of pendency being two and one-half years.[48] A substantial number of patent applications have a pendency of five to ten years.[49] With such a backlog and time-lag, the examiner

---

a basis for an antitrust violation or misuse defense. The court concluded this now-illegal clause did not supply a basis for retroactively finding an antitrust violation, a violation which if found would have constituted a misuse of the patent. This decision represents sound reasoning on this phase of retroactive application. *Lear* should be applied to all license agreements presently in existence. If a clause such as in *Kearney* exists, this clause should be declared without any effect. Failure to cancel these clauses should not enable the licensee to automatically raise a misuse defense. Any licensee under any existing license agreement should now be able to challenge the validity of the licensed patent.

The Supreme Court has granted certiorari in a case where 1 issue is whether the elimination of licensee estoppel should be applied retroactively. Standard Indus., Inc. v. Tigrett Indus., Inc., cert. granted, 396 U.S. 885 (1969). Retroactivity is neither prohibited nor required. Linkletter v. Walker, 381 U.S. 618, 629 (1965); Great N. Ry. v. Sunburst Oil & Ref. Co., 287 U.S. 358, 364 (1932). To determine when a case should be retroactively applied, one must look at the purpose of the overruling decision, the reliance placed on past decisions and the possible burden on the administration of justice. Johnson v. New Jersey, 384 U.S. 719, 727 (1966); Linkletter v. Walker, supra at 627; United States ex rel. Angelet v. Fay, 333 F.2d 12, 20-21 (2d Cir. 1964), aff'd, 381 U.S. 654 (1965). The purpose of overruling licensee estoppel was to prevent invalid patents from being treated as monopolies. This purpose would be most effectively implemented if *Lear* were applied both retroactively and prospectively. This retroactive application would not be too harmful since the demise of licensee estoppel had been anticipated and the doctrine had been riddled with exceptions. See notes 12-13 supra. Thus reliance on this rule would not be sufficient to bar it from being retroactively applied. There would be no way in which to estimate the burden of retroactive application on judicial administration, but the effects of eliminating invalid monopolies should outweigh any possible burdens on the courts. *Finally*, the Court in *Lear* implied that its decision would be applied retroactively. 395 U.S. at 674 n.19.

[46] Comment, 34 U.M.K.C.L. Rev. 393, 401 (1966). For figures on the number of patents held invalid between 1948 and 1954 in all of the federal courts see Hearings on S. Res. 92 Before the Subcomm. on Patents, Trademarks and Copyrights of the Senate Comm. on the Judiciary, 84th Cong., 1st Sess., 106, at 177-79 (1956). These figures correlate with the 1953 through 1963 figures.

[47] S. Rep. No. 1202, 86th Cong., 2d Sess. 22 (1960).

[48] Report of the President's Commission on the Patent System at 2 (1966).

[49] *Id.*

is often unable to check the prior art adequately,[50] and due to the numerous patent grants the check of prior art becomes increasingly more difficult. Examiners formerly were instructed to resolve all reasonable doubts in favor of the applicant,[51] but applicants may appeal an examiner's rejection.[52]

The procedures utilized by the courts to determine patent validity differ in several ways from those employed by the Patent Office.[53] The courts which handle the appeals from Patent Office rejections face a disadvantage in that the published case law is confined to those decisions in which the examiner's rejection has been overruled; there is no disclosure of the court decisions upholding administrative rejections.[54] The weight given on appeal to a Patent Office decision denying a patent varies depending upon the court which reviews the decision. The Patent Office decision is presumed correct in the district court and the court of appeals in the District of Columbia, but not in the Court of Customs and Patent Appeals.[55] The courts are also unclear on whether certain elements of patent validity are questions of law or fact,[56] and the Supreme Court has given differing answers.[57] There is no agreement about the precise definition of the statutory requirements of novelty and nonobviousness.[58] The lack of a uniform and consistent approach to patent validity has resulted in a patent being held valid by one court and invalid by another.[59]

---

[50] Stedman, The U.S. Patent System and its Current Problems, 42 Texas L. Rev. 450, 463-64 (1964).

[51] Report of the President's Commission on the Patent System at 22 (1966).

[52] The applicant can appeal to the Board of Appeals, 35 U.S.C. § 134 (1964). From here an applicant has a choice of appeals. He can appeal either to the Court of Customs and Patent Appeals, id. § 141, or to the United States District Court for the District of Columbia, id. § 145.

[53] See Graham v. John Deere Co., 383 U.S. 1 (1966).

[54] Doerfer, supra note 24, at 1444.

[55] Report of the President's Commission on the Patent System at 26 (1966).

[56] For a discussion of this law-fact controversy see Comment, Appellate Review of Determinations of Patentable Inventions, 29 U. Chi. L. Rev. 185 (1961).

[57] Compare Keyes v. Grant, 118 U.S. 25, 37 (1886) with Graham v. John Deere Co., 383 U.S. 1, 17 (1966).

[58] For a discussion of how courts apply different standards in interpreting invention see Kitch, Graham v. John Deere Co.: New Standards for Patents, 1966 Sup. Ct. Rev. 293; Note, The Impact of the Supreme Court Section 103 Cases on the Standard of Patentability in the Lower Federal Courts, 35 Geo. Wash. L. Rev. 818 (1967); Comment, 34 Geo. Wash. L. Rev. 802 (1966); Comment, 31 Mo. L. Rev. 553 (1966); Comment, 44 Texas L. Rev. 1405 (1966); Comment, 34 U.M.K.C.L. Rev. 393 (1966).

[59] See, e.g., Graham v. John Deere Co., 333 F.2d 529 (8th Cir. 1964), aff'd, 383 U.S. 1 (1966). The same patent held invalid by the Eighth Circuit was found valid by the Fifth Circuit in 1957, Jeoffroy Mfg., Inc. v. Graham, 219 F.2d 511 (5th Cir.), cert. denied, 350 U.S. 826 (1955). See also Bradley v. Great Atl. & Pac. Tea Co., 78 F. Supp. 388 (E.D. Mich. 1948), aff'd sub nom. Great Atl. & Pac. Tea Co. v. Supermarket Equip. Corp., 179 F.2d 636 (6th Cir.), rev'd, 340 U.S. 147 (1950) (a patent upheld by 2 courts was found invalid by the Supreme Court).

There has been no basic change in the patent laws since 1836.[60] A presidential commission on patents was formed and it made numerous recommendations for altering the patent laws.[61] To far, none of these suggestions have been implemented. Due to problems similar to those facing the United States Patent Office, including ever increasing numbers of patent applications with resulting backlogs and difficulty in checking prior art, several foreign countries have recently made sweeping changes in their patent systems.[62] Three possible changes in the system would alleviate the present uncertainty surrounding patent litigation. If a claim rejected by an examiner and the Patent Office Board of Appeals could not be reversed unless clearly erroneous,[63] Patent Office decisions would be vested with greater finality and the temptation to litigate patent validity, now increased with the abolition of licensee estoppel, would be significantly limited. A more far-reaching change would be the establishment of a special court composed of experts to review patent validity cases.[64] A third change might be the incorporation of adversary procedures into the disposition of patent applications, as is currently done in several European countries.[65] In those countries, notice is given of an examiner's acceptance of an application, and interested persons may oppose the final grant within

---

[60] Report of the President's Commission on the Patent System at 1 (1966).

[61] Id.

[62] In Germany, due to a 5 year delay in the processing of patent applications, a law was enacted in 1967 which generally reorganized their patent system. Hollman, The German Patent Examining Procedure, 51 J. Pat. Off. Soc'y 4 (1969). No major changes had been made prior to this since 1877. Id. Japan in 1960, and France in 1968 have also drastically altered their patent laws to keep pace with changing industrial conditions. See Hiance & Plasseraud, The New French Patent Law, 50 J. Pat. Off. Soc'y 209 (1968); Jarkovsky, A Comparative Review of Japanese and U.S. Patent and Related Laws, 50 J. Pat. Off. Soc'y 76 (1968). Some of the major changes in these systems are limitations on amending patent applications, opposition proceedings, an increase in personnel, reorganization of examining procedures and the elimination of chemical substances from patent protection—a procedure which greatly reduces the number of patent applications. For a summary of recent changes in foreign patent systems see Gambrell, Kayton & Trucano, Patent Law, 1969-70 Ann. Survey Am. L. 139.

[63] The law currently provides that patents are presumed valid and places the burden of showing invalidity on the challenging party. 35 U.S.C. § 282 (Supp. IV, 1969). However, this standard does not seem to have greatly hindered those parties contesting patent validity. See text accompanying note 46 supra. The main difficulty in instituting the clearly erroneous rule would be compelling the courts to adhere to such a rule. Courts easily could find many ways to circumvent this type of rule.

[64] The use of a special court was discussed in Harris, A Dual Patent Program: To Increase Patent Reliability and Decrease Litigation Costs, 13 Idea 1 (1969).

[65] For a brief discussion of these opposition proceedings see Harris & Weiser, Informed Foreign Experience and the Opinion on Provisions Similar to Commission Recommendations, 12 Idea 1021 (1968); Stuart-Prince, Patent Oppositions in Great Britain, 40 J. Pat. Off. Soc'y 769 (1958); Reichel & Frishauf, Opposition Proceedings in the German Patent Office in the Light of the Sixth Transfer Law, 44 J. Pat. Off. Soc'y 52 (1962).

a limited time. If there is no opposition, then a patent is issued. Under this system, secrecy is maintained for those applications rejected by the examiners.

Greater public disclosure of unpatented ideas could be achieved by the establishment of a utility law similar to that used by Germany, Japan and Italy.[66] The utility system provides protection for subject matter of slight novelty or ideas which would not merit regular patent protection. These utility products would receive monopoly status for only a limited time, such as three years. The system would involve smaller fees and prompter registration than that provided by the patent system, and inventors would be more likely to apply for a utility patent than rely upon state protection. Such new legislation, moreover, seems more appropriate for realizing the goals of the federal patent system than the Court's expansive interpretation of federal policy in *Stiffel*, *Compco* and *Lear*.[67]

[66] See Mott, The Concept of Small Patent in European Legal Systems and Equivalent Protection Under United States Law, 49 U. Va. L. Rev. 232 (1963).

[67] Two bills have been introduced into Congress by Senator McClellan which would preserve the right to enter into licensing agreements and also continue to have state law protect trade secrets. S. 2756, 91st Cong., 1st Sess. § 301 (1969); S. 766, 91st Cong., 1st Sess. § 43(a)(3) (1969). Section 301 was proposed as an addition to the new Patent Act, while § 43(a)(3) was part of a proposed Federal Unfair Competition Act. Thus, congressmen seem to be concerned about the continued protection of trade secrets.

SEARS TO LEAR TO PAINTON: OF WHALES AND OTHER MATTERS

ROGER M. MILGRIM*

A recent decision in the Southern District of New York jeopardizes the entire law of trade secrets. Based upon dictum in nontrade secret Supreme Court cases, Painton & Co. v. Bourns, Inc. holds that the law of trade secrets is applicable only to patentable inventions and only during the time between the application for and issuance of the patent. Mr. Milgrim, a noted expert in trade secrets, traces the genealogy of this case and warns of the perils of permitting a concept expressed as dictum in response to one set of circumstances to become a rule of law of general applicability. He concludes that trade secret protection is too important in our technological society to be cast lightly aside through mechanical application of questionable dictum.

I

A CETOLOGICAL APPROACH TO TRADE SECRETS

A. Conceptualism

WHEN a captured whale's riches of oil, flesh and bone have been exhausted its carcass is cast astern. Melville chronicles that the leviathan's funeral is attended by sharks and fowls who feast upon the remains.

> Nor is this the end. Desecrated as the body is, a vengeful ghost survives and hovers over it to scare. Espied by some timid man-of-war or blundering discovery-vessel from afar, when the distance obscuring the swarming fowls, nevertheless still shows the white mass floating in the sun, and the white spray heaving high against it; straightway the whale's unharming corpse, with trembling fingers is set down in the log—*shoals, rocks, and breakers hereabouts: beware!* And for years afterwards, perhaps, ships shun the place; leaping over it as silly sheep leap over a vacuum, because their leader originally leaped there when a stick was held. There's your law of precedents; there's your utility of traditions; there's the story of your obstinate survival of old beliefs never bottomed on the earth, and now not even hovering in the air! There's orthodoxy![1]

B. The Whale is Cast Adrift

Stiffel & Co., the pioneer of the popular pole lamp, secured a mechanical and a design patent for it. Sears duplicated the lamp

* Member, New York Bar. A.B., 1958, University of Pennsylvania; LL.B., 1961, New York University; LL.M., 1962, New York University.

[1] H. Melville, Moby Dick 284 (Dodd, Mead & Co. ed. 1942). For those who find the ensuing cetological data incomplete, see V. Scheffer, The Year of the Whale (1969), a pleasant book that has nothing to do with this Article.

and began to sell the copy for substantially less than the retail price of the Stiffel original. Stiffel sued Sears in federal court on two counts, infringement of the patents and unfair competition arising from the likelihood of confusion as to the source of the products. The district court held the patents invalid but granted recovery under the Illinois law of unfair competition on the second count. The Seventh Circuit Court of Appeals affirmed.[2] Reversing in *Sears, Roebuck & Co. v. Stiffel Co.*,[3] the Supreme Court cut adrift the whale that has been bobbing about since:

> Obviously a State could not, consistently with the Supremacy Clause of the Constitution, extend the life of a patent beyond its expiration date or give a patent on an article which lacked the level of invention required for federal patents. To do either would run counter to the policy of Congress of granting patents only to true inventions, and then only for a limited time. Just as a State cannot encroach upon the federal patent laws directly, it cannot, under some other law, such as that forbidding unfair competition, give protection of a kind that clashes with the objectives of the federal patent laws.[4]

Little in the law of trade secrets[5] was clearer before *Sears* than the nonprotectibility of alleged trade secrets disclosed by

[2] Stiffel Co. v. Sears, Roebuck & Co., 313 F.2d 115 (7th Cir. 1963), rev'd, 376 U.S. 225 (1964).

[3] 376 U.S. 225 (1964). See Compco Corp. v. Day-Brite Lighting, Inc., 376 U.S. 234 (1964). *Compco* presented essentially similar substantive issues of likelihood of confusion.

[4] 376 U.S. at 231 (dictum).

[5] Trade secret status is achieved when the subject matter is used in business, lends the owner a competitive advantage, is not generally known or readily ascertainable and is used and maintained with due regard to protecting secrecy. See Restatement of Torts § 757, comment *b* (1939). This definition has been adopted by every major commercial jurisdiction in the United States, and state law is universally regarded as controlling. See cases cited in R. Milgrim, Trade Secrets §§ 2.01 n.2, 7.02[3] (1967) [herinafter Trade Secrets]. (Generally, an author who cites himself relies on questionable authority. I shall, therefore, only refer to Trade Secrets to avoid repetition of lengthy strings of citations or to conveniently state what I believe to be noncontroversial propositions.) Trade secret owners have the right to use and disclose their secrets subject to contractual restrictions and restrictions imposed by law, under the rubric "confidential relationship" or "implied contract." Restrictions imposed by law reflect the character of the legal relationship between the owner and the disclosee. Thus, trade secret protection in most instances is afforded on the basis of a relationship between a trade secret owner and a third party, such as an employee or a licensee. Trade secret law affords the owner no protection whatsoever against the independent development of the trade secret by third parties not subject to valid interpersonal restrictions.

Trade secret protection covers a vast array of subject matter such as plans, designs, processes, formulae, research and development and many items of business data such as customer requirements and cost and pricing information. The subject matter of a trade secret may or may not be eligible for patent protection. Until the utterance of the Supreme Court's dictum in *Sears* the viability of trade secret law separate and distinct from patent law had not been seriously questioned.

the sale of products.[6] Indeed, sale of the product was not necessary to terminate secrecy. Advertising or circularizing has been sufficient to put an end to any protection based on trade secrets.[7]

Had, therefore, the Court in *Sears* restricted the language of its decision to the facts before it, it would have stated that a marketed, nonpatented product can be copied freely by anyone. The decision would have been entirely consistent with established trade secret principles[8] and would not have raised an issue of "patent preemption." Indeed, the Court's holding was within the confines of trade secret law,[9] thereby making the preemption language dictum.

No sooner was this dictum afloat, than no less prestigious a helmsman than the Ninth Circuit Court of Appeals, upon sighting the shoals, rocks and breakers of *Sears*, asserted that the *Sears* decision "precludes judicial recognition of a legally protectible interest in the secrecy of industrial information as such."[10] Fortu-

---

[6] *Trade Secrets, supra note 5, § 2.05[2] n.8.*

[7] Id. at n.10.

[8] See text accompanying notes 51-54 infra.

[9] In Compco Corp. v. Day-Brite Lighting, Inc., 376 U.S. 234 (1964), the companion case to *Sears*, Justice Black made clear that the Court's holding in *Sears* merely prevented a state from forbidding the copying of an article not protected by a patent or copyright—hardly heresy under the law of trade secrets. See text accompanying note 35 infra.

[10] Winston Research Corp. v. Minnesota Mining & Mfg. Co., 350 F.2d 134, 138 (9th Cir. 1965). The Ninth Circuit concluded, however, that *Sears* did not prevent granting relief to a trade secret plaintiff based on "the integrity of confidential employer-employee relationships." Id. After Lear, Inc. v. Adkins, 395 U.S. 653 (1969), the Ninth Circuit expanded its views. Dekar Indus., Inc. v. Bissett-Berman Corp., 168 U.S.P.Q. 71 (9th Cir. 1970) (*Sears* and *Compco* do not prevent equitable relief for trade secret misuse by one bound by confidential relationship or by express or implied agreement).

Such expressions are rather superficial. Since nonsecret technology cannot be protected by reason of a confidential relationship or by an implied or express contract, it is logically more appropriate to state that a legal right which is recognized in trade secret ownership is the right to disclose or impart it to others subject to a confidential relationship or contractual protection.

The right of the owner of a trade secret to use and disclose in specified contractual or so-called confidential relationships is the principal "property right" which inheres in a trade secret. Although discarded with little or no analysis by some commentators, see, e.g., R. Ellis, Trade Secrets 12 (1953); A. Turner, Trade Secrets 12 (1962), in practice the property view is often critical. It underlies the view that trade secrets are (a) capital assets, the sale of which entitles the owner to capital gains treatment, see E.I. duPont de Nemours & Co. v. United States, 288 F.2d 904, 912 (Ct. Cl. 1961); (b) assets which may be the subject of bankruptcy claims, see In re Bettinger Corp., 197 F. Supp. 273 (D. Mass. 1961), order vacated and case remanded on other grounds sub. nom Walker Mfg. Co. v. Bloomberg, 298 F.2d 688 (1st Cir. 1962); (c) property which may be the subject of larcenous taking, see Hancock v. State, 402 S.W.2d 906, 908 (Tex. Crim. App. 1966); (d) assets for purposes of § 7 of the Clayton Act, 15 U.S.C. § 18 (1964), see United States v. Allied Chem. Corp., 1964 CCH Trade Cases ¶ 71,193 (S.D.N.Y. 1964); (e) property affording an interested party the right to intervene under

nately, however, the overwhelming majority of trade secret decisions since *Sears* have refused to be lured off course, noting in their logs that *Sears* does not apply to trade secrets,[11] but *Sears*' broad conceptual dictum has remained afloat.

C. The Supreme Court Sights the Shoals

If Mr. Adkins had had any notion what he was to be in for when he went to work for Lear, he might have taken up horticulture. At the beginning of the employment (January 1953) Adkins and Lear entered into an agreement which provided that Adkins' new ideas, discoveries and inventions relating to vertical gyros were to be his property and that he would license them to Lear on a mutually satisfactory royalty basis. Soon thereafter, he developed a gyro for which a patent application was filed (February 1954). Some eighteen months later, after long and undoubtedly tedious negotiations, Lear took a license under which it had the right to terminate if a patent was not granted on the substantial claims of the application or if a patent issued but was subsequently held invalid.

From 1954 to 1957 Adkins' patent application was twice rejected and, on the basis of such rejections and its own patent search, Lear notified Adkins that Lear would no longer pay royalties on most of its gyros of the Adkins type. In 1959 Lear ceased making royalty payments to Adkins although it continued to produce the gyros. A year later a patent was finally granted on the design of a gyroscope apparatus—a claim much narrower in scope than those intially sought, but nonetheless covering the Lear gyros.

In the California state court litigation that ensued when Adkins sought back royalties and damages for breach of the license agreement, Lear attempted to raise the invalidity of Adkins' patent as a defense. The trial court, however, and ultimately the California Supreme Court,[12] held that the doctrine of

---

the Federal Rules of Civil Procedure, see Formulabs, Inc. v. Hartley Pen Co., 275 F.2d 52, 56-57 (9th Cir.), cert. denied, 363 U.S. 830 (1960), and (f) property in exchange for which corporate stock may be issued, see Herold v. Herold China & Pottery Co., 257 F. 911, 912-13 (6th Cir. 1919).

It should be kept in mind that in order for a trade secret owner to have legal protection he must meet the difficult burden of proving (a) that the subject matter was a trade secret, (b) that it was disclosed or imparted to the defendant, (c) subject to valid legal restrictions and (d) that the defendant has used or disclosed the trade secret to the owner's detriment. Trade Secrets, supra note 5, § 7.07[1] at text accompanying nn.5-10.

[11] See cases cited in Trade Secrets, supra note 5, § 7.08[2][c] n.43.

[12] Adkins v. Lear, Inc., 67 Cal. 2d 882, 435 P.2d 321, 64 Cal. Rptr. 554 (1967), rev'd, 395 U.S. 653 (1969).

licensee estoppel[13] precluded such a defense.[14] The United States Supreme Court renounced the doctrine of patent licensee estoppel in *Lear, Inc. v. Adkins*,[15] and remanded the case to permit Lear to avoid payment of royalties accruing after issuance of Adkins' patent if Lear could establish patent invalidity.

The only issue before the Supreme Court in *Lear* was "the [California Supreme] court's reliance upon the doctrine of estoppel to bar Lear from proving that Adkins' ideas were dedicated to the common welfare by federal law."[16] The Court stated that it granted certiorari solely to reconsider the validity of its prior patent estoppel position[17] "in the light of our recent decisions emphasizing the strong federal policy favoring free competition in ideas which do not merit patent protection."[18] By framing the issue with this sweeping language, did the Court hint it was about to announce that federal policy subjects the owner of *any* unpatented matter to use or disclosure notwithstanding contractual or confidential restrictions? Not at all. Federal law, even as enunciated in *Sears* and *Compco*, merely "requires that all ideas in *general circulation* be dedicated to the common good unless they are protected by a valid patent."[19] A comforting statement, being at one with trade secret law.[20] But, unfortunately, the Court did not leave the matter there.

Instead, it considered Adkins' claim for pre-1960 royalties, which Adkins said were due whether or not his patent was found valid, a position which the Court characterized as "extreme."[21] Despite the Court's earlier clear statement that only the patent estoppel issue was before it,[22] the Court went on to state that "[a]t the core of this case, then, is the difficult question whether

---

[13] The doctrine of licensee estoppel forecloses a patent licensee from attacking the validity of his licensor's patent. As to the licensee estoppel portions of the case, see Comment, 45 N.Y.U.L. Rev. 386 (1970).

[14] The foregoing facts are those recited by the Court in Adkins v. Lear, Inc., 395 U.S. 653, 657-61 (1969).

[15] Id. at 674.

[16] 395 U.S. at 662. The estoppel issue was question 1 in Lear's Petition for Certiorari at 3, Lear, Inc. v. Adkins, supra, and the sole issue in the Brief for United States as Amicus Curiae at 2, Lear, Inc. v. Adkins, supra. Neither party nor the Amicus raised any issue of trade secrets in the various petitions, replies and briefs before the Court. 395 U.S. at 682 (White, J., concurring).

[17] See, e.g., Automatic Radio Mfg. Co. v. Hazeltine Research, Inc., 339 U.S. 827 (1950); Comment, 45 N.Y.U.L. Rev. 386, 387-88 (1970).

[18] 395 U.S. at 656 (citing *Sears* and *Compco*).

[19] Id. at 668 (emphasis added). The majority's statement in *Lear* is a close parallel to Justice Black's characterization of *Sears* as he enunciated it in *Compco*. See text accompanying note 35 infra.

[20] See Trade Secrets, supra note 5, § 2.05.

[21] 395 U.S. at 672.

[22] See text accompanying notes 16-18 supra.

federal patent policy bars a State from enforcing a contract regulating access to an unpatented secret idea."[23] Thus, after striking down licensee estoppel so that a *patent* licensee would not be liable for *patent* royalties accruing after the licensee challenges the patent's validity until final adjudication of validity,[24] the Court expressly reserved the more difficult question of

> whether, and to what extent, the States may protect the owners of *unpatented* inventions who are willing to disclose their ideas to manufacturers only upon payment of royalties. . . . Our decision today will, of course, require the state courts to reconsider the theoretical basis of their decisions enforcing the contractual rights of inventors and it is impossible to predict the extent to which this re-evaluation may revolutionize the law of any particular State in this regard. Consequently, . . . even though an important question of federal law underlies this phase of the controversy, we should not now attempt to define . . . the extent, if any, to which the States may properly act to enforce the contractual rights of inventors of unpatented secret ideas . . . . Indeed, on remand, the California courts may well reconcile the competing demands of patent and contract law in a way which would not warrant further review in this Court.[25]

As Justice White aptly noted, the Court did not have jurisdiction to raise the foregoing question.[26] Aside from this jurisdictional issue, Justice White questioned the wisdom of disregarding the Court's rule that only "the questions set forth in the petition or fairly comprised therein will be considered by the court."[27] Nevertheless, the question has been posed and can be satisfactorily answered under trade secret principles which are consonant with the federal patent scheme.[28]

D. The Sheep Continue To Leap Over the Stick

Oh Justice White's prophetic soul! Enter Judge Motley in *Painton & Co. v. Bourns, Inc.*[29]—a declaratory judgment action brought by Painton, an English licensee, against Bourns, its California licensor of unpatented potentiometer technology. The license agreement between the parties had been terminated by Bourns for the licensee's failure to attain minimum production.

---

[23] 395 U.S. at 672.

[24] Id. at 673-74.

[25] Id. at 674-75. Matter contained in patent applications and not otherwise disclosed or generally known is treated as being in the nature of a trade secret. See Trade Secrets, supra note 5, § 8.02[7].

[26] 395 U.S. at 678 (concurring opinion).

[27] Id. at 681. See U.S. Sup. Ct. Rule 23(1)(c).

[28] See text accompanying notes 59-63 infra.

[29] 309 F. Supp. 271 (S.D.N.Y. 1970), appeal docketed, No. 34959 (2d Cir., June 1, 1970). Argument was heard on February 11, 1971.

The agreement contained no express restriction on Painton's use or disclosure of the licensed technology. Painton argued that after termination it had an unfettered right to use; Bourns, on the other hand, claimed that an implied negative covenant precluded further use.

Cross motions for summary judgment were filed on submitted facts. On the contract issue, Judge Motley held that California law would not supply a negative covenant. As an alternative and on entirely unsolicited (by argument or motion briefs) grounds, Judge Motley held for the licensee:

> Our patent policy of strict regulation of inventions would be undercut if inventors could enforce agreements for compensation for alleged secret ideas without being required to submit those ideas to the Patent Office, and, thereby, eventually have the ideas disclosed to the public. Furthermore, patent policy (reaffirmed by the holding in *Lear* that estoppel will not be a bar to challenging the validity of a patent . . .) which allows compensation only for ideas which rise to the level of invention would be further undermined by the enforcement of such a contract, since compensation would be awarded for non-inventions. And if this court were to hold that before a state could enforce a trade secrets contract, the ideas must be found to be an invention as prescribed by the rigid requirements of federal patent law, inventors would be able to circumvent "the manner in which [inventions] may be protected." [Citing *Lear*, at 677.] Inventors would be encouraged to avoid filing applications altogether and contract for long licensing arrangements. The severely restricted area which the Supreme Court left open to applicable State law would become a yawning abyss. Fewer patent applications would be made. The Patent Office would soon have a less accurate view of the state of the art in a particular field. And state courts, rather than the Patent Office, would become the initial triers of whether a discovery is an invention.
>
> For these reasons, this court holds that federal patent law requires an inventor to submit his ideas to the Patent Office before he can compel consideration for the use of his idea. The court, however, does not decide whether under California law an inventor, if he makes a patent application, can be compensated for his disclosure before the patent has issued. [Citing *Lear*, at 676–77.] That question is not before this court.[30]

In so holding, it is submitted, Judge Motley misconstrued the holding and thrust of *Lear* and followed, instead, Justice Black's dissent in *Lear*.[31]

---

[30] Id. at 274.

[31] 395 U.S. at 676 (Black, J., Warren, C.J., & Douglas, J., concurring in part and dissenting in part). Since the significant portions of his opinion constitute a dissent, it is referred to in text as such. That Judge Motley relied on Black's opinion was recognized by Painton: "The District Judge in substance abolished the law of trade secrets on the basis of the concurring opinion of Mr. Justice Black in *Lear* . . . (she erroneously attributed the concurring opinion to Mr.

E. Black on Black

That dissent purported to reiterate a belief expressed by Justice Black when he wrote the Court's opinions in *Sears* and *Compco:*

> I still entertain the belief I expressed for the Court in *Sears* and *Compco* that no state has a right to authorize any kind of monopoly on what is claimed to be a new invention, except when a patent has been obtained from the Patent Office under the exacting standards of the patent laws. One who makes a discovery may, of course, keep it secret if he wishes, but private arrangements under which self-styled "inventors" do not keep their discoveries

---

Justice Douglas . . .)" Brief for Appellee at 47, Painton & Co. v. Bourns, Inc., 309 F. Supp. 271 (S.D.N.Y. 1970) (reference is to brief on appeal). Since *Lear*, approximately 30 decisions have considered trade secret issues. With the exception of *Painton*, not one opinion has found *Lear, Sears* or *Compco* impediments to the continued vitality of trade secret principles; relief has been granted or denied on the basis of fundamental trade secret principles. A list of the cases decided since *Lear* and involving trade secret issues is set forth below. For ready reference, the cases have been divided (somewhat arbitrarily) into five categories:

1. *Trade secret protection granted.* E.I. duPont de Nemours & Co. v. Christopher, 431 F.2d 1012 (5th Cir. 1970), cert. denied, 39 U.S.L.W. 3321 (U.S. Jan. 25, 1971); Water Servs., Inc. v. Teseco Chems., Inc., 410 F.2d 163 (5th Cir. 1969); Mixing Equip. Co. v. Philadelphia Gear, Inc., 312 F. Supp. 1269 (E.D. Pa. 1970); Sperry Rand Corp. v. Pentronix, Inc., 311 F. Supp. 910 (E.D. Pa. 1970); Raybestos-Manhattan, Inc. v. Rowland, 310 F. Supp. 993 (D.S.C. 1969) (recognizing trade secret status of pending patent application); Homes v. Thew Shovel Co., 305 F. Supp. 139 (N.D. Ohio 1969) (patent application); Heathbath Corp. v. Ifkovits, 117 Ill. App. 2d 158, 254 N.E.2d 139 (1969); Carboline Co. v. Jarboe, 454 S.W.2d 540 (Mo. Sup. Ct. 1970); Glass Laboratories, Inc. v. Crystal, 165 U.S.P.Q. 647 (N.J. Super. Ct. 1970).

2. *Subject matter held not to be a trade secret.* Cataphote Corp. v. Hudson, 422 F.2d 1290 (5th Cir. 1970); Midland-Ross Corp. v. Sunbeam Equip. Corp., 316 F. Supp. 171 (W.D. Pa. 1970); Cudahy Co. v. American Laboratories, Inc., 313 F. Supp. 1399 (D. Neb. 1970); Central Specialties Co. v. Schaeffer, 165 U.S.P.Q. 15 (N.D. Ill. 1970); G.T.I. Corp. v. Calhoon, 309 F. Supp. 762 (S.D. Ohio 1969).

3. *Absence of contractual or implied legal restriction on use or disclosure.* Chemithron Corp. v. Procter & Gamble Co., 427 F.2d 893 (4th Cir. 1970); Bendix Corp. v. Balax, Inc., 421 F.2d 809 (7th Cir. 1970); Shatterproof Glass Corp. v. Guardian Glass Co., 168 U.S.P.Q. 212 (E.D. Mich. 1970); Superior Testers, Inc. v. Dameo Testers, Inc., 315 F. Supp. 934 (E.D. La. 1970); Gallo v. Norris Dispensers, Inc., 315 F. Supp. 38 (E.D. Mo. 1970); Thomson Mach. Co. v. LaRose, 306 F. Supp. 681 (E.D. La. 1969); Bimba Mfg. Co. v. Starz Cylinder Co., 119 Ill. App. 2d 251, 256 N.E.2d 357 (1969); J.T. Healy & Son, Inc. v. James A. Murphy & Son, Inc., 260 N.E.2d 723 (Mass. 1970).

4. *Submission of ideas.* Joseph Bancroft & Sons, Inc. v. M. Lowenstein & Sons, Inc., 167 U.S.P.Q. 137 (D. Del. 1970); Epstein v. Dennison Mfg. Co., 314 F. Supp. 116 (S.D.N.Y. 1969) (Motley, J.); Flemming v. Ronson Corp., 107 N.J. Super. 311, 258 A.2d 153 (1969). As to submission of ideas generally, see M. Nimmer, Copyright, ch. 15 (1963); Trade Secrets, *supra* note 5, § 8.03.

5. *Miscellaneous.* Varo, Inc. v. Corbin Mfg. Co., 168 U.S.P.Q. 95 (E.D. Pa. 1970) (burden of proof); Struthers Scientific & Int'l Corp. v. General Foods Corp., 314 F. Supp. 313 (D. Del. 1970) (discovery).

> *secret, but rather disclose them, in return for contractual payments, run counter to the plan of our patent laws, which tightly regulate the kind of inventions that may be protected and the manner in which they may be protected. The national policy expressed in the patent laws, favoring free competition and narrowly limiting monopoly, cannot be frustrated by private agreements among individuals, with or without the approval of the State.*[32]

Justice Black's beguilingly brief remembrance of things past is disturbing for two reasons: (1) it rests upon a completely inapplicable notion of "monopoly"[33] and (2) it plainly contradicts his own contemporaneous description of the *Sears*' holding in *Compco Corp. v. Day-Brite Lighting, Inc.*:[34]

> Today we have held in *Sears* . . . that when an article is unprotected by a patent or a copyright, state law may not forbid others to copy that article. To forbid copying would interfere with the federal policy . . . of allowing free access to copy whatever the federal patent and copyright laws leave in the public domain.[35]

II

A Theological View: Are Trade Secrets Dead?

The gospel according to Judge Motley would sweep trade secret law into obsolescence by reducing its subject matter solely to patentable inventions and then shortening its effective term to the period of gestation between patent application and patent grant. *Painton* was a predictable, conceptualistic adoption of the ill-defined formulae of *Sears*, *Compco* and *Lear*. But, were it taken at face value and given currency, the following are but a few of the far-ranging consequences.

First, only matter eligible for patent protection could be

---

[32] 395 U.S. at 677. A patentee is given statutory exclusivity and third parties subsequently and independently deriving a patented invention may not practice it during the term of the patent. Trade secret owners, on the other hand, have no protection against independent developers. See text accompanying notes 41-45, 51-53 infra.

[33] Properly used, the term "monopoly" is applicable when a privilege, previously available to the public, is restricted to the exclusive benefit of one party—e.g., the seventeenth century trading monopolies of the colonial powers. While the term is often used to describe the status of an inventor who has secured statutory exclusivity in exchange for public disclosure, it is not accurate since "[a]n inventor deprives the public of nothing which it enjoyed before his discovery, but gives something of value to the community by adding to the sum of human knowledge." United States v. Dubilier Condenser Corp., 289 U.S. 178, 186 (1933).

[34] 376 U.S. 234 (1964). There is quite a difference between saying that a state may not forbid copying of unpatented material and saying that individuals may not enter into a trade secret license agreement which in no way impairs the right of any independent third party to develop, use and disclose the subject matter of such license.

[35] 376 U.S. at 237.

entitled to trade secret protection. This is contrary to rudimentary trade secret law.[36]

Second, unless patent application has been made for matter ultimately entitled to patent protection, contractual and confidential relationships would afford no protection. Thus, for example, even express restrictions on use and disclosure of trade secrets in employment contracts would, in most instances, be unenforceable. This would come as an unwelcome surprise to the numerous employers who rely upon some form of employment agreement to protect their trade secrets.[37] Similarly, a confidential relationship, such as that between employer and employee, would no longer impose any restriction on use or disclosure of nonpatentable matter nor even on patentable matter if patent application has not been effected. Heretofore, the sanctity of trade secret matter imparted in the employment relationship has been widely recognized.[38]

Third, practically all existing technology licenses would be invalid to the extent that patent application had not been made. Such a result also conflicts with settled law.[39]

Fourth, monied corporations could elect to retain processes and other secret matter and to use their assets to keep such matter solely in-house. In contrast, smaller developers and owners of trade secrets, lacking sufficient assets to exploit their trade secrets adequately, would not have available to them the capital-substitution technique of licensing such matter.

Fifth, *Painton* involves a domestic trade secret licensor and a foreign licensee; it presents in microcosm the potential economic impact of its trade secret holding. If all foreign licensees of United States licensors' technology which does not meet the standard established in *Painton's* trade secret holding halted payment of royalties, the United States balance of payments would be adversely affected by a sum estimated to be in excess of $1 billion.[40]

[36] See Restatement of Torts § 757, comment *b* at "Definition of Trade Secret" and "Novelty and Prior Art" (1939); Trade Secrets, supra note 5, § 2.08.

[37] See, e.g., Employee Patent and Secrecy Agreements 13 (Nat'l. Indus. Conf. Bd. Pamphlet No. 199 (1965)).

[38] Trade Secrets, supra note 5, § 5.02[1].

[39] Imperial Chem. Indus., Ltd. v. National Distillers & Chem. Corp., 342 F.2d 737, 742 (2d Cir.), modified on other grounds and on new findings of fact, 354 F.2d 459 (2d Cir. 1965); Formulabs, Inc. v. Hartley Pen Co., 275 F.2d 52 (9th Cir.), cert. denied, 363 U.S. 830 (1960); Foundry Servs., Inc. v. Beneflux Corp., 206 F.2d 214 (2d Cir. 1953).

[40] 1969 fees and royalties from direct foreign investments are estimated at $2.052 billion. Office of Business Economics, United States Dep't of Commerce, 50 Survey of Current Business No. 3 (Mar. 1970). The National Industrial Conference Board, in its 1969 research report "Appraising Foreign Licensing Performance," citing published and unpublished data from the United States Department

While the exact amount can be only conjectured because of the absence of precise statistical data, it is certain that there would be an immediate and significant net loss to the United States' balance of payments if domestic and foreign licensees of trade secret licensors were freed from further royalty payments.

Before allowing trade secrets to be excommunicated by Judge Motley, perhaps we should review the controlling theology. We can do this by contrasting the substantive character of patents with that of trade secrets. Only after such an examination can we consider whether "preemption" is a real issue.

A. Patents

The Constitution authorizes Congress to promote the progress of science and the useful arts by granting exclusive rights to inventors for limited periods.[41] Exercising this power, Congress enacted the Patent Act.[42] Section 101 grants eligibility for patent protection to inventors of new, useful and nonobvious processes, machines and manufacture or composition of matter.[43] Assuming proper and timely disclosure of the invention in a successful application, the patentee secures, for a term of seventeen years, the right to exclude all others from making, using or selling the invention throughout the United States.[44] Any infringer of a validly

of Commerce, states that "receipts of royalties and license fees from abroad have more than doubled over the course of the last ten years, rising from around $378 million in 1957 to an estimated $786 million in 1967." National Industrial Conference Board, United States Dep't of Commerce, Studies in Business Policy No. 128 (1969).

Taking into account patent and trademark royalties which may be included in those figures, when know-how licenses and equity-type transactions are added in, a $1 billion order of magnitude for know-how licensing is a plausible estimate. See also Lightman, Compensation Patterns in U.S. Foreign Licensing, 14 Idea 1 (1970).

The figures from 1961 are of interest although nine years old.

> An important element of our international balance of payments is what is called the technological balance of payments. This international account reflects payments for technical know-how, patent royalties and the like. . . . A recent study shows the U.S. receiving roughly ten times the technological payments from abroad as goes out in payments to other nations. This is a very significant secondary effect of innovation in the American economy.

In 1961 payments by the United States to other countries amounted to $63 million; receipts by the United States from others, $557 million; net balance to the United States in 1961, $493 million. United States Dep't of Commerce, Technological Innovation: Its Environment and Management, A Report of the Panel on Invention and Innovation (1967). The author wishes to express his gratitude to Tom Arnold of the Texas Bar for the economic information cited above.

[41] U.S. Const. art. I, § 8, cl. 8.

[42] 35 U.S.C. §§ 1-293 (1964), as amended, 35 U.S.C. §§ 41-282 (Supp. V, 1970) [hereinafter Patent Act].

[43] Id. § 101 (1964).

[44] Id. § 154 (1964), as amended, (Supp. V, 1970).

issued and secured patent may be enjoined from further infringement and is subject to damages (which may, under certain circumstances, be trebled) and to reasonable attorney fees in exceptional cases.[45]

A patentee's statutory patent rights commence upon the date of issuance and expire seventeen years thereafter. Patent infringement remedies to the extent that they are available relate solely to that period. Upon publication, the patent becomes a public document, and its subject matter falls into the public domain of every foreign jurisdiction[46] unless the United States patentee has complied with the patent laws of such jurisdictions within the prescribed time, and the invention meets that jurisdiction's standard of patentability. Under the principal patent treaty to which the United States and some seventy-seven other nations adhere, applications must be made in all foreign member nations within twelve months of domestic filing in order to obtain the benefits of their United States filing dates.[47]

An example illustrates the importance of foreign filing. Suppose Mr. Flash invents a revolutionary patentable process to manufacture, at one-half the ordinary cost, a common nonpatentable product. If, by virtue of *Painton's* trade secret holding, he is precluded from licensing his process as a trade secret, he must secure worldwide patents on the process in order to have legal protection. Otherwise, the process could be freely used abroad and the nonpatented end product imported into the United States to compete with Flash's domestically manufactured product. In addition to the great expense[48] and uncertainties entailed in foreign patent application proceedings, Mr. Flash must consider the

---

[45] Id. §§ 283-85 (1964), as amended, (Supp. V, 1970). See Brand Plastics, Inc. v. Dow Chemical Co., 168 U.S.P.Q. 133 (C.D. Cal. 1970).

[46] Most Communist bloc countries, it may be noted, subscribe to the *U.S. Patent Gazette*, and do not pay any royalties on use made of published foreign inventions. It is estimated by patent counsel for a leading United States licensor of technology that the Eastern European bloc market for United States confidential technology is enormous and appears to be curried by current Department of State policy, but that patents are of only nominal value in Eastern Europe. Gilkes, Licensing as a Business and Financial Technique, in Proceedings of the First Annual Licensing Law and Practices Institute 68-71, 76 (1970).

[47] International Convention for the Protection of Industrial Property, Oct. 31, 1958, 75 Stat. 748 (1968), T.I.A.S. No. 4931.

[48] A well-known New York patent law firm estimates that a "moderately" difficult application for an electronics patent costs $2000 to 4000. It is estimated that a relatively comprehensive foreign filing of the electronic patent application mentioned above would cost $15,000 to $20,000.

Application costs are a relative trifle in comparison to litigation costs. An unsuccessful patentee in a recent infringement action has been ordered to pay more than $1 million in legal fees and disbursements to the alleged infringers. Brand Plastics Co. v. Dow Chem. Co., 168 U.S.P.Q. 133 (C.D. Cal. 1970).

realities of policing the process patent abroad. Since the end product is *nonpatentable and indistinguishable from that produced by the nonpatented expensive process*, the problem of policing may be insurmountable.

B. Trade Secrets

Judge Motley incorrectly viewed trade secrets solely as a *preliminary and adjunct step to patents. The subject matter of* a trade secret is not and should not be limited by notions of patentability. The character, duration and purpose of trade secret protection does not warrant any such limitation.

One may capsulize the most widely recognized definition of a trade secret by stating that it is data or information, or material embodiments thereof, used in the owner's business, lending a competitive advantage and not generally known in the owner's industry.[49] Classes of technological matter recognized as trade secrets include formulae, processes, methods and techniques, machines, plans, designs and patterns.[50]

It is axiomatic that, unlike a patentee who enjoys a seventeen year period of exclusivity, a trade secret owner has no rights against an independent subsequent developer, including one who copies matter marketed or otherwise made public by the owner.[51] The trade secret owner may, however, restrict the use or disclosure of the secret by persons who learned of it subject to contractual limitations or those imposed by operation of law ("confidential relationship" and "implied contract" are the standard rubrics).[52] Included in the latter category are persons who obtained the trade secret wrongfully, such as by inducing one having knowledge of the secret to breach his legal duties to the owner.[53]

Similarly, the rights of the trade secret owner are limited to matters maintained in secrecy. If use of the trade secret requires its publication, such as through sale of a previously secret mechanism or product that can be readily reverse engineered, secrecy and consequently trade secret protection are lost.[54]

A trade secret owner has none of the comforts of the pre-

---

[49] Restatement of Torts § 757 comment *b*, at 5 (1939). See note 5 supra.

[50] Trade Secrets, supra note 5, § 2.09. Recent cases of the last category cited are found in id. at 27 nn.138.2-138.6 (Supp. 1970). The parties in *Painton* did not put in issue whether Bourns' technology constituted trade secrets.

[51] Id. § 5.04(1).

[52] Id. §§ 4.01 to .03.

[53] See id. § 5.04(3).

[54] This well-settled proposition, see id. § 2.05[2] n.8, is entirely consonant with the results of Sears, Roebuck & Co. v. Stiffel Co., 376 U.S. 225 (1964).

sumption of validity afforded a patentee.[55] He must meet a difficult burden of establishing that the matter in question is not generally known, that the defendant knows of it by virtue of a protected relationship and that use or disclosure by the defendant would injure the owner.[56] Moreover, injunctive relief, if available, is apt to be limited to a period equal to the time that independent development of the secret would require.[57]

C. *Bargaining for Patent and Trade Secret Licenses*

Applying the foregoing thumbnail comparisons of trade secret and patent law to the licensing context under consideration in *Lear* and *Painton*, it can be observed that the license reward for a trade secret tends to be a function of consideration for disclosure; for a patent, consideration for use. A trade secret owner says to his prospective licensee "I will disclose something to you which you do not know, which you cannot yourself develop economically or presently obtain elsewhere, and which I have a right to keep to myself."[58] Since a prospective trade secret licensee knows that his licensor cannot protect him from independent developers, he weighs the value of disclosure against the risks of relying on matter which is subject to third-party royalty-free use. Whether articulated or not, such balancing is the stuff that leads to hard negotiating for royalty rate and duration. A patent owner, on the other hand, says "I will allow you to practice my already published and thus known invention for a fee." The royalty rate will be in large part a function of the potential economic value of the invention's use and of the degree of exclusivity conferred and the licensor's contractual duty to police the patent.

While trade secret and patent licenses are voluntary arrangements, there are important differences between them. In the former the parties do not contemplate public disclosure and the licensee knows that he has no protection against independent developers. In the latter, disclosure has occurred (or is about to occur) and the licensee relies upon the validity of the patent to protect against competitive use.

---

[55] 35 U.S.C. § 282 (Supp. V, 1970).

[56] Trade Secrets, supra note 5, § 7.07[1].

[57] See, e.g., Hampton v. Blair Mfg. Co., 374 F.2d 969 (8th Cir.), cert. denied, 389 U.S. 829 (1967); Plant Indus., Inc. v. Coleman, 287 F. Supp. 636 (C.D. Cal. 1968); Schulenburg v. Signatrol, Inc., 33 Ill. 2d 379, 388, 212 N.E.2d 865, 869-70 (1965), cert. denied, 383 U.S. 959 (1966).

[58] See, e.g., United States v. E.I. duPont de Nemours & Co., 118 F. Supp. 41, 218-19 (D. Del. 1953), aff'd, 351 U.S. 377 (1956). Despite its vast resources of scientists and chemical experience, duPont had been unable to produce cellophane and required a know-how license to permit it to enter the field and become a competitor.

D. A Solution to Lear's Question

In light of these distinctions, and the effect that they have on the bargaining between the parties, it is my view that the rights and duties bargained for and embodied in the trade secret license should govern. If a trade secret licensee does not elect to condition continuing royalty on continuing secrecy, we may assume that the value of immediate disclosure weighed heavily. It is no more appropriate for a court of law, after the fact, to renegotiate a trade secret license agreement when the subject matter becomes generally known[59] than it is for a court to set aside a contract to purchase a house, a car or tickets to the opera where the purchaser could have driven a better bargain but did not. Thus, leaving the parties where their bargain has placed them in a trade secret licensing context is not inconsistent with holding that a patent licensor may not require royalties beyond the life of the patent. Patent exclusivity is an extraordinary legislative grant, one which absolutely inhibits independent development by all others. Exacting a patent royalty beyond the statutory exclusive period as the price for practicing as a licensee under the patent has, therefore, been held to constitute patent misuse.[60] Since trade secret licenses in no way discourage independent, competitive development and use[61] by any and all parties not bound by contract or a duty arising from a direct relationship with the trade secret owner, their impact on free competition is no greater than an arm's-length transaction between a seller and purchaser. After such a transaction, the purchaser will have less money to spend elsewhere, but can we regard the transaction as being in restraint of trade?

Not only do distinctions between patents and trade secrets abound, but some hard pragmatic facts warn against Judge Motley's edict. While we are told that under our prior-examination patent system a patent is presumptively valid, more than 80% of patent infringement actions on appeal result in a holding that the patent sued upon is invalid.[62] Thus, after spending a respectable

---

[59] It may be difficult to establish that every significant element of a licensed trade secret has become generally known, particularly with respect to complex secret processes. Both a prospective licensee and licensor may recognize this and avoid the difficult—and expensive—litigation implications by fixing a finite duration.

[60] Brulotte v. Thys Co., 379 U.S. 29 (1964).

[61] An honest discoverer may use his discovery of another's trade secret with absolute impunity. Trade Secrets, supra note 5, § 5.04[1]. To the extent that a trade secret license may attenuate secrecy precautions and lead to the subject matter becoming generally known and readily copiable, it is intensely procompetitive.

[62] See I. Kayton, The Crisis of Law in Patents, pts. 1, 5, app. 2, at 13-14. (Patent Resources Group 1970). The Court's 1966 interpretations of the non-

sum for the issuance of a piece of paper, a patentee is given an opportunity to expend a vast sum[63] to prove that he initially made a poor investment.

B. The Gospel According to Congress

Implicit in Judge Motley's decision and Justice Black's dissent in *Lear* is an assertion of federal preemption of the trade secret field by the Patent Act.[64] While Congress undoubtedly has the power to substantially preempt the field under its interstate commerce and invention monopoly powers,[65] it has not done so. Had there been congressional intent to preempt all legal protection of technology—and the vast compilation of other matter covered by state trade secret development—such intent was carefully hidden in the Patent Act.[66] Indeed Congress has, in numerous statutory enactments prior and subsequent to the Patent Act, expressly recognized trade secrets.[67] And, while it may not be

---

obviousness test of 35 U.S.C. § 103 (1964), were set forth in Graham v. John Deere Co., 383 U.S. 1, 12-19 (1966), and United States v. Adams, 383 U.S. 39 (1966). In the view of many commentators the Court has done little to clarify the standards for "invention" in Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57 (1969). See Brief for the American Patent Law Ass'n as Amicus Curiae, Blonder-Tongue Labs., Inc. v. University of Ill. Foundation, 422 F.2d 769 (7th Cir.), cert. granted, 400 U.S. 864 (1970) (reference is to brief in Supreme Court); 1 D. Dunner, J. Gambrell & I. Kayton, Patent Law Perspectives § A.1(1), (3) (1970).

[63] While the $1 million award of attorney's fees to the putative infringers in Brand Plastics Co. v. Dow Chem. Co., 168 U.S.P.Q. 133 (C.D. Cal. 1970), may appear dramatic, taking a complex patent infringement case to trial and through appeal may be conservatively estimated to cost from $150,000 to $500,000 in legal fees for each party.

[64] Secondary sources analyzing "preemption" were cited by the majority opinion in *Lear* in connection with the Court's statement that "[a]t the core of this case, then, is the difficult question whether federal patent policy bars a State from enforcing a contract regulating access to an unpatented secret idea." 395 U.S. at 672 n.18.

[65] U.S. Const. art. I, § 8.

[66] P. J. Federico, then Examiner-in-Chief of the United States Patent Office and chief technical advisor to the subcommittees having jurisdiction over the patent law, is credited with having written the first draft of what became the Patent Act. He was an active participant in the studies and the revisions that matured into the Act. It is noteworthy that his commentary does not suggest any change in the 1952 existing law of trade secrets. It states that after the first draft committee print of a proposed bill, attention focused upon codification with only relatively noncontroversial changes in the law. Such attention and intention are inconsistent with any change so fundamental and far-reaching as that suggested by the trial court. Federico, Commentary on the New Patent Act, 15 U.S.C.A. 7 (1954).

[67] See the Freedom of Information Act, 5 U.S.C. § 552(b)(4) (1964), prohibiting federal agency disclosure of trade secrets; 18 U.S.C. § 1905 (1964), making it a federal crime for a United States officer or employee to disclose a trade secret; § 24 of the Securities Exchange Act of 1934, 15 U.S.C. § 78x(a) (1964), preventing the Securities & Exchange Commission from requiring that trade secrets or processes be revealed; § 6(f) of the Federal Trade Commission Act, 15

controlling on the issue of federal preemption, it is noteworthy that nineteen states have expressed their public policy by statute, making it a penal offense to steal trade secrets.[68] Along parallel lines, the Second Circuit has also held that congressional intent makes the Federal Stolen Property Act[69] applicable to trade secrets.[70]

While preemption and the concomitant monochromatic optique of Justice Black has the virtue of easy application,[71] it hardly meets the needs and realities of a complex, industrial and mobile society. Compare Justice Black's random view of the mat-

U.S.C. § 46(f) (1964), preventing the Commission from making trade secrets public; 15 U.S.C. § 1193(c) (Supp. V, 1970), requiring trade secrets received by the Commerce Department in reference to fabric-flammability regulations to be considered confidential; 15 U.S.C. § 1263(h) (1964), prohibiting any person from using or disclosing trade secrets required in connection with Department of Health, Education & Welfare (HEW) inspection and investigation of hazardous substances; 15 U.S.C. § 1401(e) (Supp. V, 1970), requiring trade secrets received in Transportation Department inspection and investigation of federal vehicle safety standards to be considered confidential; 21 U.S.C. § 331(j) (1964), prohibiting any person from using or disclosing information concerning methods or processes required under the Food, Drug & Cosmetic Act which are trade secrets; 21 U.S.C. § 458(a)(5) (Supp. V, 1970), prohibiting use or disclosure of trade secrets acquired under the Poultry Products Inspection Act; 33 U.S.C. § 466g(f)(2) (Supp. V, 1970), excluding trade secrets from being disclosed at public hearings under the Federal Water Pollution Control Act; 42 U.S.C. § 263i(e) (Supp. V, 1970), prohibiting disclosure by HEW of trade secrets obtained in enforcing the Radiation Control for Health and Safety Act of 1968; id. § 1857d(c)(5), providing that no witness shall be required to divulge trade secrets in any hearings under the Clean Air Act; id. § 1857f-6c(c), requiring trade secrets obtained by HEW in connection with registration of vehicle fuel additives to be considered confidential; and 35 U.S.C. § 122 (1964), providing for the preservation of applications for patent in secrecy until the patent issues, i.e., until the applicant knows what patent protection he is going to get and thereafter authorizes issuance of the patent.

[68] Trade Secrets, supra note 5, § 1.10(1).

[69] 18 U.S.C. §§ 2311-18 (1964), as amended, (Supp. V, 1970).

[70] United States v. Bottone, 365 F.2d 389 (2d Cir.), cert. denied, 385 U.S. 974 (1966).

[71] This virtue is achieved at the cost of dispensing with venerable Supreme Court recognition of trade secrets. See United States v. Dubilier Condenser Corp., 289 U.S. 178, 186 (1933) (inventor may keep invention secret and reap its fruits indefinitely); Becher v. Contour Laboratories, Inc., 279 U.S. 388, 391 (1929) (trade secret rights, based on breach of contract or confidential relation, are independent of the patent law). See also Board of Trade v. Christie Grain & Stock Co., 198 U.S. 236, 250-51 (1905) (trade secret owner's rights are not lost by communicating it to persons bound by contract or confidential relationship). These cases demonstrate that trade secret rights are independent of and an alternative to patent law protection. Accordingly, an inventor of matter eligible for both forms of protection has the right to maintain his invention in secrecy (with protection solely against a limited class of persons and only for an indefinite duration) or to disclose his invention in exchange for patent protection (with its extensive breadth and finite period). Nor should sight be lost of the variety of nonpatentable matter which is nonetheless properly eligible for the limited interpersonal restrictions which are imposed by trade secret principles. For an enumeration of the various categories of matter eligible for trade secret protection, see Trade Secrets, supra note 5, § 2.09.

ter with that of Judge Rich, the preeminent dean of the United States Court of Customs and Patent Appeals:

> We do not, however, agree with the position taken in appellee's brief. He says, for one thing, that the Constitution "grants" patent rights only for limited times. The Constitution grants no patent rights, it grants only authority to Congress to enact laws. He also argues, as is all too prevalent, that the *patent laws* put things *into* the public domain when patents expire. Patent laws function only to keep things *out* of the public domain temporarily. They have nothing to do with putting things into it. They say nothing about right to copy *or* right to use, they speak only in terms of right to *exclude*. "Public domain," moreover, is a question-begging legal concept. Whether or not things are in or out of the public domain and free or not free to be copied may depend on all sorts of legal concepts including patent law, antimonopoly policy and statutes, the law of unfair competition, copyright law, and the law of trademarks and trademark registration. What we really do is to determine these *legal* rights; then we may express the ultimate conclusion by saying something is in the "public domain"—or not in it. All we are concerned with here is the statutes pertaining to trademark registration and the case law construing those statutes.[12]

III

Conclusion

Sears and *Compco* were public domain copying cases unrelated to trade secret law. They contained unnecessary—and therefore unfortunate—"preemption" concepts. *Lear* was a licensee estoppel case arising from a patent license. The court in that case relied on the sweeping concepts stated as dictum in *Sears* to put some aspects of trade secret law in question, despite the fact that no trade secret issues were before the Court nor briefed nor argued for its benefit.

Trade secret law exists separate and apart from the patent system and is fundamental to our complex technologically oriented society. It covers matter which is frequently nonpatentable and affords protection only against wrongful use or disclosure. It encourages multiple independent development whereas the Patent Act discourages it. Congress has consistently recognized and protected legitimate interests arising under the law of trade secrets.

Assuming that a court might have sufficient data and expertise to determine whether trade secret law conflicts in any way with the patent system, decisions questioning the viability of trade secret law should not be rendered in the abstract. Nor should dictum arising in a nontrade-secret context determine the future of this important area of the law.

---

[12] Mine Safety Appliances Co. v. Electric Storage Battery Co., 405 F.2d 901, 902 n.2 (C.C.P.A. 1969).

APPENDIX 7

Syllabus.

LEAR, INC. *v.* ADKINS.

CERTIORARI TO THE SUPREME COURT OF CALIFORNIA.

No. 56. Argued November 20–21, 1968.—Decided June 16, 1969.

Respondent, an engineer and inventor, was hired in 1952 by petitioner (Lear) to help solve gyroscope development problems. They had agreed that "new ideas, discoveries, inventions etc. related to . . . vertical gyros become the property of" respondent, and that the inventor would grant Lear a license as to all ideas he might develop "on a mutually satisfactory royalty basis." Shortly thereafter respondent developed a method for improving gyros which Lear incorporated into its production process. In 1954 respondent filed a patent application covering these improvements and entered into licensing negotiations with Lear to establish a royalty rate. An agreement, concluded in 1955, provided that if the "Patent Office refuses to issue a patent . . . or if such a patent so issued is subsequently held invalid . . . Lear at its option shall have the right forthwith to terminate the specific license so affected or to terminate this entire Agreement . . . ." A patent was issued to respondent in 1960, after several rejections of the application. In 1957 Lear stated that a Patent Office search disclosed a patent which fully anticipated respondent's discovery and that it would no longer pay royalties on the gyros it produced in its Michigan plant, although it continued to pay royalties on gyros produced in its California plant until 1959. Upon receipt of his patent respondent brought suit in the California courts claiming that both the Michigan and California gyros used his patent and that Lear's failure to pay royalties breached the 1955 contract and Lear's quasi-contractual obligations. Although Lear tried to raise patent invalidity as a defense, the trial judge directed a verdict for respondent on the California gyros, holding that Lear was estopped by its licensing agreement from questioning the licensor's patent. Since Lear claimed that it developed its Michigan gyro designs independently of respondent's ideas, the judge instructed the jury to award recovery to the inventor only if it was satisfied that the invention was novel. When the jury returned a substantial verdict for respondent on the Michigan gyros the judge granted Lear's motion for judgment notwithstanding the verdict, finding that the invention had been

completely anticipated by the prior art. The California Supreme Court held that the 1955 agreement was still in effect, that Lear did not have the right thereunder to terminate its royalty obligations in 1959, and that the doctrine of estoppel barred Lear from questioning the patent. Noting Lear's claim that it had developed the Michigan gyros independently, the court considered "whether what is being built by Lear [in Michigan] springs *entirely* from the prior art," found that Lear had in fact utilized the patent throughout the period in question, and reinstated the jury's verdict. *Held:*

1. Since the California Supreme Court's construction of the 1955 licensing agreement is solely a matter of state law, the only issue open here is raised by the court's reliance on the doctrine of estoppel to bar Lear from contesting the validity of the patent. Pp. 661–662.

2. In the accommodation of (1) the common law of contracts, and (2) the federal law of patents requiring that all ideas in general circulation be dedicated to the common good unless they are protected by a valid patent, the technical requirements of contract doctrine must yield to the demands of the public interest in the typical situation involving the negotiation of a license after a patent has issued. The holding of *Automatic Radio Manufacturing Co.* v. *Hazeltine Research, Inc.*, 339 U. S. 827, 836, that licensee estoppel was "the general rule," is overruled. Pp. 668–671.

3. Overriding federal policies would be significantly frustrated if licensees could be required to continue to pay royalties while challenging patent validity in the courts, and in this case Lear must be permitted to avoid payment of all royalties accruing after the issuance of the patent if Lear can prove that the patent is invalid. Pp. 671–674.

4. Respondent's claim to contractual royalties accruing before the issuance of the patent, which raises the question of whether, and to what extent, the States may protect the owners of *unpatented* inventions who are willing to disclose their ideas only upon the payment of royalties is remanded for specific consideration by the California courts. Pp. 674–675.

5. It is inappropriate at this time to pass upon Lear's contention that the patent is invalid, as Lear must address its arguments attacking the validity of the underlying patent to the California courts in the first instance. Pp. 675–676.

67 Cal. 2d 882, 435 P. 2d 321, vacated and remanded.

C. Russell Hale argued the cause for petitioner. With him on the briefs were *Edwin L. Hartz, Thomas G. Corcoran,* and *Allen E. Throop.*

Peter R. Cohen argued the cause for respondent. With him on the brief was *Allen E. Susman.*

Lawrence G. Wallace argued the cause for the United States as *amicus curiae* urging reversal. With him on the brief were *Solicitor General Griswold, Assistant Attorney General Zimmerman,* and *Howard E. Shapiro.*

MR. JUSTICE HARLAN delivered the opinion of the Court.

In January of 1952, John Adkins, an inventor and mechanical engineer, was hired by Lear, Incorporated, for the purpose of solving a vexing problem the company had encountered in its efforts to develop a gyroscope which would meet the increasingly demanding requirements of the aviation industry. The gyroscope is an essential component of the navigational system in all aircraft, enabling the pilot to learn the direction and attitude of his airplane. With the development of the faster airplanes of the 1950's, more accurate gyroscopes were needed, and the gyro industry consequently was casting about for new techniques which would satisfy this need in an economical fashion. Shortly after Adkins was hired, he developed a method of construction at the company's California facilities which improved gyroscope accuracy at a low cost. Lear almost immediately incorporated Adkins' improvements into its production process to its substantial advantage.

The question that remains unsettled in this case, after eight years of litigation in the California courts, is whether Adkins will receive compensation for Lear's use of those improvements which the inventor has subsequently patented. At every stage of this lawsuit, Lear has sought to prove that, despite the grant of a patent

by the Patent Office, none of Adkins' improvements were sufficiently novel to warrant the award of a monopoly under the standards delineated in the governing federal statutes. Moreover, the company has sought to prove that Adkins obtained his patent by means of a fraud on the Patent Office. In response, the inventor has argued that since Lear had entered into a licensing agreement with Adkins, it was obliged to pay the agreed royalties regardless of the validity of the underlying patent.

The Supreme Court of California unanimously vindicated the inventor's position. While the court recognized that generally a manufacturer is free to challenge the validity of an inventor's patent, it held that "one of the oldest doctrines in the field of patent law establishes that so long as a licensee is operating under a license agreement he is estopped to deny the validity of his licensor's patent in a suit for royalties under the agreement. The theory underlying this doctrine is that a licensee should not be permitted to enjoy the benefit afforded by the agreement while simultaneously urging that the patent which forms the basis of the agreement is void." 67 Cal. 2d 882, 891, 435 P. 2d 321, 325–326 (1967).

Almost 20 years ago, in its last consideration of the doctrine, this Court also invoked an estoppel to deny a licensee the right to prove that his licensor was demanding royalties for the use of an idea which was in reality a part of the public domain. *Automatic Radio Manufacturing Co.* v. *Hazeltine Research, Inc.*, 339 U. S. 827, 836 (1950). We granted certiorari in the present case, 391 U. S. 912, to reconsider the validity of the *Hazeltine* rule in the light of our recent decisions emphasizing the strong federal policy favoring free competition in ideas which do not merit patent protection. *Sears, Roebuck* v. *Stiffel Co.*, 376 U. S. 225 (1964); *Compco Corp.* v. *Day-Brite Lighting, Inc.*, 376 U. S. 234 (1964).

I.

At the very beginning of the parties' relationship, Lear and Adkins entered into a rudimentary one-page agreement which provided that although "[a]ll new ideas, discoveries, inventions, etc., related to . . . vertical gyros become the property of Mr. John S. Adkins," the inventor promised to grant Lear a license as to all ideas he might develop "on a mutually satisfactory royalty basis." [1] As soon as Adkins' labors yielded tangible results, it quickly became apparent to the inventor that further steps should be taken to place his rights to his ideas on a firmer basis. On February 4, 1954, Adkins filed an application with the Patent Office in an effort to gain federal protection for his improvements. At about the same time, he entered into a lengthy period of negotiations with Lear in an effort to conclude a licensing agreement which would clearly establish the amount of royalties that would be paid.

These negotiations finally bore fruit on September 15, 1955, when the parties approved a complex 17-page contract which carefully delineated the conditions upon which Lear promised to pay royalties for Adkins' improvements. The parties agreed that if "the U. S. Patent Office refuses to issue a patent on the substantial claims [contained in Adkins' original patent application] or if such a patent so issued is subsequently held invalid, then in any of such events Lear at its option shall have the right forthwith to terminate the specific license so affected or to terminate this entire Agreement . . . ." § 6. (2 App. 138.)

---

[1] Lear argues that this original agreement was not submitted in evidence at trial and so should not be considered a part of the record on appeal. The California Supreme Court, however, treated the agreement as an important part of the record before it, 67 Cal. 2d, at 906, 435 P. 2d, at 335; and so we are free to refer to it.

As the contractual language indicates, Adkins had not obtained a final Patent Office decision as to the patentability of his invention at the time the licensing agreement was concluded. Indeed, he was not to receive a patent until January 5, 1960. This long delay has its source in the special character of Patent Office procedures. The regulations do not require the Office to make a final judgment on an invention's patentability on the basis of the inventor's original application.[2] While it sometimes happens that a patent is granted at this early stage, it is far more common for the Office to find that although certain of the applicant's claims may be patentable, certain others have been fully anticipated by the earlier developments in the art. In such a situation, the Patent Office does not attempt to separate the wheat from the chaff on its own initiative. Instead, it rejects the application, giving the inventor the right to make an amendment which narrows his claim to cover only those aspects of the invention which are truly novel.[3] It often happens, however, that even after an application is amended, the Patent Office finds that some of the remaining claims are unpatentable. When this occurs, the agency again issues a rejection which is subject to further amendment.[4] And so the process of rejection and amendment continues until the Patent Office Examiner either grants a patent or concludes that none of the inventor's claims could possibly be patentable, at which time a final rejection is entered on the Office's records.[5] Thus, when Adkins made his original application in 1954, it took the average inventor more than three years before he obtained a final administrative decision on the patentability of his ideas, with the Patent

[2] 37 CFR § 1.111 (1967).
[3] 37 CFR § 1.106 (1967).
[4] 37 CFR § 1.112 (1967).
[5] 37 CFR § 1.113 (1967).

Office acting on the average application from two to four times.[6]

The progress of Adkins' effort to obtain a patent followed the typical pattern. In his initial application, the inventor made the ambitious claim that his entire method of constructing gyroscopes was sufficiently novel to merit protection. The Patent Office, however, rejected this initial claim, as well as two subsequent amendments, which progressively narrowed the scope of the invention sought to be protected. Finally, Adkins narrowed his claim drastically to assert only that the design of the apparatus used to achieve gyroscope accuracy was novel.[7] In response, the Office issued its 1960 patent, granting a 17-year monopoly on this more modest claim.

During the long period in which Adkins was attempting to convince the Patent Office of the novelty of his ideas, however, Lear had become convinced that Adkins would never receive a patent on his invention and that it should not continue to pay substantial royalties on ideas which had not contributed substantially to the development of the art of gyroscopy. In 1957, after Adkins' patent application had been rejected twice, Lear announced that it had searched the Patent Office's files and had found a patent which it believed had fully anticipated Adkins' discovery. As a result, the company stated that it would no longer pay royalties on the large number of gyroscopes it was producing at its plant in Grand Rapids, Michigan (the Michigan gyros). Payments were continued on the smaller number of gyros produced at the company's

---

[6] A. Seidel, What the General Practitioner Should Know About Patent Law and Practice 61 (A. L. I. 1956).

[7] Adkins actually amended his application a third time before he made the amendment which gained the approval of the Patent Office. This third amendment was superseded by the successful amendment, however, before the Patent Office considered it.

California plant (the California gyros) for two more years until they too were terminated on April 8, 1959.

As soon as Adkins obtained his patent in 1960, he brought this lawsuit in the California Superior Court. He argued to a jury that both the Michigan and the California gyros incorporated his patented apparatus and that Lear's failure to pay royalties on these gyros was a breach both of the 1955 contract and of Lear's quasi-contractual obligations. Although Lear sought to raise patent invalidity as a defense, the trial judge directed a verdict of $16,351.93 for Adkins on the California gyros, holding that Lear was estopped by its licensing agreement from questioning the inventor's patent. The trial judge took a different approach when it came to considering the Michigan gyros. Noting that the company claimed that it had developed its Michigan designs independently of Adkins' ideas, the court instructed the jury to award the inventor recovery only if it was satisfied that Adkins' invention was novel, within the meaning of the federal patent laws. When the jury returned a verdict for Adkins of $888,122.56 on the Michigan gyros,[8] the trial judge granted Lear's motion for judgment notwithstanding the verdict, finding that Adkins' invention had been completely anticipated by the prior art.[9]

---

[8] For purposes of the present lawsuit, the parties stipulated that the jury would award only those damages accruing before May 31, 1963.

[9] Adkins also filed a second cause of action which contended that Lear had wrongfully appropriated a valuable trade secret and so was liable regardless of the validity of the inventor's contractual and quasi-contractual theories. The trial court, however, required Adkins to choose between his contract and tort claims. Since the California Supreme Court completely vindicated the inventor's right to contractual royalties, it was not obliged to consider the propriety of this aspect of the trial judge's decision. Consequently, the tort claim is not before us at this time.

Neither side was satisfied with this split decision, and both appealed to the California District Court of Appeal, which adopted a quite different approach. The court held that Lear was within its contractual rights in terminating its royalty obligations entirely in 1959, and that if Adkins desired to recover damages after that date he was "relegated to an action for infringement" in the federal courts. 52 Cal. Rptr. 795, 806. So far as pre-1959 royalties were concerned, the court held that the contract required the company to pay royalties on both the California and Michigan gyros regardless of the validity of the inventor's patent. 52 Cal. Rptr., at 809.

Once again both sides appealed, this time to the California Supreme Court, which took yet another approach to the problem presented. The court rejected the District Court of Appeal's conclusion that the 1955 license gave Lear the right to terminate its royalty obligations in 1959. Since the 1955 agreement was still in effect, the court concluded, relying on the language we have already quoted, that the doctrine of estoppel barred Lear from questioning the propriety of the Patent Office's grant. 67 Cal. 2d, at 907, 435 P. 2d, at 336. The court's adherence to estoppel, however, was not without qualification. After noting Lear's claim that it had developed its Michigan gyros independently, the court tested this contention by considering "whether what is being built by Lear [in Michigan] springs *entirely*" (emphasis supplied) from the prior art. 67 Cal. 2d, at 913, 435 P. 2d, at 340. Applying this test, it found that Lear had in fact "utilized the apparatus patented by Adkins throughout the period in question," 67 Cal. 2d, at 915, 435 P. 2d, at 341, and reinstated the jury's $888,000 verdict on this branch of the case.

II.

Since the California Supreme Court's construction of the 1955 licensing agreement is solely a matter of state

law, the only issue open to us is raised by the court's reliance upon the doctrine of estoppel to bar Lear from proving that Adkins' ideas were dedicated to the common welfare by federal law.[10] In considering the propriety of the State Court's decision, we are well aware that we are not writing upon a clean slate. The doctrine of estoppel has been considered by this Court in a line of cases reaching back into the middle of the 19th century. Before deciding what the role of estoppel

---

[10] Adkins claims that we have no jurisdiction to decide the federal question presented because the company did not adequately preserve it in its argument before the State Supreme Court. We do not agree. While it is true that Lear did not ask the Supreme Court to repudiate estoppel entirely, it did seek to persuade the court to carve out an exception to the estoppel principle which was so sweeping as to undermine the doctrine's vitality completely. The company argued, on the basis of federal as well as state cases, that a licensee may escape the impact of estoppel simply by announcing that it has repudiated the licensing agreement, regardless of the contract's terms. See, *e. g.*, Respondent's and Cross-Appellant's Opening Brief in Cases Nos. 28624 and 30089, at 110–111.

The California Supreme Court rejected this argument on its merits:

"Lear relies on authorities holding that a licensee may terminate a license agreement upon notice to his licensor even though, prior to termination, there has been no adjudication of invalidity of the patent which is the subject of the agreement and that thereafter the licensee may challenge the validity of the patent. (See, e. g., *Armstrong Co.* v. *Shell Co. of Cal.* (1929) 98 Cal. App. 769, 778–779). This rule has no application if the agreement sets forth the particular circumstances under which termination must occur. As stated above, such provisions must be complied with in order to effect a valid cancellation." 67 Cal. 2d, at 899–900 n. 15, 435 P. 2d, at 331, n. 15.

We clearly have jurisdiction to consider whether this decision is wrong. In doing so, we have the duty to consider the broader implications of Lear's contention, and vindicate, if appropriate, its claim to relief on somewhat different grounds than it chose to advance below, especially when the California court recognized, in language we have already quoted, *supra*, at 656, that matters of basic principle are at stake.

should be in the present case and in the future, it is, then, desirable to consider the role it has played in the past.

A.

While the roots of the doctrine have often been celebrated in tradition, we have found only one 19th century case in this Court that invoked estoppel in a considered manner. And that case was decided before the Sherman Act made it clear that the grant of monopoly power to a patent owner constituted a limited exception to the general federal policy favoring free competition. *Kinsman* v. *Parkhurst*, 18 How. 289 (1856).[11] Curiously, a second decision often cited as supporting the estoppel doctrine points clearly in the opposite direction. *St. Paul Plow Works* v. *Starling*, 140 U. S. 184 (1891), did not even question the right of the lower courts to admit the licensee's evidence showing that the patented device was not novel. A unanimous Court merely held that, where there was conflicting evidence as to an invention's novelty, it would not reverse the decision of the lower court upholding the patent's validity.

In the very next year, this Court found the doctrine of patent estoppel so inequitable that it refused to grant an injunction to enforce a licensee's promise never to contest the validity of the underlying patent. "It is as

[11] There are two other early cases which enforced patent licenses without a thorough consideration of the estoppel issues that were presented. In *Eureka Co.* v. *Bailey Co.*, 11 Wall. 488 (1871), the Court held that a licensee was obliged to overcome a "very strong presumption" of patent validity in order to avoid his royalty obligations, without indicating how much more compelling a showing was required than was considered necessary in an ordinary infringement action. In *Dale Tile Manufacturing Co.* v. *Hyatt*, 125 U. S. 46 (1888), this Court affirmed the decision of the New York state courts invoking the doctrine of licensee estoppel, on the ground that the estoppel question presented was one which involved only state law.

important to the public that competition should not be repressed by worthless patents, as that the patentee of a really valuable invention should be protected in his monopoly . . . ." *Pope Manufacturing Co.* v. *Gormully*, 144 U. S. 224, 234 (1892).

Although this Court invoked an estoppel in 1905 without citing or considering *Pope*'s powerful argument, *United States* v. *Harvey Steel Co.*, 196 U. S. 310, the doctrine was not to be applied again in this Court until it was revived in *Automatic Radio Manufacturing Co.* v. *Hazeltine Research, Inc., supra*, which declared, without prolonged analysis, that licensee estoppel was "the general rule." 339 U. S., at 836. In so holding, the majority ignored the teachings of a series of decisions this Court had rendered during the 45 years since *Harvey* had been decided. During this period, each time a patentee sought to rely upon his estoppel privilege before this Court, the majority created a new exception to permit judicial scrutiny into the validity of the Patent Office's grant. Long before *Hazeltine* was decided, the estoppel doctrine had been so eroded that it could no longer be considered the "general rule," but was only to be invoked in an ever-narrowing set of circumstances.

B.

The estoppel rule was first stringently limited in a situation in which the patentee's equities were far more compelling than those presented in the typical licensing arrangement. *Westinghouse Electric & Manufacturing Co.* v. *Formica Insulation Co.*, 266 U. S. 342 (1924), framed a rule to govern the recurring problem which arises when the original patent owner, after assigning his patent to another for a substantial sum, claims that the patent is worthless because it contains no new ideas. The courts of appeals had traditionally refused to permit such a defense to an infringement action on the ground

that it was improper both to "sell and keep the same thing," *Faulks* v. *Kamp*, 3 F. 898, 902 (1880). Nevertheless, *Formica* imposed a limitation upon estoppel which was radically inconsistent with the premises upon which the "general rule" is based. The Court held that while an assignor may not directly attack the validity of a patent by reference to the prior state of the art, he could introduce such evidence to *narrow* the claims made in the patent. "The distinction may be a nice one but seems to be workable." 266 U. S., at 351. Workable or not, the result proved to be an anomaly: if a patent had *some* novelty *Formica* permitted the old owner to defend an infringement action by showing that the invention's novel aspects did not extend to the inclusion of the old owner's products; on the other hand, if a patent had *no* novelty at all, the old owner could not defend successfully since he would be obliged to launch the direct attack on the patent that *Formica* seemed to forbid. The incongruity of this position compelled at least one court of appeals to carry the reasoning of the *Formica* exception to its logical conclusion. In 1940 the Seventh Circuit held that a licensee could introduce evidence of the prior art to show that the licensor's claims were not novel at all and thus successfully defend an action for royalties. *Casco Products Corp.* v. *Sinko Tool & Manufacturing Co.*, 116 F. 2d 119.

In *Scott Paper Co.* v. *Marcalus Manufacturing Co.*, 326 U. S. 249 (1945), this Court adopted a position similar to the Seventh Circuit's, undermining the basis of patent estoppel even more than *Formica* had done. In *Scott*, the original patent owner had attempted to defend an infringement suit brought by his assignee by proving that his product was a copy of an expired patent. The Court refused to permit the assignee to invoke an estoppel, finding that the policy of the patent laws would be frustrated if a manufacturer was required to pay for the use of information which, under the patent statutes, was

the property of all. Chief Justice Stone, for the Court, did not go beyond the precise question presented by a manufacturer who asserted that he was simply copying an expired patent. Nevertheless it was impossible to limit the *Scott* doctrine to such a narrow compass. If patent policy forbids estoppel when the old owner attempts to show that he did no more than copy an expired patent, why should not the old owner also be permitted to show that the invention lacked novelty because it could be found in a technical journal or because it was obvious to one knowledgeable in the art? As Justice Frankfurter's dissent indicated, *id.*, at 258–264, there were no satisfactory answers to these questions. The *Scott* exception had undermined the very basis of the "general rule."

C.

At about the time *Scott* was decided, this Court developed yet another doctrine which was profoundly antithetic to the principles underlying estoppel. In *Sola Electric Co.* v. *Jefferson Electric Co.*, 317 U. S. 173 (1942), the majority refused to permit a licensor to enforce the license's price-fixing provisions without permitting the licensee to contest the validity of the underlying patent. Since the price-fixing clause was *per se* illegal but for the existence of a valid patent, this narrow exception could be countenanced without compromising the general estoppel principle. But the *Sola* Court went further: it held that since the patentee had sought to enforce the price-fixing clause, the licensee could *also* avoid paying royalties if he could show that the patent was invalid. Five years later, the "anti-trust exception" was given an even more extensive scope in the *Katzinger* and *MacGregor* cases.[12] Here, licensors

[12] *Edward Katzinger Co.* v. *Chicago Metallic Manufacturing Co.*, 329 U. S. 394 (1947); *MacGregor* v. *Westinghouse Electric & Manufacturing Co.*, 329 U. S. 402 (1947).

45-024 O - 85 - 23

were not permitted to invoke an estoppel despite the fact that they sought only to collect their royalties. The mere existence of a price-fixing clause in the license was held to be enough to bring the validity of the patent into question. Thus in the large number of cases in which licensing agreements contained restrictions that were arguably illegal under the antitrust laws, the doctrine of estoppel was a dead letter. Justice Frankfurter, in dissent, went even further, concluding that *Katzinger* and *MacGregor* had done all but repudiate the estoppel rule: "If a doctrine that was vital law for more than ninety years will be found to have now been deprived of life, we ought at least to give it decent public burial." 329 U. S., at 416.

D.

The lower courts, both state and federal, have also hedged the impact of estoppel by creating exceptions which have indicated a recognition of the broader policies pointing to a contrary approach. It is generally the rule that licensees may avoid further royalty payments, regardless of the provisions of their contract, once a third party proves that the patent is invalid. See, *e. g.*, *Drackett Chemical Co.* v. *Chamberlain Co.*, 63 F. 2d 853 (1933). Some courts have gone further to hold that a licensee may notify the patent owner that he is repudiating his agreement, regardless of its terms, and may subsequently defend any action for royalties by proving patent invalidity. Note, The Doctrine of Licensee Repudiation in Patent Law, 63 Yale L. J. 125 (1953); R. Ellis, Patent Licenses § 328 (3d ed., A. Deller 1958). And even in the 19th century, state courts had held that if the licensee had not actually sold products incorporating the patent's ideas, he could challenge the validity of the patent. See Forkosch, Licensee

Estoppel in Patent Law, 20 Temp. L. Q. 515, 529, n. 45 (1947).[13]

III.

The uncertain status of licensee estoppel in the case law is a product of judicial efforts to accommodate the competing demands of the common law of contracts and the federal law of patents. On the one hand, the law of contracts forbids a purchaser to repudiate his promises simply because he later becomes dissatisfied with the bargain he has made.[14] On the other hand, federal law requires that all ideas in general circulation be dedicated to the common good unless they are protected by a valid patent. *Sears, Roebuck* v. *Stiffel Co., supra; Compco Corp.* v. *Day-Brite Lighting, Inc., supra.* When faced with this basic conflict in policy, both this Court and courts throughout the land have naturally sought to develop an intermediate position which somehow would remain responsive to the radically different concerns of the two different worlds of contract and patent. The result has been a failure. Rather than creative compromise, there has been a chaos of conflicting case law, proceeding on inconsistent premises. Before renewing the search for an acceptable middle ground, we must reconsider on their own merits the arguments which may properly be advanced on both sides of the estoppel question.

---

[13] In addition to the works cited in the text, a detailed explication of the development of estoppel doctrine may be found in Cooper, Estoppel to Challenge Patent Validity: The Case of Private Good Faith vs. Public Policy, 18 W. Res. L. Rev. 1122 (1967), and in Kramer, Estoppel To Deny Validity—A Slender Reed, 23 N. Y. U. Intra. L. Rev. 237 (1968).

[14] See 1 A. Corbin, Contracts § 127 (1963); Treece, Licensee Estoppel in Patent and Trademark Cases, 53 Iowa L. Rev. 525, 528–530 (1967).

A.

It will simplify matters greatly if we first consider the most typical situation in which patent licenses are negotiated. In contrast to the present case, most manufacturers obtain a license after a patent has issued. Since the Patent Office makes an inventor's ideas public when it issues its grant of a limited monopoly,[15] a potential licensee has access to the inventor's ideas even if he does not enter into an agreement with the patent owner. Consequently, a manufacturer gains only two benefits if he chooses to enter a licensing agreement after the patent has issued. First, by accepting a license and paying royalties for a time, the licensee may have avoided the necessity of defending an expensive infringement action during the period when he may be least able to afford one. Second, the existence of an unchallenged patent may deter others from attempting to compete with the licensee.[16]

Under ordinary contract principles the mere fact that some benefit is received is enough to require the enforcement of the contract, regardless of the validity of the underlying patent. Nevertheless, if one tests this result by the standard of good-faith commercial dealing, it seems far from satisfactory. For the simple contract approach entirely ignores the position of the licensor who is seeking to invoke the court's assistance on his behalf. Consider, for example, the equities of the licensor who has obtained his patent through a fraud on the Patent Office. It is difficult to perceive why good

---

[15] 37 CFR §§ 1.11, 1.13 (1967).

[16] Of course, the value of this second benefit may depend upon whether the licensee has obtained exclusive or nonexclusive rights to the use of the patent. Even in the case of nonexclusive licenses, however, competition is limited to the extent that the royalty charged by the patentee serves as a barrier to entry.

faith requires that courts should permit him to recover royalties despite his licensee's attempts to show that the patent is invalid. Compare *Walker Process Equipment, Inc.* v. *Food Machinery & Chemical Corp.*, 382 U. S. 172 (1965).

Even in the more typical cases, not involving conscious wrongdoing, the licensor's equities are far from compelling. A patent, in the last analysis, simply represents a legal conclusion reached by the Patent Office. Moreover, the legal conclusion is predicated on factors as to which reasonable men can differ widely. Yet the Patent Office is often obliged to reach its decision in an *ex parte* proceeding, without the aid of the arguments which could be advanced by parties interested in proving patent invalidity. Consequently, it does not seem to us to be unfair to require a patentee to defend the Patent Office's judgment when his licensee places the question in issue, especially since the licensor's case is buttressed by the presumption of validity which attaches to his patent. Thus, although licensee estoppel may be consistent with the letter of contractual doctrine, we cannot say that it is compelled by the spirit of contract law, which seeks to balance the claims of promisor and promisee in accord with the requirements of good faith.

Surely the equities of the licensor do not weigh very heavily when they are balanced against the important public interest in permitting full and free competition in the use of ideas which are in reality a part of the public domain. Licensees may often be the only individuals with enough economic incentive to challenge the patentability of an inventor's discovery. If they are muzzled, the public may continually be required to pay tribute to would-be monopolists without need or justification. We think it plain that the technical requirements of contract doctrine must give way before the demands of the public interest in the typical situation

involving the negotiation of a license after a patent has issued.

We are satisfied that *Automatic Radio Manufacturing Co.* v. *Hazeltine Research, Inc., supra,* itself the product of a clouded history, should no longer be regarded as sound law with respect to its "estoppel" holding, and that holding is now overruled.

B.

The case before us, however, presents a far more complicated estoppel problem than the one which arises in the most common licensing context. The problem arises out of the fact that Lear obtained its license in 1955, more than four years before Adkins received his 1960 patent. Indeed, from the very outset of the relationship, Lear obtained special access to Adkins' ideas in return for its promise to pay satisfactory compensation.

Thus, during the lengthy period in which Adkins was attempting to obtain a patent, Lear gained an important benefit not generally obtained by the typical licensee. For until a patent issues, a potential licensee may not learn his licensor's ideas simply by requesting the information from the Patent Office. During the time the inventor is seeking patent protection, the governing federal statute requires the Patent Office to hold an inventor's patent application in confidence.[17] If a poten-

---

[17] 35 U. S. C. § 122 provides:

"Applications for patents shall be kept in confidence by the Patent Office and no information concerning the same given without authority of the applicant or owner unless necessary to carry out the provisions of any Act of Congress or in such special circumstances as may be determined by the Commissioner."

The present regulations issued by the Patent Office unequivocally guarantee that: "Pending patent applications are preserved in secrecy . . . unless it shall be necessary to the proper conduct of business before the Office" to divulge their contents. 37 CFR

tial licensee hopes to use the ideas contained in a secret patent application, he must deal with the inventor himself, unless the inventor chooses to publicize his ideas to the world at large. By promising to pay Adkins royalties from the very outset of their relationship, Lear gained immediate access to ideas which it may well not have learned until the Patent Office published the details of Adkins' invention in 1960. At the core of this case, then, is the difficult question whether federal patent policy bars a State from enforcing a contract regulating access to an unpatented secret idea.[18]

Adkins takes an extreme position on this question. The inventor does not merely argue that since Lear obtained privileged access to his ideas *before 1960,* the company should be required to pay royalties accruing *before 1960* regardless of the validity of the patent which ultimately issued. He also argues that since Lear obtained special benefits before 1960, it should also pay royalties during the entire patent period (1960–1977), without regard to the validity of the Patent Office's grant. We cannot accept so broad an argument.

Adkins' position would permit inventors to negotiate all important licenses during the lengthy period while their applications were still pending at the Patent Office, thereby disabling entirely all those who have the strongest incentive to show that a patent is worthless. While the equities supporting Adkins' position are somewhat more appealing than those supporting the typical

---

§ 1.14 (a) (1967). The parties do not contend that Adkins' patent application was publicized by the Office during the period it was under consideration.

[18] See Doerfer, The Limits on Trade Secret Law Imposed by Federal Patent and Antitrust Supremacy, 80 Harv. L. Rev. 1432 (1967); Note, The *Stiffel* Doctrine and the Law of Trade Secrets, 62 Nw. U. L. Rev. 956 (1968); Adelman, Trade Secrets and Federal Pre-emption—the Aftermath of Sears and Compco, 49 J. Pat. Off. Soc. 713 (1967); Treece, Patent Policy and Preemption: The *Stiffel* and *Compco* Cases, 32 U. Chi. L. Rev. 80 (1964).

licensor, we cannot say that there is enough of a difference to justify such a substantial impairment of overriding federal policy.

Nor can we accept a second argument which may be advanced to support Adkins' claim to at least a portion of his post-patent royalties, regardless of the validity of the Patent Office grant. The terms of the 1955 agreement provide that royalties are to be paid until such time as the "patent . . . is held invalid," § 6, and the fact remains that the question of patent validity has not been finally determined in this case. Thus, it may be suggested that although Lear must be allowed to raise the question of patent validity in the present lawsuit, it must also be required to comply with its contract and continue to pay royalties until its claim is finally vindicated in the courts.

The parties' contract, however, is no more controlling on this issue than is the State's doctrine of estoppel, which is also rooted in contract principles. The decisive question is whether overriding federal policies would be significantly frustrated if licensees could be required to continue to pay royalties during the time they are challenging patent validity in the courts.

It seems to us that such a requirement would be inconsistent with the aims of federal patent policy. Enforcing this contractual provision would give the licensor an additional economic incentive to devise every conceivable dilatory tactic in an effort to postpone the day of final judicial reckoning. We can perceive no reason to encourage dilatory court tactics in this way. Moreover, the cost of prosecuting slow-moving trial proceedings and defending an inevitable appeal might well deter many licensees from attempting to prove patent invalidity in the courts. The deterrent effect would be particularly severe in the many scientific fields in which invention is proceeding at a rapid rate. In these areas, a patent may well become obsolete long before its

17-year term has expired. If a licensee has reason to believe that he will replace a patented idea with a new one in the near future, he will have little incentive to initiate lengthy court proceedings, unless he is freed from liability at least from the time he refuses to pay the contractual royalties. Lastly, enforcing this contractual provision would undermine the strong federal policy favoring the full and free use of ideas in the public domain. For all these reasons, we hold that Lear must be permitted to avoid the payment of all royalties accruing after Adkins' 1960 patent issued if Lear can prove patent invalidity.[19]

C.

Adkins' claim to contractual royalties accruing before the 1960 patent issued is, however, a much more difficult one, since it squarely raises the question whether, and to what extent, the States may protect the owners of *unpatented* inventions who are willing to disclose their ideas to manufacturers only upon payment of royalties. The California Supreme Court did not address itself to this issue with precision, for it believed that the venerable doctrine of estoppel provided a sufficient answer to all of Lear's claims based upon federal patent law. Thus, we do not know whether the Supreme Court would have awarded Adkins recovery even on his pre-patent royalties if it had recognized that previously established estoppel doctrine could no longer be properly invoked

[19] Adkins suggests that any decision repudiating licensee estoppel as the general rule should not be retroactively applied to contracts concluded before such a decision is announced. Given the extent to which the estoppel principle had been eroded by our prior decisions, we believe it clear that the patent owner—even before this decision—could not confidently rely upon the continuing vitality of the doctrine. Nor can we perceive that our decision today is likely to undermine any existing legitimate business relationships. Moreover, the public's interest in the elimination of specious patents would be significantly prejudiced if the retroactive effect of today's decision were limited in any way.

with regard to royalties accruing during the 17-year patent period. Our decision today will, of course, require the state courts to reconsider the theoretical basis of their decisions enforcing the contractual rights of inventors and it is impossible to predict the extent to which this re-evaluation may revolutionize the law of any particular State in this regard. Consequently, we have concluded, after much consideration, that even though an important question of federal law underlies this phase of the controversy, we should not now attempt to define in even a limited way the extent, if any, to which the States may properly act to enforce the contractual rights of inventors of unpatented secret ideas. Given the difficulty and importance of this task, it should be undertaken only after the state courts have, after fully focused inquiry, determined the extent to which they will respect the contractual rights of such inventors in the future. Indeed, on remand, the California courts may well reconcile the competing demands of patent and contract law in a way which would not warrant further review in this Court.

IV.

We also find it inappropriate to pass at this time upon Lear's contention that Adkins' patent is invalid.

Not only did Lear fail to raise this issue in its petition for certiorari, but the California Supreme Court has yet to pass on the question of patent validity in that clear and unequivocal manner which is so necessary for proper adjudication in this Court. As we have indicated, the California Supreme Court considered the novelty of Adkins' ideas relevant to its decision at only one stage of its extensive analysis. Since Lear claimed that it had developed its Michigan gyros completely independently of Adkins' efforts, the Supreme Court believed itself obliged to consider whether Adkins' ideas were not "entirely" anticipated by the prior art. 67 Cal. 2d, at 913, 435 P. 2d, at 340. Apply-

ing this test, the court upheld the jury's verdict of $888,000 on the Michigan gyros, finding that "Lear utilized the apparatus patented by Adkins throughout the period in question." 67 Cal. 2d, at 915, 435 P. 2d, at 341. In reaching this conclusion, however, the court did express its belief that Adkins' invention made a "significant step forward" in the art of gyroscopy. 67 Cal. 2d, at 915, 435 P. 2d, at 341.

It is far from clear that the court, in making this last statement, intended to hold that Adkins' ideas satisfied the demanding standard of invention explicated in our decision in *Graham* v. *John Deere Co.*, 383 U. S. 1 (1966). Surely, such a holding was not required by the court's analysis, which was concerned only with the question whether Lear had benefited from Adkins' ideas in any degree. In this context, we believe that Lear must be required to address its arguments attacking the validity of the underlying patent to the California courts in the first instance.

The judgment of the Supreme Court of California is vacated and the case is remanded to that court for further proceedings not inconsistent with this opinion.

It is so ordered.

MR. JUSTICE BLACK, with whom THE CHIEF JUSTICE and MR. JUSTICE DOUGLAS join, concurring in part and dissenting in part.

I concur in the judgment and opinion of the Court, except for what is said in Part III, C, of the Court's opinion. What the Court does in this part of its opinion is to reserve for future decision the question whether the States have power to enforce contracts under which someone claiming to have a new discovery can obtain payment for disclosing it while his patent application is pending, even though the discovery is later held to be unpatentable. This reservation is, as I see it, directly

in conflict with what this Court held to be the law in *Sears, Roebuck* v. *Stiffel Co.*, 376 U. S. 225 (1964), and *Compco Corp.* v. *Day-Brite Lighting, Inc.*, 376 U. S. 234 (1964). Brother HARLAN concurred in the result in those cases, saying—contrary to what the Court held—"I see no reason why the State may not impose reasonable restrictions on the future 'copying' itself." *Compco, supra,* at 239. Consequently the Court is today joining in the kind of qualification that only MR. JUSTICE HARLAN was willing to make at the time of our *Stiffel* and *Compco* decisions.

I still entertain the belief I expressed for the Court in *Stiffel* and *Compco* that no State has a right to authorize any kind of monopoly on what is claimed to be a new invention, except when a patent has been obtained from the Patent Office under the exacting standards of the patent laws. One who makes a discovery may, of course, keep it secret if he wishes, but private arrangements under which self-styled "inventors" do not keep their discoveries secret, but rather disclose them, in return for contractual payments, run counter to the plan of our patent laws, which tightly regulate the kind of inventions that may be protected and the manner in which they may be protected. The national policy expressed in the patent laws, favoring free competition and narrowly limiting monopoly, cannot be frustrated by private agreements among individuals, with or without the approval of the State.

MR. JUSTICE WHITE, concurring in part.

The applicable provision of 28 U. S. C. § 1257 empowers us to review by writ of certiorari "[f]inal judgments or decrees rendered by the highest court of a State . . . where any title, right, privilege or immunity is specially set up or claimed under the Constitution, treaties or statutes of, or commission held or authority exercised under, the

United States." Although Adkins disputes it, we have jurisdiction to consider whether a patent licensee is estopped to challenge the validity of the patent. The California Supreme Court ruled that he is and therefore would not entertain attacks on Adkins' patent as a defense to his suit for royalties. Lear seeks review of that holding here. In my view, not only is the issue properly here but the Court has correctly decided it.

Although we have jurisdiction to review this state court judgment and to determine the licensee estoppel issue, it does not necessarily follow that we may or should deal with two other federal questions which come into focus once the licensee is free to challenge the patent. The first is whether the patent is valid. The second, which arises only if the patent is invalidated, is whether federal law forbids the collection of royalties which might otherwise be collectible under a contract rooted in state law. Although the Court does not deal with the first issue, it does purport to decide the second, at least in part. However, as either a jurisdictional or a policy matter, neither of these issues is properly before us in this case.

In the first place, we have no decision of the California Supreme Court affirming or denying, as a matter of federal law, that Adkins may not enforce his contract if his patent is held invalid. The California court held that the license agreement had not been terminated in accordance with its terms, that the doctrine of licensee estoppel prevented Lear from challenging the patent and that Lear was utilizing the teaching of Adkins' patent. There was thus no necessity or reason to consider whether the patent was invalid, or, if it was, whether either state or federal law prevented collection of the royalties reserved by the contract. Even if these issues had been presented to the California Supreme Court, sound principles would have dictated that the court not render a

decision on questions unnecessary to its disposition of the case. See, *e. g., Southwestern Bell Telephone Co.* v. *Oklahoma,* 303 U. S. 206, 212–213 (1938).

There is no indication, however, that Lear, directly or by inference, urged in the California courts that if Adkins' patent were invalid, federal law overrode state contract law and precluded collection of the royalties which Lear had promised to pay. One of the defenses presented by Lear in its answer to Adkins' claim for royalties was that there had been a failure of consideration because of the absence of bargained-for patentability in Adkins' ideas. But failure of consideration is a state law question, and I find nothing in the record and nothing in this Court's opinion indicating that Lear at any time contended in the state courts that once Adkins' patent was invalidated, the royalty agreement was unenforceable as a matter of federal law.[1]

Given Lear's failure below to "specially set up or claim" the federal bar to collection of royalties in the

[1] The Court brushes aside the problem by characterizing the additional issue it decides as representing a "more complicated estoppel problem." But licensee estoppel, the question raised here, refers to estoppel against the licensee to challenge the patent, not to any bar or "estoppel" interposed by federal law against collecting royalties on an invalidated patent. Whether Adkins can enforce his contract for royalties if his patent is found to be invalid cannot be shoehorned into the licensee-estoppel question, and by no stretch of the imagination can it be included within the scope of the question raised and litigated by the parties in this case. In the courts below Lear wanted to challenge Adkins' patent only for the purpose of showing that Adkins was entitled to no recovery under the terms of the contract itself, either because of a failure of consideration or because the contract had been legally terminated or could be legally terminated. Indeed, the District Court of Appeal noted: "Lear concedes that it would be estopped to contest the validity of any patent issued to Adkins on the claims of his application described in the license agreement so long as it continued to operate under that agreement." 52 Cal. Rptr. 795, 805. See also Lear's Opening Brief in the District Court of Appeal 109.

event Adkins' patent was invalidated, and without the California Supreme Court's "final judgment" on this issue, I doubt our jurisdiction to decide the issue. But even if jurisdiction exists, the Court should follow its characteristic practice and refuse to issue pronouncements on questions not urged or decided in the state courts.

In *McGoldrick* v. *Compagnie Generale Transatlantique,* 309 U. S. 430 (1940), the Court, while recognizing it had jurisdiction to determine whether a New York tax was an unconstitutional burden on interstate commerce, refused to consider whether the tax was a prohibited impost or duty on imports and exports, saying: "[I]t is only in exceptional cases, and then only in cases coming from the federal courts, that [the Court] considers questions urged by a petitioner or appellant not pressed or passed upon in the courts below. . . . [D]ue regard for the appropriate relationship of this Court to state courts requires us to decline to consider and decide questions affecting the validity of state statutes not urged or considered there." *Id.*, at 434.

Wilson v. *Cook,* 327 U. S. 474 (1946), reached a similar conclusion. There the Court denied a government contractor the benefit of the implied constitutional immunity of the Federal Government from taxation by the State, but at the same time declined to consider whether the state tax at issue placed a forbidden tax directly on the United States. This was because the Court was "not free to consider" a ground of attack "not presented to the Supreme Court of Arkansas or considered or decided by it," even though the issue was in some measure related to one actually decided by the state courts and arose under the same implied constitutional immunity argument. *Id.*, at 483. Cf. *Dewey* v. *Des Moines,* 173 U. S. 193, 197–198 (1899). The Court relied on *McGoldrick* and a long line of prior cases, including *New York ex rel. Cohn* v. *Graves,* 300 U. S. 308, 317 (1937),

where the Court had said: "In reviewing the judgment of a state court, this Court will not pass upon any federal question not shown by the record to have been raised in the state court or considered there, whether it be one arising under a different or the same clause in the Constitution with respect to which other questions are properly presented."

The result is the same when a party has attempted to raise an issue in the state court but has not done so in proper or timely fashion. "Questions first presented to the highest State court on a petition for rehearing come too late for consideration here . . . ." *Radio Station WOW* v. *Johnson*, 326 U. S. 120, 128 (1945). "Since the State Supreme Court did not pass on the question now urged, and since it does not appear to have been properly presented to that court for decision, we are without jurisdiction to consider it in the first instance here." *CIO* v. *McAdory*, 325 U. S. 472, 477 (1945). And no different conclusion obtains when the federal question, although not yet presented to or decided by the state court, will probably or even certainly arise during further proceedings held in that court. See, *e. g.*, *NAACP* v. *Alabama*, 357 U. S. 449, 466–467 (1958); *Hudson Distributors, Inc.* v. *Eli Lilly & Co.*, 377 U. S. 386, 394–395 (1964).

Wholly aside from jurisdictional considerations or those relating to our relationships with state courts, there is the matter of our own Rule 23 (1)(c), which states that "[o]nly the questions set forth in the petition or fairly comprised therein will be considered by the court." See *Flournoy* v. *Wiener*, 321 U. S. 253, 259 (1944). None of the questions presented by Lear's petition for certiorari comes even close to the issue to which the Court now addresses itself—an issue which will arise only if Lear can and does challenge the patent, if the patent is declared invalid, if Adkins nevertheless seeks to enforce the agreement, and if Lear interposes a defense based on federal law.

This seems a poor case for waiving our Rules. In the first place, the question of validity has not been reached by the California Supreme Court, and when it is the patent may withstand attack. In that event there will be no necessity to consider the impact of patent law on the enforceability of a contract grounded in state law. Second, even if the patent is declared invalid, the state court, after the parties have addressed themselves to the issues, may accommodate federal and state law in a matter which would not prompt review here. Third, the parties themselves have neither briefed nor seriously argued the question in this Court, and we do not have the benefit of their views on what is surely a difficult question. The Court itself has flushed the issue, which it now deals with on a piecemeal basis.[2] Like the question of patent validity, I would leave the consequences of invalidity to the state court in the first instance.

---

[2] The Court's opinion flatly proscribes recovery by Adkins of "all royalties accruing after Adkins' 1960 patent issued if Lear can prove patent invalidity." *Ante*, at 674. But recovery of pre-1960 royalties is left open by the Court, apparently because pre-issuance and post-issuance royalties do not stand on the same footing under federal law. Such a distinction may be valid, and pre-1960 royalties recoverable; but if so, what of post-1960 royalties which are attributable to the headstart Lear obtained over the rest of the industry as a result of pre-issuance disclosure of Adkins' idea? Today's bar to collection of post-1960 royalties would seem to be inflexible, and yet those royalties arguably are recoverable to the extent they represent payment for the pre-1960 disclosure of Adkins' idea; to that extent, they seem indistinguishable from pre-1960 royalties, at least for purposes of federal patent law. Cf. *Brulotte* v. *Thys Co.*, 379 U. S. 29, 31 (1964). See also *id.*, at 34–39 (dissenting opinion). This possibility and others serve to indicate the wisdom of refraining from any pronouncement now, and particularly from any rigid line drawing, in advance of consideration by the courts below and by the parties.

District Court, D. Minnesota

Telectronics Pty Ltd.
v. Cordis Corporation

No. 4-82-62

Decided Mar. 5, 1982

PATENTS

1. Injunction — Preliminary injunction (§40.5)

Title — Licenses — Royalty provisions — In general (§66.4231)

Licensor has right to terminate license if licensee breaches agreement by failure to pay royalties, even though patent was held invalid in action between licensor and different party, and licensee is not entitled to preliminary injunction permitting it to withhold royalty payments under license during pendency of its suit for declaration of patent invalidity, while restraining licensor from terminating license if patent is found valid.

2. Title — Licenses — Royalty provisions — In general (§66.4231)

Option of requiring royalty payments to be paid into escrow during pendency of licensee's action for declaration of patent invalidity is inappropriate, absent evidence licensor would be unable to repay if so ordered.

Action by Telectronics Pty Ltd., against Cordis Corporation, for declaration of patent invalidity. On plaintiff's motion for preliminary injunction. Motion denied.

Henry H. Feikema, and Smith, Juster, Feikema, Malmon & Haskvitz, both of Minneapolis, Minn., for plaintiff.

Hendy D. Pahl, Jr., and Kenway & Jenney, both of Boston, Mass., and Douglas B. Farrow, and Williamson, Bains, Moore & Hansen, both of Minneapolis, Minn., for defendant.

MacLaughlin, District Judge.

The complaint in this action seeks a judicial declaration of invalidity of a patent owned by the defendant, Cordis Corporation. The plaintiff, Telectronics Pty Ltd. (TPL), holds a license under the challenged patent. The matter is now before the Court on TPL's motion for a preliminary injunction permitting it to withhold payments of royalties under the license during the pendency of the action while restraining Cordis from terminating the license in the event the patent is found to be valid. The motion will be denied.

Facts

On June 1, 1979, Cordis and TPL executed a license agreement. At that time, TPL was unable to afford the expense of challenging the patent owned by Cordis. It knew, however, that another company, Cardiac Pacemakers, Inc., was challenging the validity of the patent. Article VII(B) of the license agreement provides:

> Cordis is now involved in litigation with Cardiac Pacemakers Inc. of Minnesota, over the patent rights herein licensed. *Royalty obligation hereunder shall terminate immediately as to any patent rights found invalid in any final unappealable judicial decision including that litigation.* Furthermore, until that litigation is concluded, the TPL royalty obligation as to U.S. Patent Rights shall not exceed four hundred thousand ($400,000.00) if TPL is in operation in Group I or Group II and $500,000.00 if in Group III.

(Emphasis added). On August 31, 1981, the trial court in the referenced litigation ruled that the Cordis patent is invalid. Cardiac Pacemakers, Inc. v. Cordis Corp., CIVIL 4-77-427, 215 USPQ 604 (D. Minn. Aug. 31, 1981), appealed docketed, No. 81-2048, 216 USPQ 288 (1981). As of the date of this Memorandum and Order, the briefs for the appeal have been filed, but it has not yet been set on the calendar for argument.

The license agreement also contains other terms regarding termination of the license. Article VII(A) grants Cordis an option to terminate the agreement if TPL defaults on its obligations. Article VII(A) provides:

> If TPL fails to make any statement or report required herein, fails to make any payment of royalties as herein provided for, or fails to perform any other obligation herein provided for, Cordis may notify TPL in writing of its intention to cancel this Agreement specifying the default complained of, and this Agreement shall then terminate sixty (60) days after such notice unless TPL makes good and cures the default complained of before the end of said sixty (60) days.

Article VII(D) grants TPL an option to terminate without any cause. It provides:

> At any time, TPL may, at its option, terminate the license herein granted, upon sixty (60) days written notice to Cordis to that effect.

Several months prior to the decision by the trial court in Cardiac Pacemakers, Inc. v. Cordis Corp., TPL started withholding the royalty payments due under the agreement. Cordis has demanded payment and has given the notice required by Article VII(A). In this lawsuit, TPL now challenges the validity of the Cordis patent, relying on the trial court adjudication of invalidity in Cardiac Pacemakers, Inc. v. Cordis Corp. TPL seeks to restrain Cordis from exercising its option to terminate pursuant to Article VII(A) of the license agreement, while being relieved of its obligations to pay royalties pending the appeal in Cardiac Pacemakers, Inc. v. Cordis Corp.

Discussion

On a motion for a preliminary injunction, the Court must consider the following factors:

> [W]hether a preliminary injunction should issue involves consideration of (1) the threat of irreparable harm to the movant; (2) the state of balance between this harm and the injury that granting the injunction will inflict on other parties litigant; (3) the probability that movant will succeed on the merits; and (4) the public interest.

Dataphase Systems, Inc. v. C L Systems, Inc., 640 F.2d 109, 114 (8th Cir. 1981). The movant's likelihood of success on the merits and the threat of irreparable harm are the primary factors.

The plaintiff contends that it has established a strong likelihood of success on the merits by citing Cardiac Pacemakers, Inc. v. Cordis Corp. and arguing that if the decision is upheld on appeal, then Cordis will be collaterally estopped from contesting the merits of the challenge to the validity of the patent in this action. See Blonder-Tongue Laboratories, Inc. v. University of Illinois Foundation, 402 U.S. 313, 169 USPQ 513 (1970). The plaintiff contends that it will suffer irreparable harm if it must continue making royalty payments in order to preserve its rights under the licensing agreement. The plantiff contends that it is unclear how much, if any, of the royalty payments it may be able to recover if the patent is found invalid by the Eighth Circuit.

The motion before the Court involves an issue left open by the United States Supreme Court in Lear, Inc. v. Adkins, 395 U.S. 653, 162 USPQ 1 (1969) in which the Supreme Court overturned the doctrine of licensee estoppel which theretofore had prohibited a licensee from contesting the validity of the patent. In Lear, the Supreme Court enunciated the public policy of fostering "full and free competition in the use of ideas which are in reality a part of the public domain." 395 U.S. at 670, 162 USPQ at 8. To foster this policy, the Supreme Court determined that licensees must be permitted to challenge the validity of patents, and must be given an economic incentive to test the validity at the earliest opportunity. Therefore the Lear Court held that a licensee cannot be compelled to continue paying royalties due under a license agreement during the pendency of a lawsuit challenging the validity of a patent. 395 U.S. at 673, 162 USPQ at 8-9. The Supreme Court did not address the issue of whether the licensor could terminate the license agreement for nonpayment of royalties rather than compelling payment of the royalties.

It appears from the language of the license agreement that the parties had in mind the possibility that this issue would arise. The license agreement expressly provides that Cordis may terminate the agreement if TPL fails to make payments of royalties. It also expressly provides, "Royalty obligation hereunder shall terminate immediately as to any patent rights found invalid in any *final unappealable* judicial decision, including [the Cardiac Pacemakers, Inc. v. Cordis Corp.] litigation." TPL has given no reason why the trial court's ruling in the Cardiac Pacemakers, Inc. v. Cordis Corp. litigation should permit it to rewrite this contract by eliminating Cordis' option to terminate for nonpayment of royalties. TPL certainly contemplated the possibility that the trial court in that litigation would hold the patent to be invalid, yet Article VII(B) only applies to a "final unappealable" decision. Because the matter is currently on appeal, Article VII(B) has no application to this case.

Moreover, the Eighth Circuit Court of Appeals has held that Lear does not prevent a licensor from exercising a clause permitting termination of a license for nonpayment of royalties. In Nebraska Engineering Corp. v. Shivvers, 557 F.2d 1257, 195 USPQ 227 (8th Cir. 1977), a licensee filed an action challenging the underlying patent, and simultaneously filed a motion to enjoin the licensor from terminating the license agreement. The district court ordered that the royalty payments be deposited with an escrow agent pending the decision on the merits of the challenge to the patent's validity. The court of appeals

reversed, holding that the licensor had the right to terminate the license agreement if the licensee breached its obligation to pay the royalties. The court declined to rule on the issue of whether the licensee would be entitled to recover the royalties if it succeeded in having the patent declared invalid.

[1] The Shivvers holding directly controls this motion. The fact that the underlying patent was held invalid in a different lawsuit does not distinguish the facts of this action from Shivvers. The adjudication of invalidity of the patent is currently on appeal, and the Court will not speculate as to the outcome of the appeal.

As in Shivvers, this Court need not rule at this time on how much, if any, of the royalty payments made by TPL to Cordis may be recoverable should the patent ultimately be invalidated. It is sufficient to note that while the Eighth Circuit has not yet addressed this issue, a number of other circuits have. See, e.g., Precision Shooting Equipment Co. v. Allen, 646 F.2d 313, 210 USPQ 184 (7th Cir. 1981); Warner-Jenkinson Co. v. Allied Chemical Corp., 567 F.2d 184, 193 USPQ 753 (2d Cir. 1977); St. Regis Paper Co. v. Royal Industries, 552 F.2d 309, 194 USPQ 52 (9th Cir.), cert. denied, 434 U.S. 996 (1977); Atlas Chemical Industries, Inc. v. Moraine Products, 509 F.2d 1, 184 USPQ 281 (6th Cir. 1974).

[2] Finally, the Court finds that there is no evidence before it that Cordis would be unable to repay the royalties in the event that it was ordered to do so. Therefore, the option of requiring royalty payments to be paid into an escrow account is inappropriate in this action. Shivvers, 557 F.2d at 1260; see Precision Shooting Equipment, 646 F.2d at 321.

Accordingly, *It Is Hereby Ordered* that the plaintiff's motion for a preliminary injunction is denied.

Entry of this Order is hereby stayed for ten days.

District Court, E. D. Illinois

Precision Shooting Equipment Co., et al.
v. Allen, et al.

No. CV-77-0152-D Decided Oct. 3, 1977

PATENTS

1. Estoppel — As to validity — Licensor or licensee (§35.156)

Licensee may contest validity of licensed patent, may challenge whether certain products fall within license agreement, and may challenge whether he is entitled to more favorable terms that may have been given to other licensees.

2. Estoppel — As to validity — Licensor and licensee (§35.156)

Title — Licenses — Royalty provisions — In general (§66.4231)

Patent licensee who wishes to continue using patent cannot withhold royalty payments without risking patent infringement suit and injunction against all future use of patent.

3. Title — Licenses — Royalty provisions — In general (§66.4231)

Patent owner should be deprived of its right to receive royalties in interim, where there is strong indication that it might not be financially able to repay royalties at end of litigation and royalties are safely paid into escrow.

4. Prior adjudication — In general (§56.01)

Doctrine of Blonder-Tongue Laboratories, Inc. v. University of Illinois Foundation, 169 USPQ 513, requires that once patent is declared invalid in any district that judgment automatically applies to any other district.

Action by Precision Shooting Equipment Co. and Paul E. Shepley, Jr., against Holless W. Allen, and Allen Archery, Inc. for declaratory judgment of patent invalidity. On plaintiffs' motion for preliminary injunction. Motion granted.

Thomas E. Harrington, and Busch, Harrington & Porter, both of Champaign, Ill., and Jack E. Dominik, P.A., Miami, Fla., for plaintiffs.

F. Daniel Welsch, William A. Young, and Young, Welsch, Young & Hall, all of Danville, Ill., Huebner & Worrel, Los Angeles, Cal., and D.A.N. Chase, Kansas City, Mo., for defendants.

Morgan, District Judge.

This cause coming on to be heard on the motion of plaintiffs for a preliminary injunction against defendants, and due notice having been given to the defendants, and plaintiffs being represented in open court by their attorney, Thomas E. Harrington of Busch, Harrington & Porter; and defendants being represented in open court by their attorney, D.A.N. Chase of Kansas City, Missouri, and their local counsel, F. Daniel Welsch and William A. Young of Young, Welsch, Young and Hall; and the court having considered the Complaint, the Amended Complaint, the affidavits submitted in support of Plaintiffs' Motion for Temporary Restraining Order, the testimony of Douglas Allen, President of defendant Allen Archery, Inc., and the exhibits submitted to the court during the hearing in open court and in camera on the motion, and having heard the arguments of counsel, makes the following findings of fact and conclusions of law:

Findings of Fact

1. The Letters Patent in question were granted to defendant Holless W. Allen in 1969, who sold his interest therein to defendant Allen Archery, Inc., a corporation, by written assignment recorded in the U.S. Patent Office on June 18, 1974.

2. Said corporation is wholly owned by defendant Holless W. Allen and members of his family. Certain other matters pertaining to Holless W. Allen, Allen Archery, Inc., said assignment and said patent, including financial statements, were the subject of in camera proceedings and at defendants' request are the subject of a separate protective order entered herein. Said matters, including testimony and exhibits (to be kept under seal and to be opened only on order of court), are a part of the record of these proceedings and were considered by this court in arriving at the decision herein expressed.

3. Plaintiffs, pursuant to license agreement (Exhibit A attached to the Complaint herein), have paid approximately $285,000 in royalties prior to August 10, 1977, to defendants (or either of them) pertinent to the patent in question, and it appears reasonably likely that plaintiffs will, within the next two years, become obligated under said license agreement for further royalties

to defendants in an amount approximating $500,000.

4. At the time of filing the Complaint, plaintiffs paid into this court the sum of $47,901.39, being the amount of the royalty payment admitted to be due under the agreement attached to the Complaint, and an additional $6,000 as bond pursuant to this court's Temporary Restraining Order, dated August 16, 1977.

5. Defendants' said patent has been, is, and it appears reasonably likely that it will in the future be the subject of other litigation.

6. Defendants, or one of them, being the patent owners, have disclaimed claims 1, 2 and 11 of the subject patent.

7. It is reasonably likely that the plaintiffs may prevail in this declaratory judgment action, and in that event it is reasonably likely that the defendant corporation would be unable to repay the substantial royalties paid by plaintiffs under said License Agreement.

8. Plaintiffs have reasonable fear that they would be irreparably damaged if required to pay royalties directly to defendants, or either of them, during the pendency of this lawsuit, because of potential inability to repay.

9. Where any finding of fact, in whole or in part, may be construed as a conclusion of law, it should be so construed.

Conclusions of Law

[1] 1. A licensee may contest the validity of a licensed patent, may challenge whether certain products fall within a license agreement, and may challenge whether he is entitled to more favorable terms which may have been given to other licensees. Lear v. Adkins, 395 U.S. 653, 162 USPQ 1 (1969).

[2] 2. A patent licensee who wishes to continue using a patent cannot withhold royalty payments without risking a patent infringement suit and an injunction against all future use of the patent.

[3] 3. Where there is strong indication that the patent owner might not be financially able to repay royalties at the end of the litigation, it should be deprived of its right to receive royalties in the interim, so long as they are safely paid into escrow as here required.

[4] 4. It is clear under the "Blonder-Tongue" doctrine [Blonder-Tongue Laboratories, Inc. v. University of Illinois Foundation, 402 U.S. 313, 169 USPQ 513 (1971)] that once a patent is declared invalid in any district, that judgment automatically applies to any other district.

5. The issue of escrowing royalty payments where the defendant's financial ability to repay has been challenged appears to be a question of first impression within the Seventh Circuit.

6. No damage has been caused to defendants as a result of the temporary restraining order granted heretofore; defendants had intended to raise the subject matter of this complaint in this district; and there is a reasonable likelihood of success by plaintiffs in their declaratory judgment action and thus a reasonable likelihood of irreparable damage to plaintiffs if they were required to continue to pay royalties to defendants, or either of them, during the period required for such litigation.

7. Wherever any conclusion of law, in whole or in part, constitutes a finding of fact, it shall be so construed.

* * *

It is therefore ordered that the defendants Holless W. Allen and Allen Archery, Inc., a corporation, and their officers, attorneys, servants, agents, associates, members, employees, and all persons acting in conjunction with the defendants or at their direction be, and they are hereby, until further order of this court, restrained and enjoined from bringing any other action in any other court, whether state or federal, against the plaintiffs or their assigns with regard to any subject matter which has been, reasonably could be, or will be pleaded to or counter-claimed in this action, until the subject matter raised by the Complaint herein has been disposed of by a final court order, or otherwise by agreement of the parties approved by this court.

It is further ordered that the plaintiffs, Precision Shooting Equipment Co. and Paul E. Shepley, Jr., or their assigns, shall continue to pay into this court all amounts of royalties which shall accrue under the License Agreement attached to the Complaint, pending the final disposition of this matter by court order, or otherwise by agreement of the parties approved by this court; and it is further ordered that all royalties paid in to court by plaintiffs shall be deposited by the clerk of this court in an interest bearing account or invested in interest bearing securities of the United States of America until further order of the court.

It is further ordered that the bond on said temporary restraining order is hereby dis-

charged, but that security in the amount of $6,000 shall be deposited by plaintiffs for the purposes of this preliminary injunction, and that plaintiffs hereby are permitted to allow said $6,000 on deposit to remain as this security under Rule 65(c), Federal Rules of Civil Procedure.

Commissioner of Patents and Trademarks

Newland, Jessel, and Duffett
v. Jessel, Duffett, and Mix

Decided June 24, 1977

PATENTS

1. Applications for patent — In general (§15.1)

Oath (§47)

Patent Rule 56 states that application that is signed and sworn without actual inspection by applicant may be stricken.

2. Applications for patent — In general (§15.1)

Oath (§47)

It is acceptable for application to be read to applicant who is illiterate, blind, or does not understand English or explained to him in way that allows him to suppose with some confidence that application he is called on to sign covers invention that he believes he has invented, to constitute actual inspection for purposes of Patent Rule 56; however, signing in blank or with no inspection and without other circumstances reasonably leading to such confidence on part of applicant justifies striking application as not vouched for by applicant.

3. Applications for patent — In general (§15.1)

Oath (§47)

Actions of coinventor of plant whose principal characteristic was color, who looked at picture showing color and discussed application with attorney, and who would have realized that stated reference to plant's genetic parent was incorrect if he had read application completely, but who knew nothing of data on asexual reproduction and botanical characterization supplied by coinventors, does not amount to heedless signing of application in blank, although it is doubtful that it qualifies as actual inspection.

4. Applications for patent — In general (§15.1)

Oath (§47)

Allegation that inventors "have read the foregoing specification and claims" is not required by statute or rule and does not bear in substantive way on patentability of alleged invention; requirements of 35 U.S.C. 115 and implementing rules are concerned with substance not form.

5. Applications for patent — In general (§15.1)

Defenses — Fraud (§30.05)

Pleading and practice in Patent Office — In general (§54.1)

Commissioner of Patents is required to strike application when fraud was practiced or attempted on Patent Office by applicant in connection with application; striking is discretionary when application was executed in blank or without actual inspection and is justified if resulting application does not fairly reflect applicant's invention or if he has not taken reasonable steps to satisfy himself that application does reflect his invention.

Patent interference No. 98,252 between Walter H. Jessel, Jr., William E. Duffett, and Marvin D. Mix, application, Serial No. 232,393, filed March 7, 1972, and Robert N. Newland, Walter H. Jessel, Jr., and William E. Duffett, application, Serial No. 218,569, filed Jan. 17, 1972. On party Jessel's petition for reconsideration of decision striking application and dissolving interference. Decision vacated in part.

Original opinion 195 USPQ 678; see also 195 USPQ 674.

Stephen W. Blore, Portland, Ore., for party Newland.

Daniel P. Chernoff, and Jacob E. Vilhauer, Jr., both of Portland Ore., for party Jessel.

Dann, Commissioner of Patents and Trademarks.

The party Jessel et al. has filed a petition to the Commissioner requesting reconsideration of that part of the Commissioner's decision of February 25, 1977 which held that the Jessel et al. application should be stricken from the files under the provisions of 37 CFR 1.56, based on the failure of inventor Mix to read the application before signing it.

After careful reconsideration of the facts and arguments presented, it is concluded that the result reached in the February 25, 1977 decision represented too inflexible an application of 37 CFR 1.56.

[1] That rule states that an application *may* be stricken if it is signed and sworn without actual inspection by the applicant. Although it is admitted that Mix did not read the application "throughout" before signing it, petitioner nevertheless urges that there was sufficient actual inspection to preclude any striking under 37 CFR 1.56.

[2] What is needed to constitute actual inspection? It is certainly desirable that applicants read their applications carefully and completely before signing them. When the applicant is illiterate, blind, or does not understand English, it is acceptable for the application to be read to him or explained in a way that allows him to suppose with some confidence that the application he is called on to sign covers the invention that he believes he has invented. On the other hand, a signing in blank or with no inspection and without other circumstances reasonably leading to such confidence on the part of the applicant would justify striking the application as in essence not vouched for by the applicant.

[3] In the present case it is contended that Mix adequately inspected the application at the time of signing when he looked at the picture of the flower and discussed the application with his attorney. The principal characteristic of the new plant variety known to Mix was its color, which was shown in the picture. He indicated that he knew nothing about the data on the asexual reproduction and the botanical characterization supplied by his co-inventors, which constituted the bulk of the specification. It is claimed that he would have had no better idea of the application's coverage if he had read it completely, except that he would have realized that the reference to Gay Anne as the genetic parent of the new variety was incorrect.

All of this adds up to something more than a heedless signing in blank, though it is doubtful whether it is enough to qualify as an actual inspection. Assuming arguendo that it does not, there remains the question of whether the circumstances call for the severe penalty of striking the application.

There is no suggestion that Mix's failure to read the application was part of an effort to deceive the Patent and Trademark Office in any way or that it had that effect. As noted, Mix testified that if he had seen the reference in the specification to Gay Anne as the genetic parent of the new variety Copper Anne, he would have realized that this was incorrect. This corroborates his admission that he failed to read the specification, but the correct identification of the parent is evidently not significant in providing a description of the new variety. With this one fairly unimportant exception, the application was what he supposed it to be and what he intended to have filed in the Patent and Trademark Office. The circumstances are consistent with a conclusion that Mix's failure to more adequately inspect the application occurred because he was satisfied that the application covered what he believed to be his invention.

[4] The original declaration signed by Mix stated inter alia that "* * * we have read the foregoing specification and claims * * *" Mix apparently failed to read these words as well as those constituting the specification and the claims. To sign a declaration under pain of perjury without reading it is most reprehensible. Nevertheless this particular allegation is not required by statute or rule and does not bear in a substantive way on the patentability of the Jessel et al. application: "The requirements of section 115 and of the implementing rules are concerned with substance and not with form."[1]

[5] Under the present form of 37 CFR 1.56, the Commissioner is required to strike an application when fraud was practiced or attempted on the Office in connection with it. Striking is discretionary when the application has been executed in blank or without actual inspection. Striking is justified under these circumstances if the resulting application does not fairly reflect applicant's invention or if he has not taken reasonable steps to satisfy himself that the application does so reflect his invention.

---

[1] Carter-Wallace, Inc. v. Davis-Edwards Pharmacal Corp., 173 USPQ 65, 91 (1972). In this case execution of an application which was later partially retyped and a claim added before filing was held not to be defective.

APPENDIX 8

UNIVERSITY OF CALIFORNIA, LOS ANGELES UCLA

BERKELEY · DAVIS · IRVINE · LOS ANGELES · RIVERSIDE · SAN DIEGO · SAN FRANCISCO SANTA BARBARA · SANTA CRUZ

SCHOOL OF LAW
LOS ANGELES, CALIFORNIA 90024

September 6, 1983

SEP

The Honorable Robert W. Kastenmeier
U. S. House of Representatives
Committee on the Judiciary
Washington, D. C. 20515

Re: Pending Bills Relating to the Patent Laws;
Your Letter of August 18, 1983

Dear Congressman Kastenmeier:

This responds to your letter of August 18, 1983 requesting my comments on various pending bills relating to the patent laws. I am honored that you asked me and I am happy to provide my observations.

Before I begin, a disclosure is in order. In addition to being an adjunct lecturer in patent law on the U.C.L.A. Law School faculty, I am also a full-time private practitioner conducting an active litigation practice in the patent and trademark field. However, in this letter, I will attempt to provide the neutral view which you requested based on my scholarly activities.

H.R. 3577 (Relating to Protection of Process Patents Outside the United States)

I believe the proposed amendment to Section 271 of 35 U.S.C. set forth in new paragraph (a)(2) of the proposed bill will provide a significant strengthening of the incentive to invention provided by patents without offsetting anticompetitive effects. There is no doubt that, at present, some holders of U. S. patents on process inventions are being deprived of the patent reward for their contributions by off-shore use of the process and importation of the resulting product. Although 19 U.S.C. 1337(a), an ITC proceeding, provides some relief, there is no possibility of a damage award under such proceeding. A particularly serious problem is that the intense pace and expense of ITC proceedings can simply be too much for an individual inventor or an inadequately-financed business to bear. A suit for patent infringement in the United States District Court would offer a preferable avenue for relief in such cases.

The second portion of the bill, Section 295, would establish a presumption that the product was produced by the patented process where the court found there was substantial likelihood thereof and that the client had exhausted all reasonably available means through discovery to determine the process actually used. Notwithstanding these safeguards, I think proposed Section 295 overreaches and would have potentially anticompetitive results which outweigh its benefits. Certainly, I am aware of the difficulty of obtaining discovery in foreign countries that the patent owner would face. However, I think that, by leaving the burden of proof at a normal "preponderance of the evidence" standard for proving infringement, there are still preferable alternatives to the proposed presumption that should be available to a patentee to meet that burden, e.g., that no economically alternative process for making the product was known, that use of the process inherently produced side products detectable in the accused product, and so on. The fatal problem I see with the presumption of Section 295 is that the products that are imported are often basic staples, e.g., ordinary gasoline obtained by a new refining process. Such a staple product may enter the United States and be comingled with other products and pass through a succession of hands before it reaches the possession of the defendant who is charged with infringement. Consider a purchaser of a staple product, such as gasoline, who is charged with infringement. Such a user may have no practical way of tracing back through the chain of distribution to find out how the product was made to establish that an alternative noninfringing process was used, to establish its freedom from liability, or that the commodity has been so mingled with major quantities of product produced by a noninfringing process to reduce the extent of its liability. The existence of such a presumption would, I foresee, encourage process patent owners to litigate against weakly funded defendants and could have anticompetitive effects which far exceed the beneficial effects that the existence of such a presumption could be expected to have.

In sum, I believe that the first part of H.R. 3577 represents sound legislation but that the second part of the bill, proposed Section 295, should be eliminated, leaving the burden of proof on the patent owner, as it is at present, by a preponderance of the evidence.

H.R. 3256

A copy of this bill was enclosed with your letter. Because the bill does not relate to patents, I assume it was included by error in place of H.R. 3286 which is referred to in your letter, but was not enclosed.

Accordingly, I have not provided any comments on H.R. 3256.

H.R. 2610 (Defensive Patents)

In my view, the proposal for a defensive patent, while basically sound, requires revision. The defensive patent concept should be confined to the purpose for which it was originally conceived by its proponents, namely as a vehicle for the United States government to obtain defensive publications. The purpose of making such an instrument available to the Government would be to insulate it from prospective liability to any private parties who later independently make the same inventions, in a way that would relieve the government agency obtaining the patents, and the United States Patent and Trademark Office examining the patents, from the full effort and expense involved in patent preparation, prosecution and examination.

By broadening the original concept to make the defensive patent available to private parties, opportunities will be ripe for exploitation of the name and prestige of a "patent" by unscrupulous promoters of such quack remedies as cancer cures, automobile gas saving gadgets, baldness potions, aphrodisiacs and the like. The word "patent" has historically denoted an instrument conferring an exclusionary right granted by the sovereign. As such, a patent is accorded considerable respect by the public. Many, perhaps most, citizens are inclined to honor patents during their lifetime to the overall benefit of the inventive community and the advancement of technology. The existence of an instrument issued by the United States Patent Office as a "patent" which would be issued without the examination for utility, novelty and obviousness subjected to real patents, would open the door for promoters of quack products to advertise them as patented with all the connotation of government approval that the word connotes to unsophisticated members of the public. To confer that term upon a mere publication cannot fail to weaken the general respect accorded to true patents.

Additionally, there will be some members of the public, who upon seeing the word "patent" upon such an instrument will mistakenly conclude that the subject matter is subject to some type of exclusionary right which forbids its use. This could be particularly pernicious because the subject matter of such instruments may well be matter that is old and in the public domain because it has escaped the normal examination scrutiny of the Patent Office. It is not difficult to foresee that there may be occasions when owners of so-called defensive patents may make verbal or other

threats of enforcement against persons who are too unsophisticated to realize that the exclusionary rights of a true patent are missing.

A further reason for not conferring the term "patent" upon such an instrument is the potential weakening of the position of the United States in resisting attempts of Eastern-bloc countries to obtain full priority rights for inventor's certificates under the Paris Treaty. As you are aware, the Paris Convention provides that where an applicant has filed a patent application in the country of origin, a counterpart application may be filed in a foreign country within one year and be treated as if filed in the foreign country on the date of filing in the country of origin, providing both countries are signatories. This is a most valuable right to overcome intervening prior art. At present, priority rights in the United States based on an earlier filed application for an inventor's certificate in a foreign country are available only if the foreign country also provided patent protection as an alternative to an inventor's certificate. In some classes of invention, for example, pharmaceuticals in the Soviet Union, only inventor's certificates are available. The United States, I understand, has resisted attempts to revise the Paris Convention that would confer priority rights on the basis of inventor's certificates in such circumstances because it would result in a nonreciprocal situation. For example, a Russian inventor could obtain pharmaceutical patents in the United States but a U. S. inventor could not obtain a corresponding patent in the U.S.S.R. In resisting attempts by Eastern-bloc and third world countries to extend priority benefits to inventor's certificates, it has been the position of the United States that the absence of an exclusionary right, or the alternative availability of an exclusionary right, prevents an inventor's certificate from amounting to a patent application upon which priority rights could be based. For the United States to now apply the term patent to an instrument lacking an exclusionary right would, I understand, significantly weaken the position that has been taken with respect to revision of the Paris Convention.

In sum, while I am not opposed to the defensive patent in principle, it is my opinion that H.R. 2610 needs two essential revisions:

1. The availability of defensive instruments should be confined to the United States government, and

2. The instrument that results from an application as to which all remedies have been waived should be called by some name other than a "patent," e.g., a Statutory Invention Disclosure.

H.R. 3285 (Relating to Employed Inventors)

I think that H.R. 3285 would be a serious mistake.

Let me briefly review the disadvantages I see with the proposed legislation:

1. The bill is based on the false premise that presently employed inventors lack adequate incentive to invent and are, therefore, not making some invention that they would otherwise make. From my work with corporate clients, this simply is not true. Most corporate inventors have adequate incentive to invent in the form of salary and increases in salary, promotions for successful inventions, voluntary bonus plans and the status and recognition that accrues to successful inventors.

2. The bill takes no account of the economic reality that many, perhaps most, inventions are not a commercial success. Yet the employer must bear the cost of the unsuccessful inventions and recoup them out of the cost of development of the unsuccessful ones. In addition, it is the employer, not the employee that bears the often enormous litigation expense of enforcing the patent if an infringer appears. The proposed invention would put the employee-inventor of a commercially successful invention in a situation in which he would benefit whenever there was a winner but the employer would be left to bear the cost of all the losers and the cost of enforcement. The present situation where an employer can calculate the costs of his R & D development based on the knowledge of the salaries that he is paying to his R & D personnel provides for certainty in calculating their costs to those who must provide the risk capital, that the proposed bill would destroy.

3. The existence of such a scheme would discourage the patenting of inventions, particularly in small companies. Employers would be far more likely to take the position that an employee's contribution was an unpatentable improvement which should be practiced as a trade secret, if this could be a way of avoiding payment to the employee. As a result, a primary objective of the patent system, the rapid public dissemination of new improvements, would be undermined.

4. The proposed legislation would inevitably spawn many lawsuits by employees against employers. The cost of litigation would likely be taken out of corporate R and D budgets, thereby reducing the amount of money available for technical work and diverting it to the pockets of lawyers. The net result would be increased employer-employee friction and turnover and reduced bottom line expenditures on technological advance.

5. Proposed Section 435, for an Arbitration Board in the Patent and Trademark Office, would be an almost certain failure. While I have the highest respect for the ability of the Patent and Trademark Office to examine patent applications and perform those essentially technological and legal tasks, the Patent Office examining staff lacks the expertise in economics, labor relations and other nontechnological areas to perform the allocation of economic values that would be involved in such a proceeding. Moreover, in an essentially economic dispute, credibility of the claimant would play an important part in any true determination of awards. Yet the Patent Office experience, in its now-aborted reissue protest proceedings, proved that it is singularly ill-equipped to make determinations outside its expertise.

I could go on but I think that every portion of this bill is so deeply and basically flawed that it would serve no useful purpose to do so.

H.R. (Merger of Board of Appeals and Patent Interferences)

So long as the patent statute continues to provide for interference proceedings, it would be my opinion that this proposed bill, to consolidate the Board of Appeals and the Board of Patent Interferences, is sound and should be enacted.

Beyond that, I believe the time is long overdue that the patent laws should be revised to eliminate the anachronistic, costly, time-consuming and utterly wasteful practice of patent interferences. Most other advanced technological societies, such as those of western Europe, function perfectly effectively with a first-to-file system. Even within our interference system, the first to file wins about 70 percent of the time.

We are, in effect, maintaining in existence an out-of-date, arcane system for determining priority in a miniscule fraction of the total number of patent applications filed each year. So far as I can determine, from conversations with numerous patent lawyers and from reported votes taken at various patent bar meetings, opinion is almost equally divided between those who would scrap the system in favor of a first-to-file system and those who would retain the present system but seek to streamline it. However, the proposals of those who would seek to streamline it would reduce the opportunities for the second-to-file to gain the evidence necessary to meet its already daunting burden of proof. As a result, the interference system is tending closer and closer to a de facto first-to-file system anyway.

Moreover, interference practice vastly favors the large company, because of its expense and because most interferences are handled by corporate patent departments rather than outside counsel. For an individual inventor or for a small corporation to contest an interference is an extremely costly and difficult undertaking.

For all these reasons, I think it would be a major contribution for Congress to take the initiative itself and abolish interference practice.

S. 1535 (Miscellaneous Unrelated Patent Proposals)

-Proposed Amendment to 35 U.S.C. 271(e)

See my comments above concerning H.R. 3577.

I think the language of the House bill is preferable because it defines the period in which such conduct shall constitute an infringement as being "during the term of the patent therefor." The Senate bill is sufficiently vague that it would create arguments concerning product produced abroad by a process which was made (a) before the issuance of a patent but imported subsequent to the issuance of a patent and (b) produced abroad during the period of a patent but imported subsequent to expiration of the patent. The House bill, H.R. 3577, is not attended by these defects of the Senate bill.

-Proposed Amendment (f) to 35 U.S.C. 271

I have a number of doubts about the desirability and effectiveness of proposed Section (f). As to the desirability, I think that, on balance, such a provision would strengthen the rights of U. S. patent owners and should be adopted. As to effectiveness, however, the proposed language could easily be evaded. A

U. S. supplier, intending to evade the statute would, merely produce and export less than all of the elements of the patent claim likely to be infringed and would leave an off-shore assembler to obtain the remaining elements of the claim from an off-shore source and assemble the entire device. Because the statute could be so easily evaded under its present wording, I doubt that it would be a worthwhile addition to the patent laws.

-Proposed Amendment to Sections 2, 3 and 4 of Section 184 of Title 35

These proposed amendments, dealing with obtaining a license to foreign file, are eminently sound and noncontroversial. They should be included in the earliest bill relating to patents that is likely to be passed through Congress.

-Section 5, Proposed Amendment to Section 103

In my view, the amendment proposed by Section 5, to 35 U.S.C. 103, would be ill-advised. I appreciate that support for this proposal exists amongst large corporate patent departments which do have understandable difficulties in deciding who should be named as joint inventor of a patent. However, these difficulties have, to all practical purposes, been overcome by the liberal provisions which now exist in the statute, and under the case law, allowing correction of misjoinder of inventor. Thus, the proposed amendment is not truly necessary to effect the purposes which such proponents seek to achieve.

The negative side of the proposed amendment is that it might tend to weaken the protection provided by the derivation section of the patent statute, 35 U.S.C. 102(f) against the obtaining of patents by those who did not truly make any inventive contribution but merely copied the work of others. In litigation, I have seen instances where patents have been applied for in the name of persons who were not the true inventors but were in a position to know of the work of others "by virtue of his or her employment." I do not believe that this proposed amendment is necessary, in view of these provisions for liberal correction of an innocent error in judgment in naming inventors.

-Section 6, Proposed Revision to 35 U.S.C. 116

This is a very sound proposal which should be noncontroversial and deserving of passing, in my opinion.

-Sections 7-9, Relating to Patent Interferences

If there are to be patent interferences, Sections 7-9 of S. 135 appear to be thoroughly justified. However, in my

opinion, the most urgent need is for a legislation which would eliminate interferences, as discussed above.

-Section 10, Addition of Proposed
35 U.S.C. 295 Re Licensee Estoppel

This provision is thoroughly necessary to protect the right of patent licensors. The United States Supreme Court decision in Lear v. Adkins which allowed a licensee to challenge the validity of a licensed patent, has accomplished its desired objective of freeing dubious patents to be challenged by those parties having the strongest interest in judicial scrutiny of such patents, namely the licensees. However, as often happens following a Supreme Court decision, the pendulum has swung too far in some of the lower courts which have placed the licensee in the "heads I win - tails you lose" position of being able to challenge a licensed patent by a declaratory judgment action, pay license royalties into an escrow and still hang on to the patent license in the event that the validity of the patent is sustained Precision Shooting Equipment Co. v. Allen, 196 U.S.P.Q. 502 (E.D. Ill. 1977). Such a result places the patent licensor, which may often be an individual or a corporation lacking the resources available to defend the strength of its patent, in an impossible position where its cash flow is cut off and yet it cannot terminate the license and go out and seek an alternative licensee that would provide a cash stream sufficient to enable the patent licensor to adquately contest his side of the lawsuit concerning patent validity. The recent court decisions have, fortunately, perceived that the pendulum has overswung the point of fairness to licensors, Telectronics Pty Ltd. v. Cordis Corp., 217 U.S.P.Q. 1374 (D.Minn. 1982). However, the law is not yet uniform in all Circuits. Congress could stand back and allow the Court of Appeals for the Federal Circuit to rule on this issue which would spare Congress the task of legislation on the point. If, however, there should be a patent bill going through Congress, this would appear to be a suitably noncontroversial, sound proposal to justify its enactment.

Conclusion

I very much appreciate having been invited to express my opinions. Because I live in the Congressional District of one of the other members of your Committee, Carlos Moorhead, I am taking the liberty of copying him on this letter.

Yours sincerely,

Laurence H. Pretty

LHP:var
cc: Dean Susan Prager, U.C.L.A. Law School
The Honorable Carlos Moorhead

USF
University of San Francisco

San Francisco, CA 94117

School of Law
Kendrick Hall (415) 666-6202

October 12, 1983

Hon. Robert W. Kastenmeier
U.S. House of Representatives
Judiciary Committee
Washington DC 20515

Re: HR 3878 : "National Productivity and Innovation Act of 1983"

Dear Representative Kastenmeier:

Thank you for your reply of September 29, 1983 to my comments regarding various patent law reform bills. You also sent me a copy of HR 3878 and I would like to convey to you my strong support for this bill.

For over 20 years I have studied and written in the field of the interface between intellectual property rights and antitrust law. I have also over the years taught several seminars for practicing attorneys in this field. Thus, the problems addressed by the bill are intimately familiar to me. As to my basic perspective on these matters, I like to think of myself as a moderate in both fields of intellectual property and antitrust. For example, I am neither unthinkingly protectionistic for patents nor am I an "antitrust zealot" who hates all patents a la Justice Douglas. In antitrust matters, my views occupy a middle ground between the extremes of the super-traditionalist populists and the more aggressive adherents of the "Chicago School". I am a co-author with Professors Oppenheim and Weston of "Federal Antitrust Laws" (1981), a casebook which attempts to present a balanced view of the whole spectrum of thought on antitrust matters. I believe that both intellectual property and antitrust policies must co-exist in a mix which hopefully will produce the most hospitable environment for technological progress.

I believe that in the past few decades, the balance in the case law has swung slowly, but clearly, in the direction of giving too much weight to rigid antitrust policies and has as a result created a definite chilling effect on the incentive of businesspeople to engage in such activities as joint research and development and licensing of technology. The case law in this area tends to rest primarily upon unthinking repetition of shibboleths of the past. The case law has become ossified into rigid rules condemning as a matter of course certain categories of conduct which most people today would label as competitively neutral. With a few notable exceptions, judges have ceased to analyze and think about the real competitive impact of such things as restrictions in patent licenses. In sum, the interface between intellectual property and antitrust has in practice lost any coherent logical or intellectual underpinnings. Thus, Title

III, §27 would restore the need for judicial analysis by requiring application of the traditional rule of reason. Cases could no longer be argued and decided simply by the incantation of outmoded precedent.

In this connection, I would draw your attention to the word "solely" in Title III, §27(a). While the limiting word appears in the official print of HR 3878, it does not appear in a reprint in the September 15, 1983 Bureau of National Affairs Patent, Trademark and Copyright Journal. This may indicate that the word "solely" was a last-minute insertion. In my opinion, the bill should not be limited so as to forbid use of the illegal per se rule only to agreements which "solely" convey rights under patents, copyrights, trade secrets, trademarks, know-how or other intellectual property. Many commercial licenses contain other provisions such as the lease of hardware or provisions for services. The addition of such other provisions should not remove a license from the operation of §27(a). Deletion of "solely" would, I believe, make it clear that the rule of reason must be followed as to those parts of agreements which convey intellectual property rights and that, if appropriate, a per se rule could be invoked as to the other portions of such agreements.

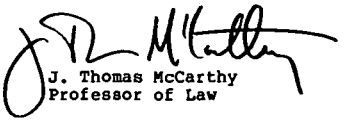
Title IV is also much-needed. I fully agree with Attorney General Baxter's comments to the Subcommittee on September 14, 1983 to the effect that the "misuse" doctrine has drifted far from the traditional moorings of antitrust policy. I have often been asked to render an opinion to a business as to whether a proposed license provision might or might not be found to be "misuse". It is almost impossible to predict, for a realistic reading of the case law reveals that judges rest their finding of "misuse" on nothing more than their personal perceptions of what seems "fair" at the time. The challenger who asserts "misuse" need not have suffered any competitive impact whatever and in fact, the cases make it clear that no finding of any violation of the antitrust laws is necessary. Predictability and coherency of the "law" is almost totally lacking. Since a finding of "misuse" can effectively deprive a patentee from ever enforcing its patent rights again, the impact is sometimes even more devastating than a treble damage judgment under the letter of the antitrust laws.

I have previously indicated to you in my letter of September 6, 1983 my support for a revision of the process patent provisions such as is contained in Title V of the bill.

While I am somewhat less enthusiastic, I do also support Title II of HR 3878 which requires that joint research and development programs be tested by the rule of reason and restricts recovery to only actual damages for successful antitrust prosecution against joint R & D programs notified to the Department of Justice and the FTC. If you have your staff quickly review the November 1980 Antitrust Division "Antitrust Guide Concerning Research Joint Ventures", you will see that it is a reasonably balanced presentation of the current state of the case law. But

there are so many "ifs, ands and buts" in the analysis and so many points at which per se illegality may be triggered that legal advice is a very complicated and risky undertaking. This always introduces a considerable degree of uncertainty and hesitation among those who propose the joint venture. In my opinion, Title II is a reasonable compromise among the various proposals introduced to reduce this risk.

Sincerely,



J. Thomas McCarthy
Professor of Law

Law School
MU Marquette University
1103 West Wisconsin Avenue
Milwaukee, Wisconsin 53233
414/224-7090

SEP 12 1983

September 6, 1983

Hon. Robert W. Kastenmeier
United States House of Representatives
Subcommittee on Courts, Civil Liberties
and the Administration of Justice
Committee on the Judiciary
Washington, D.C. 20515

Dear Mr. Kastenmeier:

In your letter of August 22, you solicit my views on various legislative measures that have been introduced in the Congress, or are to be introduced. I am pleased to offer you my comments on these proposals.

H.R. 3285, 3286. Your letter did include a copy of H.R. 3285, but H.R. 3256 was sent instead of H.R. 3286. H.R. 3285 would be a major contribution to the protection of inventors' rights and should be enacted into law. I have three comments to offer with regard to this bill. First, H.R. 3286, from what I gathered in reading your remarks in the Congressional Record of June 13, would set standards for preemployment assignments of inventions that do not arise directly out of the employment situation. I take it that H.R. 3286 would not apply to the employee hired for purposes of research and development. H.R. 3285 would apply to such inventors and would provide an arbitration procedure for determining what the amount of compensation should be for "service inventions." Section 401 of the bill allows the parties to agree that a "free invention" is the exclusive property of the employee. Section 414(b)(1) allows the parties to agree as to the amount of compensation, "before issuance of the patent on the service invention." Reading Section 414 as a whole, I believe that the courts would construe it as applying to that period of time after the service invention has been developed. I am certain that you would not have the bill apply to those employer-employee contracts that have been entered into prior to the conception of the invention. A prior contract might govern an invention that turns out to have a fair market value far in excess of what either party predicted. Could the employee then demand compensation in excess of that contracted for? An argument of violation of substantive due process could be made. Section 432, especially, may be subject to a substantive due process argument. My point is applicable to

general employment contracts, whether entered into before or after the inception of the employment relation.

My second comment relates to the definition of "service invention" in Section 402(3)(A) and (B). "(G)rown out of the type of work performed by the employee" and "derived from experiences gained on the job" seem unnecessarily broad. In Roberts v. Sears, Roebuck & Co., 573 F.2d 976 (7th Cir.), cert denied, 439 U.S. 860 (1978), one Peter M. Roberts, a lowly sales clerk in Sears' hardware department, invented a quick-release socket wrench that allowed the user to change sockets with one hand. The employer then negotiated an assignment of the invention, which Roberts had made at home on his own time. For a maximum payment to Roberts of $10,000, Sears obtained rights to the wrench and sold 19 million copies in ten years, at a profit of one to two dollars each. Did Roberts' invention grow out of the type of work performed? He was a sales clerk. Was it derived from experiences gained on the job? Is this the type of "service invention" that you contemplate in this bill? Does not the definition need some clarification?

My third comment relates to the requirement, under Section 431, that the employee give written notice of any free invention to the employer so that the employer can determine whether or not the invention is a free invention. My problem with this section is that the invention is usually a trade secret for a period of time after its development and during the time the employee is either attempting to license it or is planning on developing it himself. Trade secrets lose their status as such when they become known to more than a select few to whom knowledge has been disclosed for the purpose of licensing or manufacturing. Requiring disclosure by the employee of an invention that is not a service invention unnecessarily impairs the employee's right to trade secret protection that may be vital for a short period of time. Perhaps your bill could provide for notice of the general subject matter of the invention and then submission to the Arbitration Board of Section 435 if the employer claims that it is a service invention.

H.R. 3577. Mr. Moorhead's bill might indeed close a damaging loophole in American patent law by expanding the patent infringement cause of action to include anyone who uses or sells a product produced by a patented process. It is Mr. Moorhead's stated intention to prevent sales of a product in the United States if the product was made by a patented process outside of the United States and the U.S. patentee has not authorized the practice of the process. However, the bill accomplishes much more than that. As written, the bill would create a new class of patent infringers, a class that has never been contemplated in American patent law. The bill would indict the innocent user or seller who is unaware of the fact that the production process is unauthorized. Our patent law has never expanded patent rights

to that extent and, in my opinion, such an extension of the 17-year monopoly is unwarranted. Our courts have carefully circumscribed the rights of the patentee. While ancillary rights are favored when they serve to enhance the ability of the patentee to obtain the reward that is justifiably due (e.g., license royalties and profits from sales), the courts recognize the patent as an extraordinary exclusive right in derogation of the historical distaste for monopolies of any kind. Thus, most cases limit the patent rights to those originally contemplated by the Congress under Article I, Section 8, Clause 8, of the Constitution. In my opinion, Mr. Moorhead's bill would be an untoward expansion of patent rights that cannot be justified.

A more appropriate solution to the problem addressed by H.R. 3577 would be the amendment proposed in S. 1535, in Parts I and II of the Proposal for Patent Legislation prepared by the Ad Hoc Committee to Improve the Patent Laws. Proposed Sections 271(e) and (f) of that bill would cure the problem without unduly extending the patent grant to products not intended to be subject to infringement actions.

Board of Patent Appeals/Board of Interference Merger. The bill to be introduced that would merge the Board of Patent Appeals with the Board of Interference has apparently emerged from the Patent and Trademark Office itself, as an administrative measure to simplify Patent Office organization and, perhaps, to lower administrative costs. The Board of Appeals is a true appellate board, which renders a final administrative determination before the applicant is allowed to appeal to the judicial system. The Board of Interferences is not an appellate board at all. Once the patent examiner has found that two applicants have the same invention, and they are willing to propose identical claims, the interference is declared and moves on to the Board of Patent Interferences. That Board need make no further determination of patentability, but has only the assignment of determining who is the first inventor. Thus, the objects of the bill would not be achieved. The two determinations: patentability of claims and priority of invention, must still be made separately. If it is an object of the bill to allow the merged Appeals/ Interference Board to determine inventor priority before patentability, then we have not reduced the total workload of the Patent and Trademark Office, but we have imposed an additional burden on patent applicants who have a similar invention but who may ultimately find that the invention is unpatentable, even after priority of intention has been awarded.

H.R. 2610. The most important provision of this bill would institute defensive patents in this country. I am not at all certain that this would constitute progress. The idea of defensive patents is not new, but has not, over the years, gained a substantial foothold in American jurisprudence. While the idea is in some ways quite appealing, it has its disadvantages. The public disclosure of an invention without any attendant petition

for patent protection serves to increase the store of knowledge in a particular technical art, but the total contribution may be illusory. If there is no patentability examination under Sections 131 and 132 of the Patent Code, a disclosure may be published that contains sweeping language designed to include a wide area of technical achievement that the applicant has really not reduced to practice. While the bill does contain a requirement that the description be a sufficient disclosure under the Section 112 tests, the cursory check to be made by the Patent and Trademark Office may easily fail to discover the overbreadth of the claimed invention. Such a defensive patent would foreclose protection for a patentable invention that the author of the knowhow needed to reproduce the best mode of the invention. Omission of this information enables the applicant to claim more broadly than would be allowed if the knowhow were included. A similar practice would prevail in defensive patent practice.

Even more alarming is the provision that would allow an unexamined defensive patent to serve as a basis for a priority claim when applying for a foreign patent. I do not see how an unexamined patent could be acceptable to those foreign patent offices that are now willing to issue fully empowered patents based on the examination known to have preceded the issuance of the U.S. patent.

Section 3 of H.R. 2610 would permit an appeal from a second rejection of claims by an examiner who is not a primary examiner. I welcome this as an improvement in the patent prosecution process that would help to shorten it and make it less complicated.

I have no comments to offer with regard to the remianing sections of H.R. 2610. The sections relating to international patent practice should be commented upon by practitioners familiar with that type of practice.

S. 1535. I am in accord with most of the proposals submitted by the Ad Hoc Committee to Improve the Patent Laws. I have already indicated that proposals I and II, relating to the unauthorized importation of a product made by a process patented in the United States, are to be preferred over the solution posed by the H.R. 3577. S. 1535 closes the loophole without unnecessarily expanding the exclusionary privilege of the patentee. The innocent buyer or user of the domestically made product is not exposed to liability under S. 1535 and should not be.

Proposal III should also be acted upon favorably. American inventors are in need of expediency in obtaining foreign patent protection and the proposed additions to Sections 184 and 185 should contribute to that expediency.

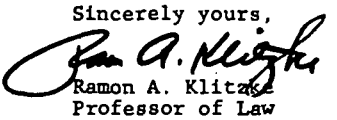
Proposal IV has two parts. The proposed addition to Section 103 of the Patent Code would exempt certain unpublished information from the prior art. Conceptually, unpublished information not readily available beyond the walls of the corporate laboratory should not be used to defeat a future patent application. There would be a very slight disadvantage to the independent inventor by reason of the elimination of a rule that has been unfavorably imposed upon corporate inventors: the broad joint inventor rule. The second part of the Proposal IV, the amendment of Section 116 of the Patent Code, would also be corrective of the unjust joint inventor requirement that has quite seriously complicated corporate patent practice for many years. Many courts have struggled with the present statutory language, "made by two or more persons jointly," and the cases have not satisfactorily resolved the issue of joint inventorship.

Proposal V would simplify patent interference practice. There is no area of American jurisprudence that is more arcane than patent interference practice. It has been an unnecessary burden on the Patent and Trademark Office, that patent bar, and the fee-paying clients far too long. I can support Proposal V without qualification. I would add only that there are a number of antitrust and patent misuse cases that might be in conflict with that part of the proposed bill that would allow arbitration of priority of invention. While settlement agreements and arbitration should be encouraged, it must be remembered that one of the litigating parties will be awarded a legal monopoly. Any deference to the future rights of the other party will be viewed suspiciously under principles of antitrust law.

Proposal VI codifies the well-accepted rule of Lear v. Adkins, 395 U.S. 653 (1969), but would provide some relief for the licensor whose patent is being challenged by the licensee. The courts have, to some extent, favored the licensee in license litigation and this proposed amendment would strike a more equitable balance.

Conclusion. I am pleased to have the opportunity to comment upon these bills, and I shall be happy to make my thoughts known with regard to any future bills that you may choose to send me. I am particularly grateful to you for sending me copies of these bills because I can discuss them in my patent law classes. I would like to receive copies of future bills relating to patent or antitrust law, if your office could conveniently arrange to send them to me.

Sincerely yours,



Ramon A. Klitzke
Professor of Law

RAK:ns

THE PTC RESEARCH FOUNDATION

FRANKLIN PIERCE LAW CENTER

February 1, 1984

The Honorable Robert W. Kastenmeier
Chairman
Subcommittee on Courts, Civil Liberties
& the Administration of Justice
United States House of Representatives
Committee on the Judiciary
Washington, DC 20515

RE: S.1535, Lear v. Adkins

Dear Congressman Kastenmeier:

We have conducted a survey (Appendix A annexed hereto) to seek the opinions of companies and law firms regarding the Lear v. Adkins decision of the Supreme Court. We have reviewed the history of doctrine of law of licensee estoppel and the results in our courts following that decision (Appendix B). The annexed review is a concise summary only of a careful study of that law by Steven Krantz (one of our students) in consultation with this writer. A summary of the results of the survey is found in Appendix C which also includes comments by those who responded, and Appendix D contains copies of the returned questionnaires.

A review of question "D" of Appendix D shows that 26 of the 33 respondents favored legislation rendering a change in the Lear doctrine to make the licensee more responsible; six said no; and one said maybe. We sent 250 questionnaires to law firms and industrial corporations (see the longhand designation "law firm," upper right-hand corner, and "corp.").

A review of the cases is even more telling. The circuits are in disarray, as is indicated in Appendix B. It should be noted that the review contains typical cases only of what is a fairly large number of cases on the subject. The Lear doctrine is an aberration grafted by the Court upon the long standing law of contracts and is a blemish upon that law. It is incredible that our highest court should not have foreseen the mischief of its decision.

Yours very truly,

Robert Shaw
Professor of Law

RS/alp
D19-1.84

Enclosures

2 WHITE STREET CONCORD, NEW HAMPSHIRE 03301 603/228-1541

Appendix A

THE PTC RESEARCH FOUNDATION

FRANKLIN PIERCE LAW CENTER

October 4, 1983

Dear Respondent:

We are writing on behalf of the PTC Research Foundation, a nonprofit organization presently engaged in researching the impact of Lear, Inc. v. Adkins, 395 U.S. 653.

This session Congress will be addressing, under S.1535, the doctrine of licensee estoppel emanating from Lear by the following proposed amendment to 35 U.S.C.

> (a) A licensee shall not be estopped from asserting in judicial action the invalidity of any patent to which it is licensed. Any agreement between the parties to a patent license agreement which purports to bar the licensee from asserting the invalidity of any licensed patent shall be unenforceable as to that provision.
>
> (b) In the event of an assertion of invalidity by the licensee in a judicial action, licensee and licensor shall each have the right to terminate the license at any time after such assertion. Until so terminated by either party, the licensee shall pay and the licensor shall receive the consideration set in the license agreement.

In order for the PTC to represent and assess the impact of Lear on businesses such as yours, we ask you to fill out the enclosed one-page questionnaire. Please feel free to expand upon the issues. Your individual response will be kept in confidence, but it will be compiled with others to be presented to the Congress.

Your cooperation is appreciated.

Research Group,

Steven A. Donato
Dawn M. Levandoski
Sedra F. Michaelson
Leslie A. Roff
Patrice A. Seitz

alp
D16-1.64

Enclosure

2 WHITE STREET CONCORD, NEW HAMPSHIRE 03301 603/228-1541

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

D. Do you favor:

____ a. Repeal of Lear, Inc. v. Adkins by legislation?

____ b. Legislation to require license payments until a decision adverse to the patent?

____ c. Any other legislation? (Briefly delineate.)

APPENDIX B

An estoppel is a remedy at equity, that is to say, in looking at a situation as a whole an estoppel brings about a result that is "fair." This concept has a long history which survives, for the most part, today. The exception to the survival of various forms of estoppel is the doctrine of licensee estoppel in patent cases.

Originally the doctrine of licensee estoppel operated under the concept that a person who bargains for a license should be estopped from denying that the licensor had valid title to the object of the license. In developing this concept, one early court analogized the doctrine of licensee estoppel to the doctrine of lessee estoppel, another property concept. In lessee estoppel, a lessee "... is bound to pay rent as long as he continues to enjoy quietly the premises leased to him, though by one who's title may be invalid. ... So a lessee cannot dispute the title of his landlord."[1] In 1805 the English case of Taylor v. Hare[2] addressed the issue of licensee estoppel based upon the concept of sanctity of contract when it stated, "[t]he Plaintiff has had the enjoyment of what he stipulated for, and in this action the Court ought not to interfere ..."[3]

This deep rooted concept of fundamental fairness was plucked up by the Supreme Court in the case of Lear v. Adkins.[4] The Court, without citing any specific authority, struck down the doctrine of licensee estoppel, basing its decision upon the rationale that according to federal law, "... all ideas in general circulation be dedicated to the common good unless they are protected by a valid patent."[5] This ruling effectively encouraged patent litigation, as

well as the unmasking of invalid patents, and making ideas developed by people, which happened to appear in an invalidated patent, available free to everyone.

Ever since it was first decided in 1959, the Lear case has caused confusion to reign supreme. The California Court of Appeals was under the impression that Lear signaled the demise of licensee estoppel in more than just the patent field, as it attempted to draw an analogy in the copyright field.[6]

There is also confusion in how to treat the parties in an action where a licensee denies the validity of the patent licensed. According to some courts, a licensor may not terminate a license because of failure to pay royalties once the licensee has challenged the validity of the licensed patent.[7] At least one court has held that if a licensee fails to pay royalties, the licensor may elect either to: 1) Treat the license as terminated and sue for damages; or, 2) sue on the agreement for royalties thus waiving the right to terminate.[8]

At least three different positions exist with regard to what should be done about continuing royalty payments during pendancy of a suit wherein a licensee has challenged the validity of a patent. One court has ruled that a licensee need not make any payments during litigation.[9] Another court held that a licensee may prevent a licensor from terminating the license by paying royalties into escrow during pendency of an action for declaratory judgment.[10] However, most courts refuse to order payments into escrow, holding that if one wants to continue the licensing agreement, one must continue to pay.[11]

Recently introduced in the Senate, in bill S.1535, is a provision to amend the patent laws by adding to 35 U.S.C. a new section 295 dealing with licensee estoppel. The provision is an attempt to codify the decision of the Supreme Court in the Lear case. As has been stated earlier, the demise of

licensee estoppel is contrary to long tradition and public policy based upon the sanctity of contract. In the parallel theory of lessee estoppel, as set forth in §4.3 of the Restatement of Property, Second, the following has been given as the rationale for the doctrine, and is equally valid for the doctrine of licensee estoppel:

> a. Rationale. Once the tenant has entered into possession of the leased property and has begun to enjoy its use, he is assumed to have accepted the state of the landlord's title as adequate to satisfy his expectations as to the possession and use of the property for the term. As long as the tenant remains undisturbed in his contemplated use of the leased property by a paramount title, his expectations have not been frustrated and the landlord is not in default.

The one redeeming feature of the proposed §295 also suffers from lack of attentiveness to contract theory. On the one hand, the section properly permits a licensor to terminate the license upon an assertion of invalidity by the licensee in a judicial action. On the other hand, the provision provides a unilateral escape from a license agreement by a licensee, wherein a licensee may terminate the agreement by its own assertion of invalidity in a judicial action. This second proposition flies in the face of public policy and should be removed from the proposal.

Finally, there may be great discrepency in determinations of patent validity depending upon the form of the action involving the patent. In a declaratory judgment action, or an infringement action, the case may be appealed eventually to the Court of Appeals for the Federal Circuit ("CAFC"), thus providing for consistent determination of a patent's validity, no matter where a suit is brought. However, if a licensor brings an action for nonpayment of royalties, it is a contract action governed by state law,[12] and the assertion of invalidity as a defense by a licensee will not bring the case within the ambit of review of the CAFC. This in turn fosters inconsistent rulings on patent validity.

As a last, but very important, note, the proposed legislation does not address the problem of inconsistent rulings of patent validity by state courts in suits for nonpayment of royalties. The Federal Court's Improvement Act was supposed to address this issue, but the enactment of the proposed 35 U.S.C. §295, as it stands, would defeat that purpose. There must be consistency in determinations of patent validity to promote the advance of the useful arts.[13]

FOOTNOTES

1. Wilder v. Adams, 29 F.Cas. 1216 (C.C.D. Mass. 1846) (No. 17,647).

2. Taylor v. Hare, 127 Eng. Rep. 461 (1805).

3. Id.

4. Lear v. Adkins, 395 U.S. 653, 89 S.Ct. 1902, 23 L.Ed.2d 610 (1969).

5. Id.

6. Golden West Melodies v. Capitol Records, 79 Cal. R. 442, 274 Cal. App.2d 713 (1969).

7. Lee v. Lee Engraving, 476 F.Supp. 361 (E.D. Wisc. 1979); Warner-Jenkinsen v. Allied Chemical, 567 F.2d 184 (2d Cir. 1977).

8. Skil v. Lucerne, 206 USPQ 792 (N.D. Ohio 1980).

9. Qume v. Xerox, 207 USPQ 621 (N.D. Cal. 1979).

10. Atlas Chemical v. Moraine Products, 509 F.2d 1 (6th Cir. 1974).

11. Nebraska Engineering v. Shivvers, 557 F.2d 1257 (8th Cir. 1977); Warner-Jenkinson v. Allied Chemical, note 7, supra; Milton Roy v. Bausch & Lomb, 418 F.Supp. 975 (D. De. 1976); National Patent Development v. Bausch & Lomb, 191 USPQ 629 (N.Y. Sup. N.Y.C. 1976).

12. Erie Railroad v. Tompkins, 304 U.S. 64, 58 S.Ct. 817 (1983).

13. United States Constitution, article 1, clause 8.

D19-1.57
1/26/84

Appendix C

PTC RESEARCH FOUNDATION QUESTIONNAIRE

SURVEY

A. Has your compahy/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

30 No

6 Yes

0 Blank

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

34 No

2 Yes

0 Blank

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

19 No

15 Yes

2 Blank

D. Do you favor:

a. Repeal of Lear, Inc. v. Adkins by legislation? 17 No 5 Yes 14 Blank

b. Legislation to require license payments until a decision adverse to the patent? 10 No 18 Yes 8 Blank

c. Any other legislation? (Briefly delineate.)

6 No

11 Yes

19 Blank

COMMENTS BY THOSE ANSWERING THE SURVEY PARAGRAPH A.

Successful but further litigation was not necessary

Morton Salt challenged a patent licence from International Salt that was executed before Lear but challenged after the Lear decision. Case for declaratory judgment filed in 1972, litigated for ten years and settled after patent expired.

To extent comprehend question, former client has; see USM v. SPS; 364Fs 547; 179 PQ 596 (NDI/173) mod 504F2d 1086, 183 PQ 577 (7th Cir.)

Successful settlement

Settled satisfactorily

There have been no challenges by U.S. Gypsum under the Lear doctrine.

PARAGRAPH B.

Except in context of Consent Judgment Order.

Still in litigation.

U.S. Gypsum has not been challenged by a licensee under the Lear doctrine.

PARAGRAPH C.

Lear has had little or no impact on our licensing.

It is hard to tell where one stands. Ambiguity and indefiniteness, particularly to rights of licensor.

Licensees feel they may take a license and await challenge until it is economically feasible to do so.

Knew it was coming for some time!

Licensing terms which were previously standard have been revised to comply with the Lear doctrine.

Makes licensing easier, because a licensee need not feel locked into payments forever.

It makes a decision to take a license easier and it requires the inclusion in license of agreements to deal with the effect of invalidity and challenges to validity.

The structuring of agreements settling lawsuits, before trial, which involved licenses, limited licenses or agreements in the nature of licenses. The problems were to achieve a binding settlement which could not be denounced under Lear v. Adkins.

It has given a licensee a substantial advantage over the licensor because the licensee is not bound to his contract with the licenaor. The licensor can make one contract and then in effect renegotiate it to obtain a better financial arrangement by challenging the patent without the threat of an injunction.

Attempts are made to spellout challenge procedures.

The licensing process has been simplified. One of the key issues prior to Lear, especially for the licensee, was being satisfied that patent was valid before entering into a license. The risk of entering into a bad bargain has been reduced by Lear, and the transfer and use of technology through licensing has been made easier.

Little practical effect in my experience except negotiating provision of the general type of the wording of S.1535.

No first hand experience.

Discontinuation of use of licensee estoppel clauses.

Licensees more readily agree to a license, without thoroughly questioning validity since they know they can always challenge later if the economic situation warrants. This has been my outlook. (Note that this is a reverse effect from the policy upon which Lear is based, i.e. facilitating the challenge of bad patents!

We would not license a patent that would not stand up to a challenge.

Not on my company, but it is an unfair situation unless b on previous page is passed.

It has made licensing more perilous and uncertain, but generally I think these disabilities have been accepted as part of business risk.

I believe licensors have had to make ad-ustments such as incorporating special provisions in licenses and also in attempting to get consent judgments before signing an agreement.

The new provisions with regard to reexamination may ultimately have more impact.

The only impact relative to U.S. Gypsum operations is the elimination of the formerly standard license agreement provision prohibiting the licensee from attacking the licensed patent.

PARAGRAPH D.

Only in the context of S.1535.

We would favor the licensing provisions contained in the Mathias Bill S.1535.

Licensees must be allowed to challenge without fear of losing their licence. Threat of licensor termination is as much as "muggle" as pre-Lear. Our history was perhaps typical. We took licences thinking our royalties would be small and not justify a fight over validity. Over seven year period, the royalties built to a surprising $300,00 a year. We had always thought the patent not valid but did not concern ourselves when we expected royalties to be only hundreds of dollars annually. If licensor had right to terminate licence upon challenge, we could not have jeopardized so large a part of our business and would never have challenged. The licencee should not receive royalties during the suit because this gives him economic advantage for prolonging litigation. If licensce has possibility of being displaced from the business he has built up, he either won't challenge or we'll be motivated to prolong suit to end of patent term.

Since many other countries do not have this doctrine.

Legislation permitting termination by the licensor if the licensee stops paying. This is out of elemented fairness. The licensee should not be allowed to keep the royalties and keep his license. I favor S.1535.

There is need for penalty provisions to permit a successful licensor to recoup litigation costs against licensee who invokes Lear Adkins.

Legislation such as S.1535 proposing to retain the licensee's right to challange validity, but giving either party 's right to terminate the license. or preventing challenge by licensee for a period of years unless new and significantly different evidence of invalidity is discovered by licensee after entering the license and which is basis of alleged invalidity.

S.1535

I rather like the proposed amendments (a) d(b) attached to this questionaire. The proposal, especially (b), seems to strike a fair balance between the rights and equities of the parties in event of licensing disagreements.

I favor S.1535 as being a practical compromise permitting licensee to challenge validity, but not doing so with the net of a license to fall back on if unsuccessful in challenges.

S.1535

I'd like the 2nd sentence of proposed 35 USC 1535(a) enacted. I don't like the thought that licensea with such provisions shall be unenforceable.

However, I question whether an exclusive licensee, who essentially "buys" the patent, should be permitted to challenge the patent on any grounds other than failure of consideration.

I strongly prefer the proposed amendment in b on previous page. While I would rather not have amendment in a, it may necessary to get b enacted.

No thoughts on this at the moment.

Legislation is probably not necessary since this aspect of the law has been pretty well defined by decision.

See pending bill in Congress S.1535.

Extension of patent term for inventions requiring governmental approval prior to commercialization, e.g. drugs, ag. chems.
Pennwalt - C.A.Hechmen Jr.

Appendix D

PTC-RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

D. Do you favor:

Yes a. Repeal of Lear, Inc. v. Adkins by legislation?

(b) Legislation to require license payments until a decision adverse to the patent?

___ c. Any other legislation? (Briefly delineate.)

→ Only in the context of S. 1535

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

Lear has had little or no impact on our licensing.

D. Do you favor:

____ a. Repeal of Lear, Inc. v. Adkins by legislation?

____ b. Legislation to require license payments until a decision adverse to the patent?

__X__ c. Any other legislation? (Briefly delineate.)

We would favor the licensing provisions contained in the Mathias Bill S.1535.

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

Successful but further litigation was not necessary

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

Yes - It is hard to tell where one stands. Ambiguity and indefiniteness, particularly of rights of Licensor

D. Do you favor:

X a. Repeal of Lear, Inc. v. Adkins by legislation?

X b. Legislation to require license payments until a decision adverse to the patent?

___ c. ~~Any other legislation? (Briefly delineate.)~~

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

Morton Salt challenged a patent license from International Salt that was executed before Lear but challenged after the Lear decision. Case for declaratory judgment filed in 1972, litigated for ten years and settled after patent expired.

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

no.

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

Licensees feel they may take a license and await challenge until it is economically feasible to do so.

D. Do you favor:

No a. Repeal of Lear, Inc. v. Adkins by legislation?

No b. Legislation to require license payments until a decision adverse to the patent? Any patent lawsuit may be stretched for the remaining life of the patent.

___ c. Any other legislation? (Briefly delineate.)

Licensees must be allowed to challenge without fear of losing their license. Threat of licensor termination is as much an "muzzle" as pre-Lear.

Send to: PTC Research Foundation
2 White St
Concord NH 03301

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

To extent comprehend question, former client has:
see USM v SPS; 364FS 547; 179 PQ 596 (NDIL 73)
mod 504 F2d 1086, 183 PQ 577 (7th Cir)

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No; except in context of Consent Judgement Order

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

No — knew it was coming for some time!

D. Do you favor:

No a. Repeal of Lear, Inc. v. Adkins by legislation?

No b. Legislation to require license payments until a decision adverse to the patent?

No c. Any other legislation? (Briefly delineate.)

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

yes - still in litigation

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

No,

D. Do you favor:

Yes a. Repeal of Lear, Inc. v. Adkins by legislation?

Yes b. Legislation to require license payments until a decision adverse to the patent?

___ c. Any other legislation? (Briefly delineate.)

Since many other countries do not have this doctrine.

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

no

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

no

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

no

D. Do you favor:

___ a. Repeal of Lear, Inc. v. Adkins by legislation?

✓ b. Legislation to require license payments until a decision adverse to the patent?

✓ c. Any other legislation? (Briefly delineate.)

Legislation permitting termination by the licensor if the licensee stops paying. This is one of the elements Lear. The licensee should not be able to keep the royalties & keep the license.

I favor S. 1535

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

No

D. Do you favor:

____ a. Repeal of Lear, Inc. v. Adkins by legislation?

__X__ b. Legislation to require license payments until a decision adverse to the patent?

____ c. Any other legislation? (Briefly delineate.)

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No.

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No.

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

Yes. Licensing terms which were previously standard have been revised to comply with the Lear doctrine.

D. Do you favor:

____ a. Repeal of Lear, Inc. v. Adkins by legislation?

__x__ b. Legislation to require license payments until a decision adverse to the patent?

____ c. Any other legislation? (Briefly delineate.)

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

Yes, makes licensing easier, because a licensee need not feel locked into payments forever.

D. Do you favor:

No a. Repeal of Lear, Inc. v. Adkins by legislation?

yes b. Legislation to require license payments until a decision adverse to the patent?

yes c. Any other legislation? (Briefly delineate.)

There is need for penalty provisions to permit a successful licensor to recoup litigation costs against licensee who invokes Lear Adkins.

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

ND

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

ND

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

ND

D. Do you favor:

ND a. Repeal of Lear, Inc. v. Adkins by legislation?

YES OR CANCELLATION OF LICENSE b. Legislation to require license payments until a decision adverse to the patent?

ND c. Any other legislation? (Briefly delineate.)

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No.

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No.

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

D. Do you favor:

____ a. Repeal of Lear, Inc. v. Adkins by legislation?

____ b. Legislation to require license payments until a decision adverse to the patent?

____ c. Any other legislation? (Briefly delineate.)

Legislation such as S. 1535 proposing to retain the licensee's right to challenge validity but giving either party right to terminate the license. - or - preventing challenge by licensee for a period of years & immediately in dispute by licensee after entering the license and while in suit of default ... U.S.C.

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

Yes - it makes a decision to take a license easier and it requires the inclusion in license agreements to deal with the effect of invalidity and challenges to validity

D. Do you favor:

No ___ a. Repeal of Lear, Inc. v. Adkins by legislation?

No ___ b. Legislation to require license payments until a decision adverse to the patent?

___ c. Any other legislation? (Briefly delineate.)

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No.

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No.

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

Yes. The structuring of agreements settling lawsuits, before trial, which involved licenses, limited licenses or agreements in the nature of licenses. The problems were to achieve a binding settlement which could not be denounced under Lear v. Adkins.

D. Do you favor:

____ a. Repeal of Lear, Inc. v. Adkins by legislation?

____ b. Legislation to require license payments until a decision adverse to the patent?

__x__ c. Any other legislation? (Briefly delineate.)

I support H.R. 1535

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

No

D. Do you favor:

___ a. Repeal of Lear, Inc. v. Adkins by legislation?

X b. Legislation to require license payments until a decision adverse to the patent?

___ c. Any other legislation? (Briefly delineate.)

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No.

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No.

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

No.

D. Do you favor:

No a. Repeal of Lear, Inc. v. Adkins by legislation?

No b. Legislation to require license payments until a decision adverse to the patent?

Yes c. Any other legislation? (Briefly delineate.)
S.1535

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

NO

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

NO

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

NO

D. Do you favor:

NO a. Repeal of Lear, Inc. v. Adkins by legislation?

NO b. Legislation to require license payments until a decision adverse to the patent?

NO c. Any other legislation? (Briefly delineate.)

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

Attempts are made to spellout challenge procedures

D. Do you favor:

___ a. Repeal of Lear, Inc. v. Adkins by legislation?

✓ b. Legislation to require license payments until a decision adverse to the patent?

___ c. Any other legislation? (Briefly delineate.)

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

Yes - successful/ settlement

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

Yes - the licensing process has been simplified. One of the key issues prior to Lear, especially for the licensee, was being satisfied that patent was valid before entering into a licens. The risk of entering into a bad bargain has been reduced by Lear, and the transfer and use of technology through licensing has been made easier.

D. Do you favor:

____ a. Repeal of Lear, Inc. v. Adkins by legislation?

____ b. Legislation to require license payments until a decision adverse to the patent?

✓ c. Any other legislation? (Briefly delineate.)

I rather like the proposed amendments (a) & (b) attached to this questionnaire. The proposal, especially (b), seems to strike a fair balance between the rights and equities of the parties in event of licensing disagreements.

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

NO

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

NO

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

LITTLE PRACTICAL [redacted] EFFECT IN MY EXPERIENCE EXCEPT NEGOTIATING PROVISION OF THE GENERAL TYPE OF THE WORDING OF S. 1535

D. Do you favor:

___ a. Repeal of Lear, Inc. v. Adkins by legislation?

___ b. Legislation to require license payments until a decision adverse to the patent?

X c. Any other legislation? (Briefly delineate.) I FAVOR S. 1535 AS BEING A PRACTICAL COMPROMISE [redacted] PERMITTING LICENSEE TO CHALLENGE VALIDITY, [redacted] BUT NOT DOING SO WITH THE NET OF A LICENSE TO FALL BACK ON IF UNSUCCESSFUL IN CHALLENGE.

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

NO

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

NO

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

NO

D. Do you favor:

NO a. Repeal of Lear, Inc. v. Adkins by legislation?

YES b. Legislation to require license payments until a decision adverse to the patent?

NO c. Any other legislation? (Briefly delineate.)

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

Yes, settled satisfactorily

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

No first hand experience

D. Do you favor:

✓ a. Repeal of Lear, Inc. v. Adkins by legislation?

___ b. Legislation to require license payments until a decision adverse to the patent?

___ c. Any other legislation? (Briefly delineate.)

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

No

D. Do you favor:

___ a. Repeal of Lear, Inc. v. Adkins by legislation?

✓ b. Legislation to require license payments until a decision adverse to the patent?

___ c. Any other legislation? (Briefly delineate.)

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

yes, discontinuation of use of licensee estoppel clauses

D. Do you favor:

No a. Repeal of Lear, Inc. v. Adkins by legislation?

No b. Legislation to require license payments until a decision adverse to the patent?

yes c. Any other legislation? (Briefly delineate.)
S. 1535

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

NO

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

NO

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

NO

D. Do you favor:

NO a. Repeal of Lear, Inc. v. Adkins by legislation?

YES b. Legislation to require license payments until a decision adverse to the patent?

YES c. Any other legislation? (Briefly delineate.)
I'd like the 2nd sentence of proposed 35 USC 1535(a) enacted. I don't like the thought that licenses with such provisions shall be unenforceable.

From [redacted] CA

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

Licensees more readily agree to a license, without ~~them~~ thoroughly questioning validity since they know they can always challenge later if the economic situation warrants. This has been my outlook. (Note that this is a reverse effect from the policy upon which Lear is based i.e. facilitating the challenge of bad patents!)

D. Do you favor:

No a.* Repeal of Lear, Inc. v. Adkins by legislation?

Yes b.* Legislation to require license payments until a decision adverse to the patent?

___ c. Any other legislation? (Briefly delineate.)

* However I question whether an exclusive licensee ~~should~~ who essentially "buys" the patent, should be permitted to challenge the patent on any grounds other than failure of consideration.

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?) No

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?) No

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)
None except we won't license a patent that would not stand up to a challenge.

D. Do you favor:

No a. Repeal of Lear, Inc. v. Adkins by legislation?

No b. Legislation to require license payments until a decision adverse to the patent?

___ c. Any other legislation? (Briefly delineate.)

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so please explain briefly.)

Not on my company, but it has on many patent attorneys who I've previously discussed.

D. Do you favor:

✓ a. Repeal of Lear, Inc. v. Adkins by legislation? But would be difficult to get through congress

✓ b. Legislation to require license payments until a decision adverse to the patent? or until license terminated

___ c. Any other legislation? (Briefly delineate.)

I strongly prefer the proposal mentioned in the previous page. While I would rather not have amendments in a, it may necessary to get it enacted

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

no

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

no

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

It has made licensing more perilous + uncertain, but generally I think these disabilities have been accepted as part of business risk.

D. Do you favor:

___ a. Repeal of Lear, Inc. v. Adkins by legislation?

X b. Legislation to require license payments until a decision adverse to the patent?

___ c. Any other legislation? (Briefly delineate.)

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

no.

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

no

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

Yes. I believe licensors have had to make adjustments such as incorporating special provisions in licenses and also in attempting to get consent judgments before signing an agreement.

D. Do you favor:

X a. Repeal of Lear, Inc. v. Adkins by legislation?

___ b. Legislation to require license payments until a decision adverse to the patent?

___ c. Any other legislation? (Briefly delineate.)

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

NO

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

NO

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

NOT REALLY - THE NEW PROVISIONS WITH REGARD TO REEXAMINATION MAY ULTIMATELY HAVE MORE IMPACT

D. Do you favor:

NO a. Repeal of Lear, Inc. v. Adkins by legislation?

YES b. Legislation to require license payments until a decision adverse to the patent?

___ c. Any other legislation? (Briefly delineate.)

NO THOUGHTS ON THIS AT THE MOMENT.



PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

There have been no challenges by [redacted] under the Lear doctrine.

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

[redacted] has not been challenged by a licensee under the Lear doctrine.

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

The only impact relative to [redacted] operations is the elimination of the formerly standard license agreement provision prohibiting the licensee from attacking the licensed patent.

D. Do you favor:

No a. Repeal of Lear, Inc. v. Adkins by legislation?

No b. Legislation to require license payments until a decision adverse to the patent?

No c. Any other legislation? (Briefly delineate.)

PTC RESEARCH FOUNDATION QUESTIONNAIRE

A. Has your company/client challenged the validity of a patent that it had licensed under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No

B. Has your company/client, as a licensor, been challenged by a licensee as to patent validity under the Lear doctrine? (If so, was the challenge successful? Court decision or settlement?)

No

C. Has Lear had any significant practical impact, in your experience, upon the licensing process? (If so, please explain briefly.)

No

D. Do you favor:

___ a. Repeal of Lear, Inc. v. Adkins by legislation?

maybe b. Legislation to require license payments until a decision adverse to the patent?

___ c. Any other legislation? (Briefly delineate.)

— d. Legislation is probably not necessary since this area of the law has been pretty well defined by court decision.

UNIVERSITY OF BALTIMORE • SCHOOL OF LAW
1420 North Charles Street • Baltimore, Maryland 21201
301-625-3396

October 17, 1983

Robert W. Kastenmeier
Chairman, Subcommittee on Courts,
Civil Liberties and the Administration
of Justice
Committee on the Judiciary
U.S. House of Representatives
Washington, DC 20515

OCT 21 1983

Subject: H.R. 3577 and corresponding S. 1535 (paragraph e only) - Your letter of August 22, 1983 Requesting Opinion.

Dear Chairman Kastenmeier:

My opinion on these bills is limited by a lack of complete information on the worldwide picture. I urge you to ask the sponsors for a detailed report on which of the industralized countries follow the approach of protecting patented processes to prevent importation of products made by the patented process in other countries. This report should be specific on how the law is interpeted, as I will mention in detail below.

Generally, I think you will find the answer to the above question is that in most of these countries the proposed general approach is followed. For example my recent visit to the European Patent Office in Munich, West Germany, where I attended a meeting of the Association for Teaching and Research Intellectual Property Law, gave me an opportunity to review the European Patent Convention. Article 64(2) specifically expands the European patent rights in each member country, no matter what the law was earlier, to include the general protection proposed in the above bills. The European Patent Convention text in article 63(2) is:

> "If the subject-matter of the European Patent is a process, the protection conferred by the patent shall extend to the products directly obtained by such process."

I am not aware that the European Patent Convention or any of its regulations specifies how the law will be applied, leaving it to the member countries to develop their specific application. For example, what happens if a product is manufactured overseas by U.S. patented process before the U.S. process patent expires, but it is not imported until afterwards? This step could be a cute way of getting a jump on U.S. companies who could

not manufacture the product under the patented process until the U.S. process patent expired under the proposed bill. H.R. 3577 specifies that infringement occurs only during the term of the U.S. process patent, so the foreign stock piling approach would be permitted. My view is that the U.S. process patent expiration should be the cut-off date. The reason for my opinion is that everyone is free to use the process, either to import products or to manufacture in the U.S. after the U.S. process patent has expired. The subject matter is in the public demand then and it is consistent U.S. patent law principles to allow anyone, either foreign or U.S. base to sell the product in the U.S.

I would, however, like to know how other countries approach this problem. If some countries prevent products made before the process patent expires from being imported, even after the process patent expires, I would suggest that language be added that gives the same restriction for importation from that country into the U.S. This proposed addition gives the balance so important in international relations, where practical, as here.

The proof question is handled in proposed Section 295 of H.R. 3577. I see a potential nightmare of allegations that infringing products are imported and made by the patented process, as well as disputes over disclosure of confidential information by foreign manufactures. It appears that section 295 is as good a job as we can find for a start. The U.S. will not be alone in this problem and these expreiences should lead to adjustments down the road. I would not shy away from implementing the proposal because these difficulties may weigh heavily on the importer, as proposed. The bill is fair, but tough now until we see how the approach works in reality.

I have included in this analysis S. 1535, paragraph (e) that amends 35 U.S. section 271, since it is generally the same proposal. The other proposals in S. 1535 are too distinct to cover in this letter. I find the S. 1535 bill inadequate on this topic, failing to cover the important procedural question of proof burden. I interpret S. 1535 to be the same as H.R. 3577 on the cut-off effect of the U.S. patent expiration, as mentioned above.

In summary I support H.R. 3577 at this stage, with a desire for more information and a possible revision to clarify the bill, if the further research indicates such a step is in the interest of the U.S. process patent holder and international relations. If you have questions on my evaluation, I will be glad to answer them. My response on the other bills and proposals will follow shortly.

Sincerely yours,

W. T. Fryer III

William T. Fryer, III
Professor

WTF/ps

UNIVERSITY OF BALTIMORE • SCHOOL OF LAW
1420 North Charles Street • Baltimore, Maryland 21201
301-625-3396

October 17, 1983

Robert W. Kastenmeier
Chairman, Subcommittee on Courts,
Civil Liberties and the Administration
of Justice
Committee on the Judiciary
U.S. House of Representatives
Washington, DC 20515

Subject: The Patent and Trademark Office Procedures Improvement Act of 1983 - Merger of the Board of Appeals and the Board of Patent Interferences

Dear Chairman Kastenmeier:

Your letter of August 22, 1983 forwarded eight bills or proposed bills related to patents and antitrust law for my review and comment. My role as a full time law professor who has taught both patents and antitrust law for many years is to give an independant opinion on these bills or proposals. Of course I am influenced by my background as a patent attorney for several years before teaching law full time, but the teaching career does give a good perspective, continually subject to reevaluation in the classroom. I will give you my comments on each bill or proposal in a separate letter, unless certain bills can logically be combined in one letter.

The subject proposal, presented as a draft bill with the Secretary of Commerce Baldridge's letter of July 18, 1983 is a welcome change. I support it for the following reasons:

1. It shifts the limited resources of the Patent and Trademark Office (PTO) to a more efficient form. The proposed bill combines the Board of Appeals (BOA) and the Board of Patent Interferences (BOPI). A sharp division existed before on what could be handled by the BOPI. The BOA was the primary decision maker on the 35 U.S.C. Section 102 and 103 patentability questions. Interferences sometimes raised questions under these statutes. The procedure involved to decide the patentability questions was inefficient. It is far better to have one board able to handle all questions at one time.

2. The appeal rights of applicants are not sufficiently changed.

3. The BOA can utilize an increase in members to more efficiently assigned work to persons best able to handle a matter.

Detailed Comments:

There was some discussion I heard earlier of other changes in the interference process, to expedite this review in the PTO. Some feel that the whole interference process should be dropped in favor of a first-to-file system used in most other countries, where the date of invention is the application filing date in the PTO. Ther present legal system in the U.S. under 35 U.S. Section 102(g) gives credit in some situations for prior work in the United States.

I teach each year, in addition to my law school patent courses, a course to foreign patent attorneys in Washington DC. It includes a detail explanation of our patent law on the determination of the date of invention. Each time I am challenged to reevaluate the importance of the U.S. law versus the laws under which the students in the class have practiced for many years. Each time I come out of that four hour session with a commitment the the U.S. system is better, because it creates an incentive to the U.S. inventor to more completely develop the invention earlier, beyond a mere description in a patent application. The present U.S. law has an incentive that other systems lack. The U.S. patent applications are more detailed on how the invention can be built and the best form at that time, a part of the U.S. patent system that is expressed in 35 USC Section 112 in the requirement for the best mode. The public receives a better disclosure in the U.S. patent then in foreign patents, generally. Of course, there are situations where the differences between the two systems are not that great, depending on the nature of the U.S. company's international business.

The negative side of the proposed bill is that it does remove a group of individuals in the PTO that have specialized in interference practice, somewhat diluting the experience of the PTO in this area of expertise. This problem does not appear to be significant, as the management of the work can be effectively arranged within the merged BOA and BOPI. The proposed bill will not change in any way the basic law in the U.S. on determination of the date of invention. I support the bill. If you have any questions, I will be glad to answer them promptly. Letters on the other bills will follow shortly.

Sincerely yours,

W. T. Fryer III

William T. Fryer, III
Professor

WTF/ps

University of Illinois
at Urbana-Champaign

College of Law
209 Law Building
504 East Pennsylvania Avenue
Champaign
Illinois 61820

217 333-0931

October 5, 1983

The Honorable Robert W. Kastenmeier
Chairman, Subcommittee on Courts, Civil Liberties
and the Administration of Justice
Committee on the Judiciary
United States House of Representatives
Washington, D.C. 20515

Dear Congressman Kastenmeier:

Thank you for your letters of August 18 and September 29 asking for my comment on patent reform measures that are before your subcommittee. I enclose separate memoranda on each of these bills.

I greatly appreciate your concern for modernizing and improving our patent legislation to keep the United States at the forefront of world technology.

Sincerely,

Peter B. Maggs
Professor of Law

PBM:blm
Enclosures

COMMENTS ON H.R. 3577 SUBMITTED BY PETER B. MAGGS, PROFESSOR OF LAW, UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

By restricting importation of goods made with patented processes, this bill would encourage developers to reveal processes through the patent system rather than to keep them as trade secrets and would bring U.S. law into line with that of many other countries.

The formulation of the rule is simpler and clearer than in S. 1535. The presumption is essential to the effectiveness of the legislation, since without it, procedural difficulties (e.g., the unavailability of discovery) may make it impossible to enforce a rule against foreign infringement of process patents.

COMMENTS ON H.R. 3878 SUBMITTED BY PETER B. MAGGS, PROFESSOR OF LAW, UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

The first part of the bill presents antitrust issues outside my area of specialization.

Pages 10-11

This incorporates the language of H.R. 3577, upon which I have commented separately.

COMMENTS ON H.R. 3286 SUBMITTED BY PETER B. MAGGS, PROFESSOR OF LAW, UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

This legislation would have the useful effect of unifying what is now a very confusing mix of differing statutes and court decisions among the various states. However there are some possible problems with the present language of the bill.

First, employers are likely to use the "specifically assigned duties" clause to overcome the intent of the act, by assigning each employee, as part of the employment contract, the duty of constantly thinking of new ideas and inventions that could be useful in the employer's business. Further clarifying language or legislative history could be useful in preventing such a defeat of the statute.

Second, the bill would give employees excessive rights in cases when the invention was made through unauthorized use of the employer's facilities and equipment.

Third, the arbitration provisions fail to account for the case of a currently unemployed former employee.

COMMENTS ON H.R. 2610 SUBMITTED BY PETER B. MAGGS, PROFESSOR OF LAW, UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Page 1.

This new Section 156 creates a defensive patent. It would encourage putting technical information into the public domain and would cost little to administer. In an earlier letter to you I indicated my worries that the bill as presently drafted would allow two types of frauds on the public: (1) selling consumer goods labeled "patented" when they did not in fact incorporate anything found by the PTO to be an invention; (2) allowing engineers to list defensive patents on their resumes as if they were real patents. The sectional analysis you have sent me talks about "appropriate notice to the pubic of the fact that the patent was not examined and is not enforceable." I still think some provision for protecting the public should be included in the statute. Furthermore, as long as this procedure leads to something called a "patent," I think there is a chance for confusion of the public. I realize there would be complications in drafting, but surely some other name could be used such as a "defensive registration certificate." Has the committee considered the effects of this proposed legislation on priority rights under the Paris Convention?

Pages 2-4.

These are noncontroversial technical amendments.

COMMENTS ON H.R. 3285 SUBMITTED BY PETER B. MAGGS, PROFESSOR OF LAW UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

As a supporter of the free enterprise system, I oppose government intervention except where a clear need is shown; I am not convinced that need has been shown for a bill such as H.R. 3285. However, if the bill is enacted, I believe it could be improved in a number of respects.

The term "service invention" is defined differently from "employment invention" as defined in H.R. 3286. If both bills were enacted, this could lead to a conflict in the law, since a particular invention might be a "service invention" and not an "employment invention" or vice versa.

Another possible conflict is with H.R. 2610 on defensive patents. Surely one could not want the definition of invention in H.R. 3285 to include anything that could be awarded a defensive patent under H.R. 2610.

The definition of "employee" is so narrow that companies may turn their more inventive employees into "consultants" and thus avoid the effect of the act. An example of this sort of problem in reverse is the way publishers, since the new Copyright Act, have tried to turn authors into persons "working for hire."

COMMENTS ON S. 1535 SUBMITTED BY PETER B. MAGGS, PROFESSOR OF LAW, UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Page 1, lines 5-8 (Process Patent Infringement)

By restricting importation of goods made with patented processes, this bill would encourage developers to reveal processes through the patent system rather than to keep them as trade secrets, and would bring U.S. law into line with that of many other countries.

The formulation of the rule is simpler and clearer in H.R. 3577 and H.R. 3878, than in S. 1535. The presumption found in H.R. 3577 and H.R. 3878 is missing from S. 1535. It is my belief that this presumption is essential to the effectiveness of the legislation, since without it, procedural difficulties (e.g., the unavailability of discovery) may make it impossible to enforce a rule against foreign infringement of process patents.

Page 1, lines 9-10; page 2, lines 1-6 (Reversal of Deepsouth)

A closer look should be taken at the atempt to reverse the Deepsouth decision. It seems quite possible that if this legislation is enacted, copiers will merely shift production operations overseas, beyond the reach of the U.S. patent system. This would mean a loss of jobs in the United States, with no real gain for holders of United States patents. Indeed, along these economic lines an argument could be made for legislation providing that manufacture of goods for export in general does not constitute an infringement of a U.S. patent.

Page 2, lines 7-24; page 3, lines 1-13 (simplifying license for foreign filing requirements).

I think that stifling of American competitiveness through government red tape is a far greater danger to national security than loss of information through foreign patent filings. Absent strong and thoroughly justified objections by the Defense Department, I would hope that your committee would look favorably on any reform that allowed U.S. industry to compete more easily in the international marketplace.

Page 3, lines 14-25; p. 4, lines 1-4

These sections take proper account of the team nature of most inventive activity in the United States today. They overcome what has amounted to forfeiture on the basis of a technicality, where the rewards were for having clever lawyers rather than brilliant scientists and engineers on corporate staffs.

Page 4, lines 3-6 (affidavit)

It is not clear to me that this section will have the desired result of reducing costs; rather it could lead to even greater expenses in turning more interferences into Federal court cases. If enacted, there should be a sunset provision requiring the Commissioner of Patents and

Trademarks to report back on its effects on the cost of patent litigation, and it should be made part of permanent legislation only if it was successful.

Page 4, lines 7-14 (interference settlement filling)

This seems to be an appropriate change that will relieve from forfeiture without significant danger of increasing antitrust violations.

Page 4, lines 15-23 (arbitration)

If settlement is to be allowed, arbitration also should be allowed. THere is a problem, however, with the way the bill is phrased. Suppose the arbitrator finds that A conceived and reduced to practice in March 1982 and that B conceived and reduced to practice in January 1983, so that A wins the interference. It still should be open to the PTO to contend that A really did not invent until June 1983 and so was barred by a May 1982 publication that was not before the arbitrator. This would require rejection of the arbitrator's finding that A invented in March 1982 and even rejection of the finding that A had priority over B. It is not clear from the language given in the bill that the Patent Office could make such a rejection.

Page 4, lines 24-25; page 5, lines 1-19 (licensee estoppel)

This section seems to give a fairer balance between the interests of licensor and licensee than given by the present confusing mix of court decisions.

Page 4, lines 17-19 (retroactivity)

Is the law meant to apply to existing licensing contracts so as to change the rules of licensee estoppel with respect to them? If so, this would seem to be an unfair change of rules in the middle of the game. If not, the statute should clearly state not.

UNIVERSITY OF CALIFORNIA, LOS ANGELES UCLA

BERKELEY · DAVIS · IRVINE · LOS ANGELES · RIVERSIDE · SAN DIEGO · SAN FRANCISCO SANTA BARBARA · SANTA CRUZ

SCHOOL OF LAW
LOS ANGELES, CALIFORNIA 90024

November 14, 1983

The Honorable Robert W. Kastenmeier
Chairman, Subcommittee on Courts,
Civil Liberties and the Administration of Justice
U. S. House of Representatives
Committee on the Judiciary
Washington, D. C. 20515

Re: Proposed Legislation H.R. 3286 and H.R. 3878

Dear Congressman Kastenmeier:

Thank you for your letter of September 29, 1983 enclosing copies of the above House bills and inviting my comments. I am happy to respond.

H.R. 3286 - EMPLOYEE INVENTIONS

This bill appears to me to codify the case law relating to employee inventions, made on the employee's time and not relating to the business of the employer, in a manner consistent with well-established precedent, c.f., U. S. Dubilier Condenser Corp., 289 U.S. 178 (1933). In addition, it provides for a shopright consistent with applicable law principles; Cambridge Wire & Cloth Co. v. Applegarth, 141 U.S.P.Q. 44 (Md. Cir. Ct. 1964). The bill resembles the provisions of the California Labor Code, Sections 2870-71 enacted in 1979.

In view of its correspondence with well-established case law, I assume that this should be a noncontroversial bill. My only thought is that, because the case law is not in doubt in this area, is there any need to take up the time of Congress by codifying it into legislation. That, however, is a question which is uniquely within your province.

H.R. 3878 - CHANGES TO THE ANTITRUST LAWS IN RELATION TO PATENTS

Title II - Joint R & D Ventures

I believe the intended objective, to encourage joint R & D ventures under circumstances where the participants would presently be inhibited for fear of running afoul of the antitrust laws, will

be served by the proposed legislation under Title II. The requirement for notification to the Attorney General and Federal Trade Commission should have the effect of keeping the participants honest from the outset. In addition, the limitation of damages, after such a notification, to single damages should have the effect of encouraging notification to reduce liability thereby reducing the incidence of behind-the-scenes joint R & D programs and increasing the scrutiny of those that are entered into.

I am a little troubled by Section 204(c) permitting a request for nondisclosure of information or documentary material submitted as part of such notification not be made public. I appreciate that this requirement is necessary where trade secrets or business confidential information needs to be preserved in confidence. On the other hand, this provision should not become an excuse for the parties to a joint R & D venture to prevent a third party that believes itself to have been injured by a violation of the antitrust laws resulting from the venture from obtaining access to such information. Perhaps it would be advisable to add an additional sentence to Section 204(c) to the effect that nothing in that section shall prevent a court from ordering discovery of such information or documentary material for good cause subject to an appropriate protective order where justified.

Title III - Reduction of Antitrust Damages for Patent Antitrust Licensing Violations to Single Damages

Section 301 of H.R. 3878 would restrict actual damages for a violation of the antitrust laws in a license under a patent to single damages, rather than trebled damages.

In approaching this question, the starting point to me is to ascertain what utlimate objective is desired at this interface of the patent and antitrust laws. It seems to me that the answer is to try to increase competition and at the same time maximize the reward to the patent owner to stimulate the incentive to invent. Both objectives, I believe, would be achieved by reducing the risk of antitrust damages to single damages in the patent license context.

One of the most serious problems with the present application of the antitrust laws to patent licensing is difficulty which businessmen face in trying to find the line that the courts have drawn between acceptable licensing practices and those that might give rise to an antitrust violation. From the point of view of

businessmen trying to structure a license, and believing in good faith they have done so in a way that stays on the lawful side of the line, it is an unjustifiably harsh result to be subject to trebeled damages if a court, operating in this often gray area, finds that the line has been crossed. I have, myself, been involved in just such patent litigation where my client was ultimately vindicated but not until after the case had been twice tried and twice appealed to the Ninth Circuit. Such a draconian exposure for what may be a good faith error in judgment as to the best way in which to license patented technologies can end up discouraging any licensing at all.

My own view is that licensing should always be encouraged because it promotes competition and increases the number of parties already in the market at the time the patent expires. Thus, I believe reducing antitrust damages to single damages, where the violation arises because of an antitrust violation based on patent licensing, will bring the penalty for an error of judgment down to a level at which the risks involved in granting licenses will be reduced and competition overall will be stimulated.

Title IV - Patent and Copyright Misuse

Section 401 is bound to be highly controversial because most species of patent misuse, within my observation, occur in circumstances where a violation of the antitrust laws could not be proven. The reason that an antitrust violation usually fails, even though the patent misuse exists, is because of the difficulty of showing that the patent that had been misused possesses exclusionary power in the relevant market. In most cases, there are nonpatented substitutes available for the patented product which the patent owner can rely upon to expand the "relevant market" sufficiently to show that the segment of commerce covered by the patent is such a small fraction that the patent does not possess exclusionary power.

Thus, the effect of Section 401 will be to legitimize a number of practices in which the patent owner has been able to use the leverage of the patent to gain monetary renumeration derived from commerce outside the scope of the claims of the patent. The broad question is whether this is good or bad.

My own view is that it probably does not make much difference. Under the law as it presently is, a patent owner is entitled to ask for license royalties as high as the traffic will bear. At the present time, forbidden to base royalties on ancillary but unpatented goods, the licensor must ask for a maximized royalty on

the narrow base of goods within the patent. I imagine that if this legislation were enacted, a licensor might ask for a lower license royalty rate on the patented goods supplemented by some return based on the ancillary unrelated goods which would bring his total reward back up to about the same figure as at present. Because the burden borne by the licensee is likely to be about the same under either circumstance, because the amount a licensee is willing to pay for use of an invention is not going to change merely because of the manner in which it is licensed, I cannot see any particular evil.

About the only harm I can see is that, in a tying situation, for example, third party suppliers of an unpatented product to the licensee will be shut out if the licensee is required to buy its supplies from the licensor. If such sales are less than an amount to trigger an antitrust violation, as must be the case for this section to apply, I do not see any particular harm to the public good. Certainly, the licensee is probably paying more for the unpatented supplies but this should be offset by the circumstance that he is probably paying less under the principal license royalty. The third party supplier is deprived of a sale but there is no absolute right to make sales merely because your price is lower. There are many nonprice reasons that already exist why sellers lose sales, e.g., delivery, quality, friendship and so forth. Adding the existence of the patent license relationship to these reasons does not trouble me too much.

Overall, I would favor this because it will remove a great deal of essentially victimless defenses from the patent law. It should reduce the cost of patent litigation and increase the opportunity for patent owners to license their patents without risk of rendering them unenforceable under the vagaries of the present confused patent misuse case law.

Title V - Process Patents

My views on this are expressed in my previous letter to you of September 16, 1983 at pp. 1-2.

Yours sincerely,

Laurence H. Pretty

cc: Dean Susan Prager, UCLA Law School

APPENDIX 9



IEEE **WASHINGTON OFFICE**
THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.
1111 19th STREET, N.W. WASHINGTON, DC 20036, U.S.A. TELEPHONE (202) 785-0017

June 7, 1984

Honorable Robert Kastenmeier
Chairman, Subcommittee on Courts, Civil Liberties
& the Administration of Justice
Committee on the Judiciary
U.S. House of Representatives
Washington, D.C. 20515

Re: H.R. 3286 " A Bill to Set Federal Standards for
Permissible Pre-Invention Assignment Agreements"

Dear Mr. Chairman:

The Institute of Electrical and Electronics Engineers Inc., (IEEE), celebrating its Centennial Anniversary in 1984, is the world's largest professional, technical society. Our membership has increased to approximately 250,000 members world-wide, with over 200,000 residing in the United States. Historically, the IEEE has concerned itself with technical issues of interest to the membership; but, responding to a mandate from the U.S. members, a United States Activities Board (USAB) was established in 1973 to convey the professional, economic, and socio-technical concerns of the membership to the Government of the United States.

IEEE/USAB's Intellectual Property Committee is the entity of IEEE which addresses itself to the broad range of issues relating to patents and copyrights. In this regard, the Intellectual Property Committee is concerned that many of our members, as a condition of employment, have been required to enter into assignment agreements which are neither fair nor equitable. In order to establish national standards that would be equitable for both the employee and the employer, we have supported enactment of HR 3286 (and its predecessor, HR 4732), and have submitted supportive testimony before your Subcommittee (July, 1982 hearings on HR 4732).

The issues of equity are inherently a part of the need for stimulation of the inventive/innovative spirit in the United States. Our country must foster an employment environment in which the nation's most valuable technical resources, its engineers and scientists, are encouraged to become more innovative and productive; indeed, the elimination of barriers to individual creativity should be a priority issue. We feel that establishing fair and equitable national standards for preinvention assignment agreements would eliminate one significant barrier.

In recent months, your Judiciary Subcommittee has held hearings on a variety of legislative proposals pending before your Subcommittee. In several instances, witnesses took the opportunity to comment on HR 3286, and in one specific case, a revised version of HR 3286 was submitted for consideration. We feel that, because of our long-standing interest in the issues embodied in HR 3286, our perspectives would be useful to the Chairman and the Subcommittee members.

Core Issue - Disincentives for Innovation and Creativity
The Need for Legislative Remedy

The IEEE Intellectual Property Committee considers it self-evident that the United States cannot afford to allow its technological leadership role to be further eroded; instead, the U.S. ought to be taking all possible steps to eliminate those disincentives to creativity which impact on the innovative spirit of our engineers and scientists - who, more than any other component, constitute our technical resource base. A dampened creative spirit will not consistently produce the major technological advances needed to remain at the leading edge of technology vis-a-vis our international trading partners.

As mentioned in the opening paragraph, the IEEE membership in the United States alone consists of over 200,000 of the professionals comprising this technical resource base. When asked in a 1983 member opinion survey whether preinvention assignment agreements inhibit innovation, 56% of those IEEE members responding to the survey indicated that preinvention assignment agreements do inhibit innovation; in fact, over 30% of these respondents indicated that such agreements either moderately or greatly inhibit innovation. When we asked those who were actually covered by preinvention assignment agreements (62%), how many of these agreements require assignment of all patents to the employer, including those outside of the technical areas in which they work, 40% responded affirmatively. The percentages of those working under such agreements varied markedly with the nature of the employer - 70% of those in private industry are covered whereas only 16% of those who are self-employed are covered. (IEEE U.S. Member Opinion Survey 1983).

From this survey of the IEEE membership, it is apparent that a majority feel that preinvention assignment agreements do inhibit innovation. Because the agreements have this effect, there is little incentive for an engineer to expend his own time and money on inventions which, if successful, would only belong to his employer. In the esoteric areas of innovation and creativity, the perception by an engineer that his preinvention assignment agreement limits his ability to profit from inventions made outside his work place can lead the engineer to only one conclusion - that his/her free time is better spent in ways other than inventing.

Post-employment Invention Abuse

One of the objections voiced in the testimonies delivered to the Subcommittee dealt with potential abuse of the system by the unscrupulous employee who might withhold disclosure of vital information until his employment terminates, then immediately capitalize on this knowledge - as early as one day after termination of employment.

We believe this concern is unwarranted. The courts have always been able to deal with the occasional unscrupulous employee who attempts to profit from an invention belonging to his previous employer. To our knowledge, very few agreements extend beyond the employee's termination date, probably because both the employer and employee recognize that to do so would severely and unfairly limit the ability of the employee to earn a living. A company considering employment of an engineer would think twice about employing him if the engineer were required to assign future inventions to his previous employer.

IEEE's purposes in advocating enactment of HR 3286 are to as clearly as possible separate ownership rights to employment inventions from ownership rights to non-employment inventions. It has never been our intent to eliminate the rights of the employer to inventions which are attributable to employment.

The Scope of Assignable Inventions

A second major area of concern with HR 3286 relates to the scope of inventions assignable to an employer, such as inventions which are related to the employer's business interests, but which are in areas in which the employee is not directly working. Many engineers, scientists, and other inventive employees work for multidivisional firms and conglomerates. Failure to appropriately restrict the definition of business-related inventions allows the range of inventions claimable by the employer to be unduly broad.

Even now the enforceability of clauses claiming relatively open-ended business interests is questionable. Some firms already voluntarily restrict their claims, limiting them to business areas with which an employee could reasonably be expected to be familiar. HR 3286 embodies this mild requirement in §222 (4)(A), (B), and (C).

However, we do not feel that strict adherence to the original language of HR 3286 is necessary, if the concepts embodied are preserved. Therefore, we can accept some of the changes suggested by Mr. Harvey Rambeck, and submitted to the Subcommittee along with his testimony of March 28, 1984, while disagreeing on several others.

§222(4)(B) - We do not agree with the recommendation that "or suggested by" be added. The addition of these words leaves the parameters too broad and nebulous. There needs to be a substantive identity link with the employer's information and we feel that the original wording "based in significant part upon" adequately defines the parameters.

We have no objections to the other modifications to §222 (4)(B) made by Mr. Manbeck.

§222(4)(C) - We do not agree with the changes to this section made by Mr. Manbeck. To do so would include as an employment invention one totally unrelated to the work performed by the employee for the company merely because it is related to a product made by another division, even though the inventor had no knowledge of the work being performed at the other division. §222(4)(C) was included in the original bill only to take care of the unusual employee, such as an officer of the corporation, who because of his/her position, has overall knowledge of everything going on within the company and also has access to information relating to contemplated new products.

We recommend §222(4)(C) be left unchanged.

The Shop Right Doctrine

We feel that §223 (a) of HR 3286 properly distinguishes the parameters between the employer and the employee for inventions that are not employment related, but were developed by substantial use of the employer's time, materials, facilities, or funds. In this instance, the conception of the invention is attributable to the innovation of the individual inventor, based on information that is unrelated to the business of the employer. The invention then is physically produced utilizing materials of the employer. We feel that the assignment to the employer of a nontransferable, nonexclusive license to practice an invention is a fair and equitable manner in which to allocate potential rewards from the invention. To insist that such instances be defined as "employment inventions" under §222 (4)(D) broadens existing shop right doctrine and totally fails to recognize the worth of the intellectual conceptions of the employee -- the very innovativeness that needs to be stimulated.

We therefore do not agree with the addition of §222(4)(D) and subsequent modification of Section 223(a) as suggested by Mr. Manbeck.

§223(b) - Mr. Manbeck suggested that the modifications be made so that the the employer is not required to keep confidential any employee inventions that properly belong to the employer. We concur that modification is needed to eliminate this problem which was inadvertently created. However, we object to the precise wording suggested since it states that an "... employee may request...". We feel that it is important that the initiative to authorize disclosure of non-employment inventions should remain with the employee. Thus we would agree with the conceptual modification, provided it requires that non-employment inventions disclosed by the employee are received and kept in confidence by the employer, unless otherwise authorized by the employee.

§223(d) - We would suggest that the phrase "... applicable rules..." might be more suitable than "... Patent Arbitration Rules..." Additionally on line 16 after the words "at the request of either party" we suggest the addition of:

> except that it not be required that proceedings actually be conducted by said Association.

This would allow the usage of whatever applicable rules are in existence while not requiring the actual involvement of the Association itself.

Conclusion

Surveys of the IEEE membership indicate that Preinvention Assignment Agreements inhibit innovation and that some 40% of those individuals covered by these agreements are required to assign all inventions to the employer, even those outside the scope of the work they do for the company. This situation is unfair to the affected employees and is a barrier to the creative and inventive spirit needed in the U.S. to remain competitive in the international marketplace.

HR. 3286 is a narrow bill that would eliminate this problem to the employee and the barrier to innovation by fairly and equitably defining the scope of permissible preinvention assignment agreements. It unquestionably assigns to the employer those inventions which are "employment inventions", and assigns to the employee those inventions which are outside of these parameters. We do not doubt that disagreements will occur concerning the inevitable gray areas in which a ruling on whether or not an invention is an "employment invention" will be a subjective one. However, HR 3286 will make a major contribution to the equitable distribution of these rights.

The issues involved are significant enough that five (5) states have already enacted state statutes, but these are not uniform. Additionally, we are in concurrence with Mr. Manbeck in stating that these have created no perceived adverse effects to industry; however, the proliferation of state laws could create confusion for employees and employers alike who would have to determine their rights under a myriad of differing state statutes. Enactment of equitable Federal legislation would eliminate these difficulties, cause little or no trouble to the affected industries, would eliminate a barrier to innovation and would provide equitable agreements in an area in which experience has shown that equity is seldom obtained voluntarily.

Mr. Chairman, we appreciate the opportunity to review the testimonies of other witnesses before your Subcommittee and to provide you with our perceptions. We found that Mr. Manbeck's method of providing a modified version of the legislation was extremely useful and so we will follow his lead. Attached to this correspondence is our own modified version of HR 3286, incorporating some changes that were suggested by Mr. Manbeck. This modified version of HR 3286 is followed by a "clean" version of our suggested paragraph modifications, and a section-by-section summary of our response to the changes recommended by Mr. Manbeck.

Thank you very much for allowing us to provide these comments to your Subcommittee, please do not hesitate to contact W. Thomas Suttle in our IEEE Washington Office if we can be of further assistance.

Sincerely,

Orin Laney

Orin Laney, Chairman
IEEE/USAB Intellectual Property Committee

Attachment A: IEEE Suggested Mark-up of HR 3286
Attachment B: Section by Section Response to Changes Suggested by Mr. Harvey Manbeck.

Attachment A

I

98TH CONGRESS
1ST SESSION

H. R. 3286

To amend title 35, United States Code, to set Federal standards for permissible employee preinvention, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JUNE 13, 1983

Mr. KASTENMEIER introduced the following bill; which was referred to the Committee on the Judiciary

---

A BILL

To amend title 35, United States Code, to set Federal standards for permissible employee preinvention, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That part II of title 35, United States Code, is amended by adding at the end thereof the following new chapter:

CHAPTER 19—EMPLOYEE INVENTIONS

"Sec.
"221. Declaration of purpose and policy.
"222. Definitions.
"223. Limitation upon terms of an employee preinvention assignment agreement.

"§ 221. Declaration of purpose and policy

"In order to promote the progress of the useful arts, and in order to encourage the free flow of commerce by the cre-

ation of new products and processes, it is the purpose and policy of this chapter to make available to employees, for inventions made by them that are unrelated to their employment, those incentives provided by the patent laws to encourage individuals to make inventions, to disclose them to the public, and to commercialize them, while at the same time to maintain an incentive for employers to support research and development activities and to commercialize inventions by their employees that are related to that employment.

"§ 222. Definitions

"For purposes of this chapter—

"(1) the terms 'employer' and 'employee' have the meanings given those terms in section 3 of the Fair Labor Standards Act of 1938 (29 U.S.C. 203);

"(2) the term 'invention' means an invention which is patentable under chapter 10 of this title;

"(3) the term 'preinvention assignment agreement' means an agreement which an employee executes at the request of his or her employer that gives any rights to the employer in any inventions of the employee not yet made at the time of the execution of the agreement;

"(4) the term 'employment invention' means an invention that is made by an employee during a term of employment—

"(A) as a result of the employee's normal or specifically assigned duties;

"(B) based in significant part upon technical data or information ~~possessed by and acquired from~~ OF the employer ~~of the employee, and~~ which is not generally known to the public; or

"(C) wherein the employee enjoyed a special position of trust or confidence or a fiduciary relationship with his or her employer at the time of making the invention, and the invention is related to the employer's actual or contemplated business known to the employee; and

"(5) an invention is deemed to have been 'made' when it is conceived or first actually reduced to practice.

"§ 223. Limitation upon terms of an employee preinvention assignment agreement

"(a) A preinvention assignment agreement shall not be enforceable to transfer any rights to the employer in any invention that is not an employment invention; except that an employer may require an employee of the employer to grant to the employer a nontransferable, nonexclusive license to practice an invention that is not an employment invention whenever such invention is made by the employee with a

substantial use of the employer's time, materials, facilities, or funds.

"(b) An employer may require that the employee of the employer disclose to the employer all inventions made by the employee, solely or jointly with others, during the term of the employee's employment with the employer PROVIDED HOWEVER THAT ~~if the disclosures are~~ INVENTIONS WHICH ARE NOT EMPLOYMENT INVENTIONS BE received and kept in confidence, UNLESS OTHERWISE AUTHORIZED BY THE EMPLOYEE.

"(c) A preinvention assignment agreement shall not be enforceable to transfer any rights to an employer in any invention that is conceived by an employee of the employer after termination of employment with the employer.

"(d) In case of any disagreement or conflict with respect to any provision of this chapter, THE RIGHTS OR OBLIGATIONS CREATED BY the matter shall be settled by arbitration in the State in which the employee is employed in accordance with the APPLICABLE rules of the American Arbitration Association, at the request of either party. EXCEPT THAT IT NOT BE REQUIRED THAT PROCEEDINGS ACTUALLY BE CONDUCTED BY SAID ASSOCIATION

"(e) This section shall not affect rights in any invention conceived prior to January 1, 1984.".

SEC. 2. The analysis of part II of title 35, United States Code, is amended by adding after the item relating to chapter 18 of the following new item:

"19. Employee Inventions..... 221".

O

Suggested Modifications to HR 3286

The following are "clean" versions of the paragraphs of HR 3286 as suggested by IEEE Intellectual Property Committee:

Section 223(4)(B) - based in significant part upon technical data or information of the employer which is not generally known to the public; or

Section 223(b) - An employer may require that the employee of the employer disclose to the employer all inventions made by the employee, solely or jointly with others, during the term of the employee's employment with the employer, provided, however, that inventions which are not employment inventions be received and kept in confidence, unless otherwise authorized by the employee.

Section 223(d) - In case of any disagreement or conflict with respect to the rights and obligations created by any provision of this chapter, the matter shall be settled by arbitration in the State in which the employee is employed in accordance with the applicable rules of the American Arbitration Association, at the request of either party, except that it not be required that the proceedings actually be conducted by said Association.

Attachment B

Comments on Harvey Manbeck's Markup of HR 3286
by IEEE/USAB Intellectual Property Committee

The following is a section by section response to the comments made by Harvey Manbeck on his "Exhibit C (continued)" to his testimony submitted to Mr. Kastenmeier's Subcommittee on March 28, 1984.

We generally agree with Mr. Manbeck's analysis of HR 3286 and applaud many of his suggestions as being substantive improvements over the original proposal. However, we are in fundamental disagreement with Mr. Manbeck on portions of §222(4)(B), §222(4)(C), §222(4)(D), and §223(a) and explain our positions in detail in the text of the correspondence to Mr. Kastenmeier.

(1) §222(1) - We concur that the intent of the definition of "employee" covers only employees whose place of work is located in the U.S.

(2) §222(4)(B) - We do not agree with the proposed changes that would add the phrase "or suggested by". The original unmodified wording "based in significant part upon" is preferable.

We agree with the remaining changes.

(3) §222(4)(C) - We do not agree with the changes suggested. This section was included only to take care of the unusual employee, such as an officer of the corporation, who because of his/her position has overall knowledge of the company and has access to information relating to contemplated new products. Expansion as suggested by Mr. Manbeck is unwarranted.

(4) §222(4)(D) - We do not agree with this change. It is broader than existing "shop right" doctrines and places too much emphasis on the rights of the employer while ignoring the value of the creativity of the individual employee. We see no need to broaden the doctrine in this manner.

(5) §223(a) - We do not agree with this change (see #4 immediately above).

(6) §223(b) - We agree with the conceptual change, but not the specific language. Employment related inventions that are disclosed by the employee properly belong to the employer and thus are under his control and discretionary disclosure. However, the initiative to authorize disclosure of non-employment inventions should remain with the employee.

Attachment 8 contd.

(7) §223(d) - We concur with the addition of the words "... the rights or obligations created by ...".

We prefer the words "... applicable rules ..." of the American Arbitration Association and feel they would be less likely to become dated than specifying the "... Patent Arbitration Rules..."

Additionally, we would like to add after the last phrase "... at the request of either party," the following phrase:

> except that it not be required that proceedings actually be conducted by said Association.

Department for Professional Employees, AFL-CIO
815 16th Street, N.W., Washington, D.C. 20006 Phone 202/638-0320

May 10, 1984

Hon. Robert Kastenmeier, Chairman
Subcommittee on Courts, Civil Liberties
and the Administration of Justice
Committee on the Judiciary
U.S. House of Representatives
Washington, D.C. 20515

MAY 24 1984

Dear Mr. Chairman:

We have noted with great interest the hearings that are currently being held on a group of bills dealing with various aspects of the patent system. In particular, we are quite pleased that the issue of compensation for employed inventors is before your committee.

In particular, we would like to reiterate our support for HR 3285. As you know, Dennis Chamot from this Department testified in support of this legislation in a hearing before your committee on July 29, 1982, and we believe that all that was said then still applies. We think that HR 3285 represents a thorough, broad approach which would go a long way toward solving the many problems currently existing in this area.

We do not believe that HR 3286 meets the needs of employed scientists and engineers. While that bill seeks to deal with pre-assignment agreements, it offers little to scientists and engineers beyond what already exists in common law and some proposed state statutes. This bill does not treat the compensation issue which, as was explained in Dr. Chamot's testimony, we believe is at the heart of the attempt to stimulate greater efforts at creativity and invention. Indeed, we believe that passage of HR 3286 by itself would result in a situation which could be worse than exists today because it gives the appearance of solving a problem without actually doing so.

While this Department takes no position at this time on the other

TWX: 710-822-9276 (AFL-CIO WSH A) FAX: 202-637-5058

bills in this group, we strongly support HR 3285 and urge you to use your good offices in facilitating its approval by the Congress.

Sincerely,

Jack Golodner
Director

Department for Professional Employees, AFL-CIO
815 16th Street, N.W., Washington, D.C. 20006 Phone 202/638-0320

June 1, 1983

Mr. David W. Beier, III
Assistant Counsel
Subcommittee on Courts,
Civil Liberties and the
Administration of Justice
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Beier:

When we spoke recently, you expressed interest in a couple of items referred to in my testimony last year on HR 6635 (compensation for employed inventors).

Enclosed are a copy of the American Chemical Society survey; the numerical results and the written comments to the ACS survey; the article from Research Management; and an article on other nations' laws. I hope this material is useful to you.

Sincerely,

Dennis Chamot
Assistant Director

DC/jmk

TWX: 710-822-9276 (AFL-CIO WSH A) FAX: 202-637-5058

RESEARCH MANAGEMENT
July 1979
Page 6

Survey Studies Inventor Award Plans in Major Companies

Nearly 60% of the major U.S. corporations have some type of plan for rewarding employee inventors, according to a survey made by the Association of Corporate Patent Counsel (ACPC). About 200 companies representing a total sales of over $500 billion in 1976 and employing in the order of 400,000 employees in technical jobs participated in the study.

Reporting on the survey at the Fall Meeting of the Industrial Research Institute, Dr. R.C. Clement, general manager of patents and licensing at Shell Development Company, said that a similar ACPC study in 1972 found that only 48% of the responding companies had inventor award plans. The current study learned that most companies now having award plans adopted them in the past 25 years.

About 33% of the plans reported in the survey provide only for honoraria while 66% involve other recognition instead of or in addition to honoraria. The amounts of the honoraria vary, with most running in the range of about $100 to $200.

However, special awards that go beyond honoraria are given by 44% of those companies which have inventor award plans. They are discretionary in amount, and are most frequently awarded only to those inventors whose inventions are judged to be of special economic benefit for the company. Typical awards range from $1,000 to several thousand dollars. Some are part of a broader company-wide plan for rewarding creativity and extraordinary contribution in general, whether or not a patent application is involved. But many are independent of such broader plans.

Reasons for Award Programs

The survey found that the highest ranked reasons for inventor award programs were: To communicate the employer's interest in inventive work of employees to encourage inventive work; to simulate timely disclosures; and to encourage the inventor to assist in the patent process. Rewarding the inventor was the principle objective in very few cases. About 30% of companies that have plans believe their inventors are more productive because of the plans. The rest either do not believe that or don't know.

According to the survey results, the cost of inventor award plans does not appear to be a substantial factor. A majority of plans, 78%, cost less than $50,000 a year. Administrative costs add to this, perhaps substantially in some cases, but most of the participants who commented on this point, indicated that no accounting was made for such administrative costs or that they are insignificant.

The study also elicited information on negative aspects of award plans: For exmaple, encouragement of secrecy among employees; difficulties of administration; increased patent manpower required to handle nonmeritorious inventions and jealousy on the part of employees in areas unlikely to result in patentable ideas. Most of the companies participating in the survey that have plans indicated that they observed these negative aspects only slightly or not at all.

Most of the participating companies that have no inventor award plan said that inventions should not be singled out over other valuable work and inventors are already being well rewarded by pay increases and promotions for a job they were hired to do. Some companies are especially concerned about the possibility that an inventor award plan would inhibit free and open communication of ideas in the same technical area.

Large Plan Differences

In commenting on the survey results, Dr. Clement emphasized the large differences among companies and industries. He said: "The importance of the legally designated inventor relative to the importance of others in the entire innovation process and how the inventors should be compensated vary greatly depending upon the kinds of business, the kinds of technology and the nature of the particular invention. A method of compensating inventors in one company of one industry is most likely, I believe, not to be suitable at all for another company or another industry. It is for this reason particularly that I am convinced that legislated invention compensation would be a bad mistake. I do not think that government regulations should be allowed to intrude into the arrangements employers make with employee inventors. I do think that we need equitable treatment designed to encourage enthusiasm for innovative achievement. This is something we can do much better for ourselves."

American Chemical Society

1979 Comprehensive Salary and Employment Status Survey

Do Not Write In This Space

A. Have you earned any of the following degrees:

Bachelors	Yes	No	Year received 19__ __
Masters	Yes	No	Year received 19__ __
Doctorate	Yes	No	Year received 19__ __

B. Field of highest degree:

- Analytical chemistry
- Inorganic chemistry
- Organic chemistry
- Polymer macromolecular chemistry
- Physical theoretical chemistry
- Biochemistry
- Agricultural food chemistry
- Pharmaceutical-medicinal clinical chemistry
- Chemical engineering
- Chemistry, general
- Chemistry, other (specify) _____
- Non-chemical (specify) _____

C. Sex: Male Female

D. Age, as of March 1, 1979 __ __

E. State of residence __ __ __ __

F. Please indicate your ACS local section:

- California
- Chicago
- Delaware
- New York
- North Jersey
- *Northeastern*
- Philadelphia
- Pittsburgh
- Southeastern Texas
- *Southern California*
- Washington
- None of the above

G. Citizenship or visa status:

- U.S. Citizen
- U.S. Permanent Resident Visa
- Other Visa

H. Racial or ethnic group:

- Black (not of Hispanic origin)
- American Indian or Alaskan Native
- Asian or Pacific Islander (of Chinese, Japanese, Korean, Filipino, or subcontinental Indian origin)
- Hispanic (of Mexican, Puerto Rican, Cuban, or Spanish origin)
- None of the above

In questions I through M please check the one response that most aptly describes your status as of March 1, 1979

I. Current Employment Status:

- Employed full-time
  - and not seeking employment
  - and actively seeking other employment
- Postdoctoral or other fellowship
- Employed part-time
  - and seeking full-time employment
  - and not seeking full time employment
- Unemployed:
  - and seeking employment
  - not seeking employment
- Retired:
  - and seeking full-time employment
  - and seeking part-time employment
  - and not seeking employment

J. If you were unemployed on March 1, *how long* had you been unemployed? __ __ months

K. Current, or most recent, full-time professional employer:

- College or university:
  - Public university
  - Public four-year college
  - Public two-year college
  - Private university
  - Private four-year college
  - Private two-year college
- High school other school
- Federal government
- State local government
- Private industry or business
  - Manufacturing
  - Non-manufacturing (e.g., mining, utilities, construction, consulting firm)
- Hospital independent laboratory
- Other non-profit organization research institution
- Self-employed
- Other (specify) _____

L. Category which most closely approximates your present, or most recent, principal work function:

- Research and development
  - Management administration of R&D
  - Basic research
  - Applied research development design
- General management administration (other than research development)
- Marketing sales purchasing technical services economic evaluation
- Production quality, control
- Forensic analyses other lab analyses
- Teaching teaching and research
  - Professor
  - Associate professor
  - Assistant professor
  - Instructor
  - Unranked
- Writing editing abstracting library services
- Data processing
- Consulting
- Other (specify) _____

M. Specialty which is most closely related to your present, or most recent, principal *employment*.

- Analytical chemistry
- Inorganic chemistry
- Organic chemistry
- Polymer macromolecular chemistry
- Physical theoretical chemistry
- Biochemistry
- Agricultural food chemistry
- Pharmaceutical medicinal clinical chemistry
- Chemical engineering
- Chemistry, general
- Environmental chemistry
- Chemistry, other (specify) _____
- Nuclear other energy
- Non chemical (specify) _____
- Journalism, information/library science
- Computer science

M.

N. Principal ANNUAL SALARY as of March 1, 1979 (Do not include payments for second job, overtime work, summer teaching or other supplemental employment.)

$ _____ per year

N.

O. Total 1978 INCOME from all professional activities. (Include salary, bonuses, royalties, honoraria, and payment for summer or part-time teaching, consultation, and other professional activities.)

$_____

O.

P. Total 1978 SALARY from principal employment. (Do not include bonuses or payments for summer and overload teaching.)

$

P.

Q. Amount of professional work experience:

Academic work experience _____ years

Non-academic work experience _____ years

Q.

R. Either at the time of hire or later, have you ever signed a written agreement requiring assignment of patents to any employer?

- Yes
- No
- Don't know

R.

S. What is the total number of patents that the U.S. Patent and Trademark Office has issued with you named as an inventor or co-inventor?

S.

T. Of these patents how many resulted from your work as an employee rather than as an independent inventor?

If answer to Question T is NONE, stop here.

T.

The remaining questions refer to the MOST RECENT U.S. PATENT covering an invention resulting from your work as an EMPLOYEE (whether for your present employer or a previous one)

U. Year this patent was *issued*: 19___

U.

V. Check *all* of the following statements that correctly describe the current status of this patent:

- Patent has been assigned to employer
- Patent is being used commercially
- Patent has been licensed or sold
- Process or product development is in progress on the invention covered by this patent
- Patent is in force now
- Patent has been released to me by employer
- Current status unknown

V.

W. What do you expect to be your total monetary return in the form of award(s) from your employer — aside from your salary — on this patent? Please check one statement:

- Less than $5
- $5 to $1,000
- Over $1,000
- Don't know

W.

X. Has this patent resulted in, or do you expect it to result in: (Check *all* items that apply.)

- Recognition, public or private, from your employer
- Monetary award or bonus (or promise leading to such an award)
- Non-monetary, commemorative medal or plaque
- A change in job assignment or favorable consideration toward a promotion or a salary increase
- None of above

X.

Y. Please indicate your opinion about the following statement:

On the whole, my employer has been fair in recognizing my contribution to this patent.

(Please check one statement.)

- Agree strongly
- Agree moderately
- Disagree moderately
- Disagree strongly

Y.

Please use the reverse side of this page for any comments or suggestions.

ESTIMATING SAMPLING ERROR FOR PROPORTIONS

Upper and lower limits for the percents presented in this report may be estimated by using the table below. The table shows the approximate sampling errors for selected proportions and sample sizes. These sampling errors may be used to construct approximate "95% confidence intervals" for proportions. The sampling errors were computed, assuming the normal approximation to the binomial distribution, using the following formula:

$$s = (1.96)\sqrt{p(1-p)/n}$$

where s is the approximate sampling error
p is the observed proportion
n is the sample size

Approximate Sampling Errors for Proportions

n	p=.10 or .90	p=.20 or .80	p=.30 or .70	p=.40 or .60	p=.50
50	.083	.111	.127	.136	.139
100	.059	.078	.090	.096	.098
200	.042	.055	.064	.068	.069
500	.026	.035	.040	.043	.044
1000	.019	.025	.028	.030	.031
2000	.013	.018	.020	.021	.022
5000	.008	.011	.013	.014	.014
10000	.006	.008	.009	.010	.010

In the table on page 10, for example, 6096 full-time employed respondents were classified as working in industry. The percent of this group who are inventors is listed as 40.5 percent (p=.405). A 95% confidence interval for this proportion may be approximated by taking n and p to be about 5000 and .40 respectively. The table shows an approximate sampling error of .014 (1.4%). Hence, the 95% confidence interval is (.405 - .014) to (.405 + .014) or .391 (39.1%) to .419 (41.9%)*. If 100 similar estimates were made at this " level of confidence", about 95 of the true population proportions would be contained in their respective intervals.

*Direct use of the formula gives $.405 \pm .012$.

FULL-TIME EMPLOYED RESPONDENTS: INVENTORS AND NON-INVENTORS
by Employer (K), Degree (A), Sex (C), and Work Function (L)

	Total	Percent Distribution	
		Inventors	Non-inventors
Employer			
Academic Institution	2121	13.7	86.3
Federal, State, Local Government	959	17.1	82.9
Private Industry	6096	40.5	59.5
Other	814	26.3	73.7
Highest Degree			
Bachelor's	2526	22.2	77.8
Master's	1842	30.0	70.0
Doctorate	5622	35.9	64.1
Sex			
Men	9083	33.5	66.5
Women	907	10.6	89.4
Work Function			
R and D Management	1420	55.6	44.4
Basic Research	938	29.7	70.3
Applied Research	2694	41.2	58.8
General Management	842	30.5	69.5
Teaching and Research	1845	13.7	86.3
Other	2251	19.8	80.2

SIGNED PATENT AGREEMENT (R)

	Respondents who had at least 1 patent		All respondents	
	Number	Percent	Number	Percent
No response	14	0.4	64	0.7
Yes	2,932	93.5	6,886	71.5
No	133	4.2	2,103	21.8
Don't know	57	1.8	577	6.0
Total	3,136	100.0	9,630	100.0

EMPLOYER (K) BY STATUS OF PATENT (V)

EMPLOYER		ASGNEMPL	USEDCOM	LCNSSOLD	DEVELOP	NOTINUSE	RELEASED	STATUNKN
NC RESPONSE	COUNT	9	4	C	1	C	C	3
	% OF COL	0.3	0.6	0.C	0.2	0.0	0.C	0.6
PUBLIC UNIVERSITY		117	21	19	9	38	2	48
		4.3	2.9	10.7	2.0	4.1	7.4	10.2
PUBLIC 4-YEAR		13	4	2	C	5	0	7
		0.5	0.6	1.1	0.C	0.5	0.0	1.5
PUBLIC 2-YEAR		10	3	C	C	2	0	7
		0.4	0.4	0.C	C.0	0.2	0.0	100.0 1.5 1.5
PRIVATE UNIVRSTY		22	4	2	2	8	1	12
		0.8	0.6	1.1	0.5	0.9	3.7	2.6
PRIVATE 4-YEAR		21	2	1	1	6	1	9
		0.8	0.3	0.6	0.2	C.6	3.7	1.9
PISCHCOL,OTHER		2	1	C	0	0	0	1
		0.1	0.1	0.C	0.0	0.0	0.0	0.2
FEDERAL GOV		120	15	9	20	43	5	30
		4.4	2.1	5.1	4.5	4.6	18.5	6.4
STATE,LOCAL GOV		4	1	0	0	4	0	2
		0.1	0.1	C.0	0.0	0.4	0.0	0.4
MANUFACTURING		2108	610	121	360	716	10	285
		77.9	84.1	68.0	81.3	76.6	37.0	60.8
NONMANUFACTURING		117	26	12	32	48	3	17
		4.3	3.6	6.7	7.2	5.1	11.1	3.6
HOSPITAL,IND LAB		12	5	2	1	4	0	7
		0.4	0.7	1.1	0.2	D.4	0.0	1.5
NONPRFT RES INST		57	8	6	7	23	4	17
		2.1	1.1	3.4	1.6	2.5	14.8	3.6
SELF- EMPLOYED		30	10	2	1	8	0	9
		1.1	1.4	1.1	0.2	0.9	0.0	1.9
OTHER		64	11	2	9	30	1	15
		2.4	1.5	1.1	2.0	3.2	3.7	3.2
COLUMN TOTAL		2706	725	178	443	935	27	469
		100.0	100.0	100.0	100.0	100.0	100.0	100.0

LEVEL OF AGREEMENT (Y) BY EMPLOYER (K)

AGREE WITH STATEMENT		EMPLOYER															
		NO RESPONSE	PUBLIC UNIVER.	PUBLIC 4 -YEAR	PUBLIC 2 -YEAR	PRIVATE UNIVERSTY	PRIVATE 4-YEAR	HISCHOOL &OTHER	FEDERAL GOV	STATE&LO CAL GOV	MANUFACT URING	NONMANUF ACTURING	HOSPITAL &IND LAB	NONPRFT RES INST	SELF-EMPLOYED	OTHER	ROW TOTAL
AGREE STRONGLY	COUNT	2	55	3	6	10	11	0	51	1	724	52	4	23	6	20	980
	% OF ROW	0.2	5.6	0.3	0.6	1.0	1.1	0.0	5.2	0.1	73.9	5.3	0.4	2.3	0.6	2.0	34.1
	% OF COL	22.2	40.4	21.4	54.5	37.0	50.0	0.0	37.2	12.5	93.2	39.1	23.5	35.9	18.8	28.2	
	% OF TOT	0.1	2.1	0.1	0.2	0.3	0.4	0.0	1.8	0.0	25.5	1.8	0.1	0.8	0.2	0.7	
AGREE MODERATELY	COUNT	6	51	5	5	9	9	1	52	2	910	55	8	23	13	38	1185
	% OF ROW	0.5	4.3	0.4	0.4	0.8	0.8	0.1	4.4	0.2	76.8	4.6	0.7	1.9	1.1	3.2	41.2
	% OF COL	66.7	34.5	35.7	27.8	33.3	40.9	50.0	38.0	25.0	41.7	41.4	50.0	35.4	40.6	53.5	
	% OF TOT	0.2	1.6	0.2	0.1	0.3	0.3	0.0	1.8	0.1	31.7	1.9	0.3	0.8	0.5	1.3	
DISAGREE MODERAT	COUNT	1	17	3	1	3	1	1	18	1	331	15	2	12	7	8	423
	% OF ROW	0.2	4.0	1.2	0.2	0.7	0.2	0.2	4.3	0.2	78.3	3.5	0.5	2.8	1.7	1.9	14.7
	% OF COL	11.1	11.6	21.4	9.1	11.1	4.5	50.0	13.1	12.5	15.2	11.3	15.4	18.4	21.9	11.3	
	% OF TOT	0.0	0.6	0.1	0.0	0.1	0.0	0.0	0.6	0.0	11.5	0.5	0.1	0.4	0.2	0.3	
DISAGREE STRONGL	COUNT	0	15	1	1	3	1	0	16	4	209	11	2	7	2	2	304
	% OF ROW	0.0	4.9	0.3	0.3	1.0	0.3	0.0	5.3	1.3	68.8	3.6	0.7	2.3	0.7	0.7	10.6
	% OF COL	0.0	10.2	7.1	9.1	18.5	4.5	0.0	11.7	50.0	9.6	8.3	15.4	10.4	18.8	5.6	
	% OF TOT	0.0	0.5	0.0	0.0	0.2	0.0	0.0	0.6	0.1	7.3	0.4	0.1	0.2	0.2	0.2	
NO RESPONSE	COUNT	2M	36M	3M	2M	20M	0M	1M	10M	2M	126M	18M	1M	5M	0M	0M	262M
	% OF ROW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% OF COL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	% OF TOT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL		9	146	14	11	27	22	2	137	8	4184	133	16	64	32	71	2874
		0.3	5.1	0.5	0.4	0.9	0.8	0.1	4.8	0.3	75.9	4.6	0.6	2.2	1.1	2.5	100.0

LEVEL OF AGREEMENT (Y) BY EXPERIENCE (Q)

		TOTAL EXPERIENCE LEVEL (YEARS)											
		NO RESPONSE	0,1	2-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 OR MORE	ROW TOTAL
AGREE STRONGLY	COUNT	12	4	6	61	93	91	162	204	154	152	41	980
	% OF ROW	1.2	0.4	0.6	6.2	9.5	9.3	16.5	20.8	15.7	15.5	4.2	34.1
	% OF COL	48.0	57.1	27.3	28.0	25.1	25.6	34.2	38.2	39.7	43.3	32.0	
	% OF TOT	0.4	0.1	0.2	2.1	3.2	3.2	5.6	7.1	5.4	5.3	1.4	
AGREE MODERATELY		6	3	7	90	171	155	184	210	157	144	58	1185
		0.5	0.3	0.6	7.6	14.4	13.1	15.5	17.7	13.2	12.2	4.9	41.2
		24.0	42.9	31.8	41.3	46.1	43.5	38.8	39.3	40.5	41.0	45.3	
		0.2	0.1	0.2	3.1	5.9	5.4	6.4	7.3	5.5	5.0	2.0	
DISAGREE MODERAT		0	0	8	45	63	62	72	70	43	40	20	423
		0.0	0.0	1.9	10.6	14.9	14.7	17.0	16.5	10.2	9.5	4.7	14.7
		0.0	0.0	36.4	20.6	17.0	17.4	15.2	13.1	11.1	11.4	15.6	
		0.0	0.0	0.3	1.6	2.2	2.2	2.5	2.4	1.5	1.4	0.7	
DISAGREE STRONGL		7	0	1	22	44	48	56	50	34	15	9	286
		2.4	0.0	0.3	7.7	15.4	16.8	19.6	17.5	11.9	5.2	3.1	10.0
		28.0	0.0	4.5	10.1	11.9	13.5	11.8	9.4	8.8	4.3	7.0	
		0.2	0.0	0.0	0.8	1.5	1.7	1.9	1.7	1.2	0.5	0.3	
NO RESPONSE		6M	2M	8M	20M	20M	38M	41M	43M	39M	31M	14M	262M
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL		25	7	22	218	371	356	474	534	388	351	128	2874
		0.9	0.2	0.8	7.6	12.9	12.4	16.5	18.6	13.5	12.2	4.5	100.0

LEVEL OF AGREEMENT (Y) BY MONETARY RETURN (W)

		TOTAL MONETARY RETURN TO PATENT					
		LESS THA $5 IN $5	$5 THRU $1000	OVER $1000	CCULT KA AD CM	NO RESPONSE	ROW TOTAL
AGREE STRONGLY	COUNT	592	296	28	56	8M	972
	% OF ROW	60.9	30.5	2.9	5.8	0.0	34.0
	% OF COL	30.8	39.1	70.0	40.3	0.0	
	% OF TOT	20.7	10.4	1.0	2.0	0.0	
AGREE MODERATELY		771	346	9	56	3M	1182
		65.2	29.3	0.8	4.7	0.0	41.3
		40.1	45.8	22.5	40.3	0.0	
		27.0	12.1	0.3	2.0	0.0	
DISAGREE MODERAT		323	78	1	19	2M	421
		76.7	18.5	0.2	4.5	0.0	14.7
		16.8	10.3	2.5	13.7	0.0	
		11.3	2.7	0.0	0.7	0.0	
DISAGREE STRONGL		236	36	2	8	2M	284
		83.1	13.4	0.7	2.8	0.0	9.9
		12.3	5.0	5.0	5.8	0.0	
		8.3	1.3	0.1	0.3	0.0	
NO RESPONSE		43M	7M	0M	10M	202M	262M
		0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL		1922	758	40	139	217M	2859
		67.2	26.5	1.4	4.9	0.0	100.0

LEVEL OF AGREEMENT (Y) BY STATUS OF PATENT (V)

		ASGNEMPL	USEDCOM	LCNSSOLD	DEVELOP	NOTINUSE	RELEASED	STATUNKN
AGREE STRONGLY	COUNT	887	209	66	145	399	14	105
	% OF COL	33.4	29.1	37.7	32.9	43.4	56.0	23.3
AGREE MODERATELY		1101	288	55	176	370	4	201
		41.4	40.2	31.4	39.9	40.3	16.0	44.7
DISAGREE MODERAT		403	117	25	68	105	5	85
		15.2	16.3	14.3	15.4	11.4	20.0	18.9
DISAGREE STRONGL		266	103	29	52	45	2	59
		10.0	14.4	16.6	11.8	4.9	8.0	13.1
NC	RESPONSE	49M	8M	3M	2M	16M	2M	19M
		0.0	0.0	0.0	0.0	0.0	0.0	0.0
	COLUMN TOTAL	2657	717	175	441	919	25	450
		100.0	100.0	100.0	100.0	100.0	100.0	100.0

LEVEL OF AGREEMENT (Y) BY TYPE OF RECOGNITION (X)

		RECOGN	MONEY	COMMEROR	JBCHANGE	NORESULT
AGREE STRONGLY	COUNT	470	257	112	187	359
	% OF COL	48.1	49.3	45.7	53.1	24.3
AGREE MODERATELY		412	218	101	143	572
		42.2	41.8	41.2	40.6	38.7
DISAGREE MODERAT		64	33	19	19	309
		6.6	6.3	7.8	5.4	20.9
DISAGREE STRONGL		31	13	13	3	237
		3.2	2.5	5.3	0.9	16.0
NC	RESPONSE	2M	4M	0M	1M	51M
		0.0	0.0	0.0	0.0	0.0
	COLUMN TOTAL	977	521	245	352	1477
		100.0	100.0	100.0	100.0	100.0

LEVEL OF AGREEMENT (Y) BY SALARY LEVEL (D) - NO RECOGNITION (X)

		ANNUAL SALARY LEVEL										
		NO RESPONSE	UNDER 5000	10000 TO 14999	15000 TO 19999	20000 TO 24999	25000 TO 29999	30000 TO 39999	40000 TO 49999	50000 TO 99999	100000 OR MORE	ROW TOTAL
AGREE STRONGLY	COUNT	5	0	0	7	21	35	115	94	78	4	359
	% OF COL	35.7	0.0	0.0	13.7	13.2	13.9	19.9	36.2	53.1	57.1	24.3
AGREE MODERATELY		3	1	5	20	60	98	230	102	52	1	572
		21.4	100.0	62.5	39.2	37.7	38.9	39.8	39.2	35.4	14.3	38.7
DISAGREE MODERAT		4	0	3	14	37	58	144	38	12	1	369
		28.6	0.0	37.5	27.5	23.3	23.0	24.9	14.6	8.2	14.3	25.0
DISAGREE STRONGL		4	0	0	10	41	61	89	26	5	1	237
		28.6	0.0	0.0	19.6	25.8	24.2	15.4	10.0	3.4	14.3	16.0
NO RESPONSE		2M	0M	3M	1M	10M	11M	11M	9M	4M	0M	51M
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	COLUMN TOTAL	14	1	8	51	159	252	578	260	147	7	1477
		0.9	0.1	0.5	3.5	10.8	17.1	39.1	17.6	10.0	0.5	100.0

LEVEL OF AGREEMENT (Y) BY SALARY LEVEL (N) - SOME RECOGNITION (X)

		ANNUAL SALARY LEVEL										
		NO RESPONSE	UNDER 5000	10000 TO 14999	15000 TO 19900	20000 TO 24900	25000 TO 29900	30000 TO 39900	40000 TO 49900	50000 TO 99900	100000 OR MORE	ROW TOTAL
AGREE STRONGLY	COUNT	8	0	3	13	33	71	217	162	109	5	621
	% OF COL	61.5	0.0	60.0	41.9	30.6	33.5	38.8	54.9	65.7	71.4	44.5
AGREE MODERATELY		4	0	1	12	56	114	274	103	47	2	613
		30.8	0.0	20.0	38.7	51.9	53.8	49.0	34.9	28.3	28.6	43.9
DISAGREE MODERAT		0	1	1	3	13	20	50	20	6	0	114
		0.0	100.0	20.0	9.7	12.0	9.4	8.9	6.8	3.6	0.0	8.2
DISAGREE STRONGL		1	0	0	3	6	7	18	10	4	0	49
		7.7	0.0	0.0	9.7	5.6	3.3	3.2	3.4	2.4	0.0	3.5	
NO RESPONSE		0M	0M	1M	8M	27M	37M	71M	41M	18M	2M	211M
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
COLUMN TOTAL		13	1	5	31	108	212	559	295	166	7	1397
		0.9	0.1	0.4	2.2	7.7	15.2	40.0	21.1	11.9	0.5	100.0

LEVEL OF AGREEMENT (Y) BY WORK FUNCTION (L)

		WORK FUNCTION																	
		NO RESPONSE	RED PGMT ADMINIS	BASIC RESEARCH	APPLIED RED	GEN PGMT ADMINIS	PRT SALE PURCH	PRO CUAL CONTROL	FORENSIC LAB ANL	PROFESSO R	ASSOC PR OF	ASSIST P ROF	INSTR LE C	UNRANKED	WRITE ST LIBRARY	AB DATA PRC CESSING	CONSULTI NG	OTHER	ROW TOTAL
AGREE STRONGLY	COUNT	0	363	181	281	163	41	20	2	59	14	3	2	1	3	1	3	10	880
	% OF ROW	0.0	41.3	20.6	32.0	18.5	4.7	2.3	0.2	6.7	1.6	0.3	0.2	0.1	0.3	0.1	0.3	1.1	34.1
	% OF COL	0.0	40.7	35.3	26.7	44.4	24.8	28.4	11.8	43.1	37.8	42.7	50.0	50.0	23.7	16.7	27.3	38.5	
	% OF TOT	0.0	10.1	5.0	7.8	4.5	1.1	0.6	0.1	1.6	0.4	0.1	0.1	0.0	0.1	0.0	0.1	0.3	
AGREE MODERATELY	COUNT	3	774	511	1405	811	97	51	7	47	16	4	1	1	5	1	5	18	3183
	% OF ROW	0.1	24.3	16.1	44.1	25.5	3.0	1.6	0.2	1.5	0.5	0.1	0.0	0.0	0.2	0.0	0.2	0.6	123.2
	% OF COL	50.0	76.3	80.3	66.1	56.9	41.8	50.0	41.2	34.3	40.0	33.3	25.0	50.0	29.4	33.3	45.5	69.2	
	% OF TOT	0.1	30.1	19.9	54.6	31.5	3.8	2.0	0.3	1.8	0.6	0.2	0.0	0.0	0.2	0.0	0.2	0.7	
DISAGREE MODERAT	COUNT	1	594	412	1360	724	74	41	5	135	15	5	1	1	3	2	4	15	3423
	% OF ROW	0.0	23.4	16.2	53.6	28.5	2.9	1.6	0.2	5.3	0.6	0.2	0.0	0.0	0.1	0.1	0.2	0.6	132.4
	% OF COL	25.0	11.1	16.3	12.7	15.7	15.7	16.8	29.4	10.9	14.2	16.7	25.0	50.0	17.6	33.3	18.2	11.5	
	% OF TOT	0.0	3.4	2.3	7.8	4.2	0.4	0.2	0.0	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
DISAGREE STRONGL	COUNT	1	531	231	1126	614	71	31	3	106	13	6	0	0	3	1	4	9	2888
	% OF ROW	0.0	27.4	8.0	58.1	31.7	3.7	1.6	0.2	5.5	0.7	0.3	0.0	0.0	0.2	0.1	0.2	0.5	111.2
	% OF COL	25.0	6.1	8.5	10.6	13.3	13.7	15.2	17.6	11.9	18.6	16.7	0.0	0.0	17.6	16.7	18.2	6.9	
	% OF TOT	0.0	2.9	1.2	6.1	3.3	0.4	0.2	0.0	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
NO RESPONSE	COUNT	1M	44M	22P	57M	23P	17M	11M	2M	47M	10M	3M	1M	1M	4M	1M	3P	11M	62M
	% OF ROW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% OF COL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	% OF TOT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL		4	2918	1357	4229	2335	403	254	34	494	84	21	4	3	18	4	19	61	12639
		0.1	23.1	10.7	33.5	18.5	3.2	2.0	0.3	3.9	0.7	0.2	0.0	0.0	0.1	0.0	0.2	0.5	100.0

LEVEL OF AGREEMENT (Y) OF INVENTORS RECEIVING NO RECOGNITION (RESPONSE TO QUESTION X) AND WHOSE PATENTS WERE USED COMMERCIALLY (RESPONSE TO QUESTION V)

AGREE WITH STATEMENT		NO RECOGNITION	ROW TOTAL
AGREE STRONGLY	COUNT	38	38
	% OF ROW	100.0	11.9
	% OF COL	11.9	
AGREE MODERATELY	COUNT	116	116
	% OF ROW	100.0	36.3
	% OF COL	36.3	
DISAGREE MODERAT	COUNT	88	88
	% OF ROW	100.0	27.5
	% OF COL	27.5	
DISAGREE STRONGL	COUNT	78	78
	% OF ROW	100.0	24.4
	% OF COL	24.4	
COLUMN TOTAL		320	320
		100.0	100.0

Summary:

No recognition Patent used commercially	Of 320,	166 (52%)	dissatisfied (disagree mod. or strongly)
No recognition Patent not used commercially	Of 1577,	448 (28%)	dissatisfied
Some recognition Patent used commercially	Of 397,	54 (14%)	dissatisfied
Some recognition Patent not used commercially	Of 580,	41 (7%)	dissatisfied

LEVEL OF AGREEMENT (Y) BY LOCAL SECTION (F)

AGREE WITH STATEMENT		ACS LOCAL SECTION												ROW TOTAL
		CALI-FORNIA	CHICAGO	DELAWARE	NEW YORK	NORTH JERSEY	NORTH-EASTERN	PHILA-DELPHIA	PITTS-BURGH	SOUTH-EASTERN	SOUTHERN CALIF.	WASHING-TON D.C.	OTHER	
AGREE STRONGLY	COUNT	59	61	63	42	70	44	41	24	31	14	21	485	955
	% OF ROW	6.2	6.4	6.6	4.4	7.3	4.6	4.3	2.5	3.2	1.5	2.2	50.8	34.1
	% OF COL	35.1	35.3	47.7	29.4	23.8	33.3	34.5	32.9	32.6	31.8	36.8	35.4	
AGREE MODERATELY		66	67	44	65	130	55	46	33	49	18	18	556	1147
		5.8	5.8	3.8	5.7	11.3	4.8	4.0	2.9	4.3	1.6	1.6	48.5	41.0
		39.3	38.7	33.3	45.5	44.2	41.7	38.7	45.2	51.6	40.9	31.6	40.6	
DISAGREE MODERAT		20	30	10	23	45	16	21	12	12	8	9	210	416
		4.8	7.2	2.4	5.5	10.8	3.8	5.0	2.9	2.9	1.9	2.2	50.5	14.9
		11.9	17.3	7.6	16.1	15.3	12.1	17.6	16.4	12.6	18.2	15.8	15.3	
DISAGREE STRONGL		23	15	15	13	49	17	11	4	3	4	9	119	282
		8.2	5.3	5.3	4.6	17.4	6.0	3.9	1.4	1.1	1.4	3.2	42.2	10.1
		13.7	8.7	11.4	9.1	16.7	12.9	9.2	5.5	3.2	5.1	15.8	8.7	
COLUMN TOTAL		168	173	132	143	294	132	119	73	95	44	57	1370	2800
		6.0	6.2	4.7	5.1	10.5	4.7	4.3	2.6	3.4	1.6	2.0	48.9	100.0

MONETARY RETURN (W) BY YEAR PATENT WAS ISSUED (U)

TOTAL MONETARY RETURN TO PATENT		YEAR PATENT ISSUED											
		NO RESPONSE	1979	1978	1977	1976	1975	1974-70	1969-65	1964-60	1959-55	1954-50	PRIOR TO 1950	ROW TOTAL
LESS THAN $5	COUNT	80	131	410	143	131	119	342	286	138	93	52	40	1965
	% OF ROW	4.1	6.7	20.9	7.3	6.7	6.1	17.4	14.6	7.0	4.7	2.6	2.0	67.5
	% OF COL	70.8	66.5	60.6	64.1	65.2	70.4	66.3	74.7	72.6	76.2	71.2	72.7	
	% OF TOT	2.7	4.5	14.0	4.9	4.5	4.1	11.7	9.8	4.7	3.2	1.8	1.4	
$5 THRU $1000		24	48	219	56	56	40	151	84	38	22	17	10	765
		3.1	6.3	28.6	7.3	7.3	5.2	19.7	11.0	5.0	2.9	2.2	1.3	26.2
		21.2	24.4	32.3	25.1	27.9	23.7	29.3	21.9	20.0	18.0	23.3	18.2	
		0.8	1.6	7.5	1.9	1.9	1.4	5.2	2.9	1.3	0.8	0.6	0.3	
OVER $1000		2	3	9	3	1	1	11	3	4	1	0	2	40
		5.0	7.5	22.5	7.5	2.5	2.5	27.5	7.5	10.0	2.5	0.0	5.0	1.4
		1.8	1.5	1.3	1.3	0.5	0.6	2.1	0.8	2.1	0.8	0.0	3.6	
		0.1	0.1	0.3	0.1	0.0	0.0	0.4	0.1	0.1	0.0	0.0	0.1	
DON'T KNOW		7	19	35	21	13	9	12	10	10	6	4	3	145
		4.7	10.1	24.2	14.1	8.7	6.0	8.1	6.7	6.7	4.0	2.7	2.0	5.1
		6.2	7.6	5.8	9.4	6.5	5.3	2.3	3.6	5.3	6.5	5.6	5.5	
		0.2	0.5	1.3	0.7	0.4	0.3	0.4	0.3	0.3	0.2	0.1	0.1	
NO RESPONSE		196M	0M	0M	1M	1M	0M	6M	2M	4M	1M	5M	1M	217M
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL		113	197	677	223	201	169	516	383	190	122	73	55	2915
		3.9	6.7	23.2	7.6	6.9	5.8	17.7	13.1	6.5	4.2	2.5	1.9	100.0

NUMBER OF PATENTS (C) BY EMPLOYER (K)

TOTAL PATENTS		EMPLOYER: NO RESPONSE	PUBLIC UNIVER.	PUBLIC 4-YEAR	PUBLIC 2-YEAR	PRIVATE UNIVERSITY	PRIVATE 4-YEAR	HISCHOOL +LEPER	FEDERAL GOV	STATE+LL CAL GOV	MANUFACT UNING	NONMANUF ACTURING	HOSPITAL +IND LAB	NONPRFT RES INST	SELF-EMPLOYED	OTHER	ROW TOTAL
1.	COUNT	2	65	6	5	23	9	2	60	5	300	51	15	16	11	32	805
	% OF ROW	0.2	8.1	0.8	0.6	2.9	1.1	0.2	7.5	0.6	37.3	6.3	1.9	2.0	1.4	3.4	23.9
	% OF COL	18.2	37.6	50.0	38.5	46.0	36.0	66.7	37.5	50.0	41.7	33.8	78.0	25.4	26.8	33.8	
	% OF TOT	0.1	2.2	0.2	0.2	0.8	0.3	0.1	1.9	0.2	9.6	1.6	0.5	0.5	0.4	0.9	
2		2	33	3	2	9	4	0	25	2	146	20	3	12	8	12	489
		0.4	7.4	0.6	0.4	1.8	0.8	0.0	5.1	0.4	29.9	4.1	0.6	2.5	1.6	2.5	14.6
		18.2	20.2	17.6	15.4	19.1	14.3	0.0	16.3	20.0	20.0	13.2	15.0	16.7	19.5	15.0	
		0.1	1.1	0.1	0.1	0.3	0.1	0.0	0.8	0.1	4.4	0.6	0.1	0.4	0.3	0.4	
3		1	26	2	2	3	2	0	11	0	217	16	1	12	2	7	338
		0.3	7.7	0.6	0.6	0.9	0.6	0.0	3.3	0.0	64.2	4.7	0.3	3.6	0.6	2.1	10.1
		9.1	14.3	11.8	15.4	7.1	7.1	0.0	7.5	0.0	14.5	10.6	5.0	16.7	4.9	8.8	
		0.0	0.8	0.1	0.1	0.1	0.1	0.0	0.4	0.0	6.5	0.5	0.0	0.4	0.1	0.2	
4		0	16	1	1	4	3	0	9	0	133	11	1	1	3	5	221
		0.0	7.2	0.5	0.5	1.8	1.4	0.0	4.1	0.0	60.2	5.0	0.5	0.5	1.4	2.3	6.6
		0.0	8.8	5.9	7.7	17.4	10.7	0.0	5.9	0.0	8.9	7.3	5.0	1.4	12.5	10.9	
		0.0	0.5	0.0	0.0	0.1	0.1	0.0	0.2	0.0	3.9	0.3	0.0	0.0	0.1	0.2	
5		0	2	0	0	1	1	1	7	0	154	11	0	1	1	4	157
		0.0	1.3	0.0	0.0	0.6	0.6	0.6	4.5	0.0	98.1	7.0	0.0	0.6	0.6	2.5	4.7
		0.0	1.2	0.0	0.0	0.4	0.4	16.7	4.7	0.0	10.3	7.3	0.0	1.4	1.4	10.0	
		0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	4.6	0.3	0.0	0.0	0.0	0.1	
6-10		3	16	1	1	4	4	0	18	1	369	31	1	9	4	10	673
		0.4	2.4	0.1	0.2	0.6	0.6	0.0	2.7	0.1	54.8	4.6	0.1	1.3	0.6	1.5	20.1
		27.3	8.8	5.9	7.7	17.4	14.3	0.0	11.4	10.0	17.8	20.5	5.0	12.5	7.3	12.5	
		0.1	0.5	0.0	0.0	0.1	0.1	0.0	0.5	0.0	11.0	0.9	0.0	0.3	0.1	0.3	
11-30		2	20	1	2	2	2	0	17	1	448	29	0	1	4	12	965
		0.2	2.1	0.1	0.2	0.2	0.2	0.0	1.8	0.1	46.4	3.0	0.0	0.1	0.4	1.2	28.8
		18.2	11.0	5.9	15.4	8.4	7.1	0.0	11.4	10.0	21.6	19.2	0.0	4.2	14.6	15.0	
		0.1	0.6	0.0	0.1	0.1	0.1	0.0	0.5	0.0	13.4	0.9	0.0	0.0	0.1	0.4	
31-50		1	3	0	0	0	1	0	4	0	82	5	0	2	0	2	76
		1.3	3.9	0.0	0.0	0.0	1.3	0.0	5.3	0.0	107.9	6.6	0.0	2.6	0.0	2.6	2.4
		9.1	1.7	0.0	0.0	0.0	3.6	0.0	2.6	0.0	3.2	3.3	0.0	2.8	0.0	5.0	
		0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.0	2.6	0.2	0.0	0.1	0.0	0.1	
51-100		0	2	0	0	1	1	0	2	0	26	0	0	0	2	1	35
		0.0	2.9	0.0	0.0	1.4	1.4	0.0	2.9	0.0	74.3	0.0	0.0	0.0	5.7	2.9	1.1
		0.0	0.6	0.0	0.0	0.4	0.4	0.0	1.3	0.0	1.1	0.0	0.0	0.0	4.9	2.5	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.1	0.0	
MORE THAN 100		0	1	0	0	0	0	0	0	0	7	0	0	0	0	0	7
		0.0	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.2
		0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL		11	162	17	13	49	28	3	153	10	2308	151	20	73	41	80	3336
		0.4	5.2	0.5	0.4	1.5	0.9	0.1	4.9	0.3	73.8	4.8	0.6	2.3	1.3	2.6	100.0

NUMBER OF PATENTS (S) BY HIGHEST DEGREE (A)

TOTAL PATENTS		HIGHEST DEGREE EARNED				ROW TOTAL
		NO RESPONSE	BACHELORS	MASTERS	DOCTORS	
1	COUNT	1	158	148	436	743
	% OF ROW	0.1	21.3	19.9	58.7	25.3
	% OF COL	16.7	30.2	28.7	23.1	
	% OF TOT	0.0	5.4	5.0	14.9	
2		1	98	91	264	454
		0.2	21.6	20.0	58.1	15.5
		16.7	18.7	17.6	14.0	
		0.0	3.3	3.1	9.0	
3		0	60	63	191	314
		0.0	19.1	20.1	60.8	10.7
		0.0	11.5	12.2	10.1	
		0.0	2.0	2.1	6.5	
4		0	41	43	129	213
		0.0	19.2	20.2	60.6	7.3
		0.0	7.8	8.3	6.8	
		0.0	1.4	1.5	4.4	
5		0	32	33	123	189
		0.0	17.5	17.5	65.1	6.4
		0.0	6.3	6.4	6.5	
		0.0	1.1	1.1	4.2	
6-10		0	66	74	301	441
		0.0	15.0	16.8	68.3	15.0
		0.0	12.6	14.3	16.0	
		0.0	2.3	2.5	10.3	
11-30		3	55	52	352	462
		0.6	11.9	11.3	76.2	15.8
		50.0	10.5	10.1	18.7	
		0.1	1.9	1.8	12.0	
31-50		1	12	11	49	73
		1.4	16.4	15.1	67.1	2.5
		16.7	2.3	2.1	2.6	
		0.0	0.4	0.4	1.7	
51-100		0	1	1	33	35
		0.0	2.9	2.9	94.3	1.2
		0.0	0.2	0.2	1.8	
		0.0	0.0	0.0	1.1	
MORE THAN 100		0	0	0	7	7
		0.0	0.0	0.0	100.0	0.2
		0.0	0.0	0.0	0.4	
		0.0	0.0	0.0	0.2	
COLUMN TOTAL		6	524	516	1885	2931
		0.2	17.9	17.6	64.3	100.0

NUMBER OF PATENTS (S) BY LEVEL OF AGREEMENT (Y)

TOTAL PATENTS		AGREE WITH STATEMENT: AGREE STRONGLY	AGREE MODERATELY	DISAGREE MODERAT	DISAGREE STRONGL	NO RESPONSE	ROW TOTAL
1	COUNT	233	305	100	55	108M	697
	% OF ROW	33.4	44.2	14.3	7.9	0.0	24.3
	% OF COL	23.8	26.1	23.6	19.2	0.0	
	% OF TOT	8.1	10.6	3.5	1.9	0.0	
2		145	154	53	47	50M	439
		33.0	44.2	12.1	10.7	0.0	15.3
		14.8	16.4	12.5	16.4	0.0	
		5.0	6.6	1.8	1.6	0.0	
3		113	121	43	33	28M	310
		36.5	39.0	13.9	10.6	0.0	10.8
		11.5	10.2	10.2	11.5	0.0	
		3.9	4.2	1.5	1.1	0.0	
4		59	102	33	19	18M	213
		27.7	47.9	15.5	8.9	0.0	7.4
		6.0	8.6	7.8	6.6	0.0	
		2.1	3.5	1.1	0.7	0.0	
5		66	78	22	19	12M	185
		35.7	42.2	11.9	10.3	0.0	6.4
		6.7	6.6	5.2	6.6	0.0	
		2.3	2.7	0.8	0.7	0.0	
6-10		157	155	77	51	29M	444
		35.4	35.8	17.3	11.5	0.0	15.4
		16.0	13.4	18.2	17.8	0.0	
		5.5	5.5	2.7	1.8	0.0	
11-30		168	173	78	54	12M	473
		35.5	36.6	16.5	11.4	0.0	16.5
		17.1	14.6	18.4	18.9	0.0	
		5.8	6.0	2.7	1.9	0.0	
31-50		24	35	11	4	2M	74
		32.4	47.3	14.9	5.4	0.0	2.6
		2.4	3.0	2.6	1.4	0.0	
		0.8	1.2	0.4	0.1	0.0	
51-100		13	13	4	4	1M	34
		38.2	38.2	11.8	11.8	0.0	1.2
		1.3	1.1	0.9	1.4	0.0	
		0.5	0.5	0.1	0.1	0.0	
MORE THAN 100		2	1	2	0	2M	5
		40.0	20.0	40.0	0.0	0.0	0.2
		0.2	0.1	0.5	0.0	0.0	
		0.1	0.0	0.1	0.0	0.0	
	COLUMN TOTAL	980	1185	423	286	262M	2874
		34.1	41.2	14.7	10.0	0.0	100.0

NUMBER OF PATENTS (S) BY SALARY LEVEL (U)

TOTAL PATENTS		SALARY LEVEL										ROW TOTAL
		NO RESPONSE	UNDER 5000	10000 TO 14950	15000 TO 19950	20000 TO 24950	25000 TO 29900	30000 TO 39900	40000 TO 49900	50000 TO 99900	100000 OR MORE	
1	COUNT	5	0	11	39	130	190	410	111	36	3	805
	% OF ROW	1.1	0.0	1.4	4.8	16.1	23.6	35.5	13.8	4.0	0.4	25.7
	% OF COL	25.7	0.0	57.7	42.9	42.8	37.1	24.0	18.3	9.8	10.6	
	% OF TOT	0.3	0.0	0.4	1.2	4.1	6.1	13.1	3.5	1.0	0.1	
2	COUNT	4	1	2	20	64	102	186	66	40	4	485
	% OF ROW	0.8	0.2	0.4	4.1	13.1	20.9	38.3	13.6	8.2	0.8	15.6
	% OF COL	11.4	50.0	11.8	22.0	21.1	19.9	15.3	13.9	11.9	25.0	
	% OF TOT	0.1	0.0	0.1	0.6	2.0	3.3	5.9	2.1	1.3	0.1	
3	COUNT	0	0	0	11	38	52	136	63	35	3	338
	% OF ROW	0.0	0.0	0.0	3.3	11.2	15.4	40.2	18.6	10.4	0.9	10.8
	% OF COL	0.0	0.0	0.0	12.1	12.5	10.2	11.2	13.4	10.4	18.8	
	% OF TOT	0.0	0.0	0.0	0.4	1.2	1.7	4.3	2.0	1.1	0.1	
4	COUNT	4	0	2	5	25	38	102	39	15	1	231
	% OF ROW	1.7	0.0	0.9	2.2	10.8	16.5	44.2	16.9	6.5	0.4	7.4
	% OF COL	11.4	0.0	11.8	5.5	8.2	7.4	8.4	8.0	4.5	6.3	
	% OF TOT	0.1	0.0	0.1	0.2	0.8	1.2	3.3	1.2	0.5	0.0	
5	COUNT	1	0	1	3	8	26	92	41	25	0	197
	% OF ROW	0.5	0.0	0.5	1.5	4.1	13.2	46.7	20.8	12.7	0.0	6.3
	% OF COL	2.9	0.0	5.9	3.3	2.6	5.1	7.5	6.8	7.5	0.0	
	% OF TOT	0.0	0.0	0.0	0.1	0.3	0.8	2.9	1.3	0.8	0.0	
6-10	COUNT	6	0	0	8	22	55	206	116	56	4	473
	% OF ROW	1.3	0.0	0.0	1.7	4.7	11.6	43.6	24.5	11.8	0.8	15.1
	% OF COL	17.1	0.0	0.0	8.8	7.2	10.7	16.9	19.2	16.7	25.0	
	% OF TOT	0.2	0.0	0.0	0.3	0.7	1.8	6.6	3.7	1.8	0.1	
11-30	COUNT	8	1	1	4	14	41	186	127	100	1	465
	% OF ROW	1.6	0.2	0.2	0.8	2.9	8.9	38.4	26.2	20.6	0.2	15.0
	% OF COL	22.9	50.0	5.9	4.4	4.6	8.4	15.3	21.0	29.9	6.3	
	% OF TOT	0.3	0.0	0.0	0.1	0.4	1.4	5.5	4.0	3.2	0.0	
31-50	COUNT	2	0	0	1	2	3	24	20	18	0	76
	% OF ROW	2.6	0.0	0.0	1.3	2.6	3.9	31.6	26.3	23.7	0.0	2.4
	% OF COL	5.7	0.0	0.0	1.1	0.7	0.6	2.0	3.3	5.4	0.0	
	% OF TOT	0.1	0.0	0.0	0.0	0.1	0.1	0.8	0.6	0.6	0.0	
51-100	COUNT	1	0	0	0	0	3	4	16	13	0	35
	% OF ROW	2.9	0.0	0.0	0.0	0.0	8.6	11.4	45.7	37.1	0.0	1.1
	% OF COL	2.9	0.0	0.0	0.0	0.0	0.6	0.3	2.3	3.9	0.0	
	% OF TOT	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.4	0.0	
MORE THAN 100	COUNT	0	0	0	0	1	0	3	2	1	0	7
	% OF ROW	0.0	0.0	0.0	0.0	14.3	0.0	42.9	28.6	14.3	0.0	0.2
	% OF COL	0.0	0.0	0.0	0.0	0.5	0.0	0.2	0.3	0.3	0.0	
	% OF TOT	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	
COLUMN TOTAL		35	2	17	91	304	519	1419	555	293	16	3250
		1.1	0.1	0.5	2.8	9.4	16.0	43.7	17.1	9.0	0.5	100.0

NUMBER OF PATENTS (S) BY SEX (C)

TOTAL PATENTS		SEX: NO RESPONSE	MEN	WOMEN	ROW TOTAL
1	COUNT	11	765	29	805
	% OF ROW	1.4	95.0	3.6	25.7
	% OF COL	35.5	25.4	30.5	
	% OF TOT	0.4	24.4	0.9	
2		5	459	25	489
		1.0	93.9	5.1	15.6
		16.1	15.2	26.3	
		0.2	14.6	0.8	
3		2	326	10	338
		0.6	96.4	3.0	10.8
		6.5	10.8	10.5	
		0.1	10.4	0.3	
4		3	222	6	231
		1.3	96.1	2.6	7.4
		9.7	7.4	6.3	
		0.1	7.1	0.2	
5		1	193	3	197
		0.5	98.0	1.5	6.3
		3.2	6.4	3.2	
		0.0	6.2	0.1	
6-10		3	460	10	473
		0.6	97.3	2.1	15.1
		9.7	15.3	10.5	
		0.1	14.7	0.3	
11-30		3	471	11	485
		0.6	97.1	2.3	15.5
		9.7	15.6	11.6	
		0.1	15.0	0.4	
31-50		3	73	0	76
		3.9	96.1	0.0	2.4
		9.7	2.4	0.0	
		0.1	2.3	0.0	
51-100		0	34	1	35
		0.0	97.1	2.9	1.1
		0.0	1.1	1.1	
		0.0	1.1	0.0	
MORE THAN 100		0	7	0	7
		0.0	100.0	0.0	0.2
		0.0	0.2	0.0	
		0.0	0.2	0.0	
COLUMN TOTAL		31	3010	95	3136
		1.0	96.0	3.0	100.0

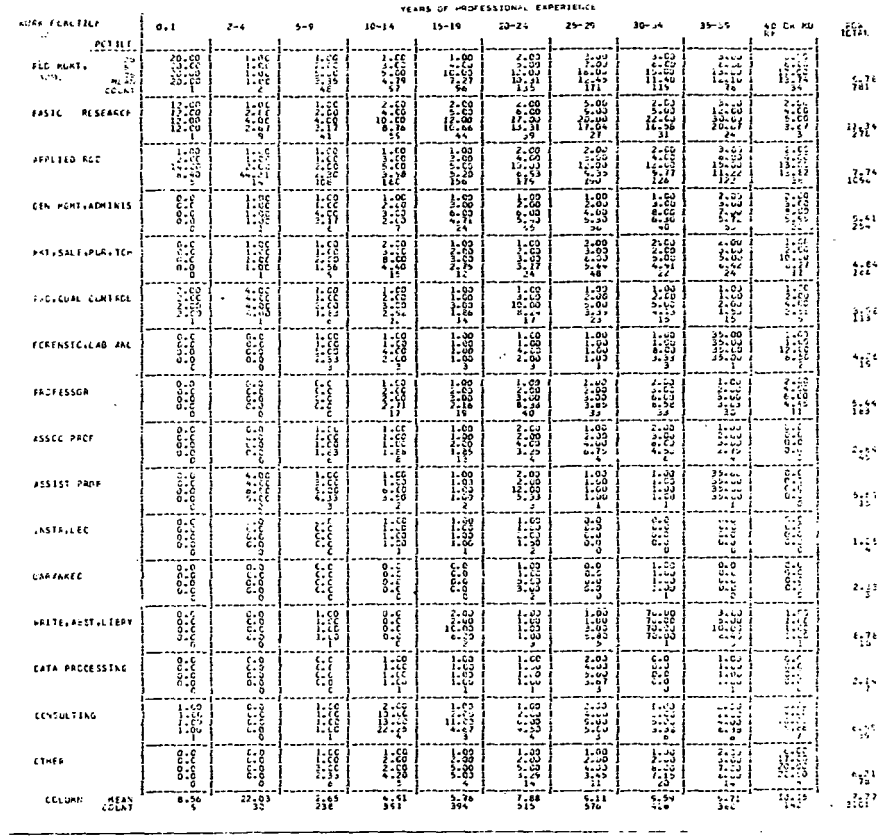
NUMBER OF PATENTS (S) BY WORK FUNCTION (L)

TOTAL PATENTS.		WORK FUNCTION																				ROW TOTAL
		NO RESPONSE	R&D MGMT ,ADMINIS	BASIC RESEARCH	APPLIED REC	GEN MGMT ,ADMINIS	MKT,SALE ,PUR,TCH	PRD,UAL CONTROL	FORENSIC ,LAB ANL	PROFESSO R	ASSOC OF	PR ASSIST ROF	P INSTR,LE C	UNRANKED	WRITE,AB ST,LEGRY	DATA PRC ESSING	CONSULTI NG	OTHER		
1	COUNT	1	138	61	280	74	44	47	13	64	23	6	4	2	8	4	7	29		805
	% OF ROW	0.1	17.1	7.6	34.8	9.2	5.5	5.8	1.6	8.0	2.9	0.7	0.5	0.2	1.0	0.5	0.9	3.6		25.7
	% OF COL	20.0	17.5	21.5	25.4	28.8	25.9	41.6	68.4	34.8	51.1	40.0	80.0	66.7	44.4	57.1	17.9	36.7		
	% OF TOT	0.0	4.4	1.9	8.9	2.4	1.4	1.5	0.4	2.0	0.7	0.2	0.1	0.1	0.3	0.1	0.2	0.9		
2	COUNT	2	56	37	175	39	41	24	0	45	7	2	1	0	2	1	10	13		480
	% OF ROW	0.4	11.7	7.7	36.5	8.1	8.5	5.0	0.0	9.4	1.5	0.4	0.2	0.0	0.4	0.2	2.1	2.7		15.4
	% OF COL	40.0	11.4	13.3	15.8	13.2	24.1	21.2	0.0	24.5	15.6	10.5	20.0	0.0	11.1	14.3	25.6	16.5		
	% OF TOT	0.1	1.8	1.2	5.6	1.2	1.3	0.8	0.0	1.4	0.2	0.1	0.0	0.0	0.1	0.0	0.3	0.4		
3	COUNT	0	81	17	123	35	25	14	0	22	3	1	0	0	2	0	1	1		338
	% OF ROW	0.0	24.0	5.0	36.4	10.4	7.4	4.1	0.0	6.5	0.9	0.3	0.0	0.0	0.6	0.0	0.3	0.3		10.8
	% OF COL	0.0	11.5	6.1	11.1	13.6	14.7	12.4	0.0	12.0	11.1	10.0	0.0	0.0	11.1	0.0	2.6	2.0		
	% OF TOT	0.0	2.6	0.5	3.9	1.1	0.8	0.4	0.0	0.7	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0		
4	COUNT	0	46	26	86	23	12	5	2	18	2	1	0	0	0	1	5	1		231
	% OF ROW	0.0	15.4	11.3	37.2	10.0	5.2	2.2	0.9	7.8	0.9	0.4	0.0	0.0	0.0	0.4	2.2	0.4		7.4
	% OF COL	0.0	3.8	9.5	7.8	8.7	7.1	5.3	10.5	9.8	7.4	10.0	0.0	0.0	5.6	14.3	12.8	1.4		
	% OF TOT	0.0	1.5	0.8	2.8	0.7	0.4	0.2	0.1	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0		
5	COUNT	0	62	17	69	15	8	4	2	4	2	0	0	0	1	0	1	1		197
	% OF ROW	0.0	32.0	8.6	35.6	7.6	4.1	2.0	1.0	2.0	1.0	0.0	0.0	0.0	0.5	0.0	0.5	0.5		6.1
	% OF COL	0.0	5.1	6.1	6.3	5.8	4.7	2.1	5.3	2.2	3.4	0.0	0.0	0.0	2.8	0.0	1.3	0.7		
	% OF TOT	0.0	1.9	0.5	2.1	0.5	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6-10	COUNT	0	43	15	104	20	23	7	1	16	6	2	0	0	2	0	9	2		471
	% OF ROW	0.0	11.7	5.3	34.4	8.0	5.3	1.7	0.2	3.0	1.3	0.4	0.0	0.0	0.4	0.0	1.9	0.4		15.1
	% OF COL	0.0	10.5	15.6	14.8	15.6	14.7	7.4	5.3	7.6	10.3	20.0	0.0	0.0	11.1	0.0	23.1	1.4		
	% OF TOT	0.0	1.4	0.5	3.3	0.6	0.8	0.2	0.0	0.5	0.2	0.1	0.0	0.0	0.1	0.0	0.3	0.1		
11-30	COUNT	2	174	55	178	47	13	7	1	14	2	1	0	0	2	0	3	8		482
	% OF ROW	0.4	35.1	11.3	36.7	9.6	2.7	1.4	0.2	2.9	0.4	0.2	0.0	0.0	0.4	0.0	0.6	1.6		15.5
	% OF COL	40.0	22.1	19.7	18.1	18.5	7.6	6.2	5.3	6.5	3.4	10.0	0.0	0.0	11.1	0.0	7.7	10.1		
	% OF TOT	0.1	5.6	1.8	5.7	1.5	0.4	0.2	0.1	0.4	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.3		
31-50	COUNT	0	31	11	22	3	2	1	1	2	0	0	0	0	0	0	0	3		76
	% OF ROW	0.0	40.8	14.5	28.9	3.9	2.6	1.3	1.3	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9		2.4
	% OF COL	0.0	1.0	3.9	2.0	1.2	1.2	0.9	5.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1		
	% OF TOT	0.0	1.0	0.4	0.7	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1		
51-100	COUNT	0	5	11	8	3	0	0	0	2	0	0	0	0	0	0	1	2		32
	% OF ROW	0.0	25.0	34.4	22.9	8.6	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0	2.9	5.7		1.1
	% OF COL	0.0	0.3	3.5	0.4	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	% OF TOT	0.0	0.1	0.4	0.3	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
MORE THAN 100	COUNT	0	2	1	4	0	0	0	0	1	0	0	0	0	0	0	0	0		7
	% OF ROW	0.0	28.6	14.3	57.1	0.0	0.0	0.0	0.0	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.2
	% OF COL	0.0	0.1	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	% OF TOT	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
COLUMN TOTAL		5	785	275	1109	257	170	113	19	189	65	15	5	3	18	7	36	78		3336
		0.2	23.5	8.9	33.4	8.2	5.4	3.6	0.6	5.9	1.4	0.5	0.2	0.1	0.6	0.2	1.2	2.5		100.0

NUMBER OF PATENTS (S) BY WORK SPECIALTY (P)

TOTAL PATENTS		WORK SPECIALTY: ANALYTICAL	INORGANIC	ORGANIC	POLYMER, PACREMGL	PHYSICAL ,THEORET	BIOCHEMISTRY	AGRICUL, FOOD	PHARMA, MED, CLN	CHEMICAL ENGRNG	CHEMISTRY ,GENERAL	ENVIRONMENTAL	CHEMISTRY,OTHER	NON-CHEMICAL	ROW TOTAL
1	COUNT	98	37	116	106	41	38	31	32	102	51	19	61	45	803
	% OF ROW	12.2	4.6	14.7	13.4	5.1	4.7	3.9	4.0	12.7	6.3	4.8	7.6	6.1	25.7
	% OF COL	42.2	31.1	20.0	19.2	28.3	45.2	26.7	16.4	26.0	26.8	33.6	26.9	28.1	
	% OF TOT	3.1	1.2	3.7	3.4	1.3	1.2	1.0	1.0	3.3	1.6	1.2	1.9	1.4	
2		48	21	83	88	17	9	12	32	65	26	18	34	36	485
		9.9	4.3	17.0	18.0	3.5	1.8	2.5	6.5	13.3	5.3	3.7	7.0	7.4	15.6
		20.7	17.6	14.1	15.6	11.7	10.7	10.3	16.9	16.5	13.7	15.5	15.0	20.5	
		1.5	0.7	2.6	2.8	0.5	0.3	0.4	1.0	4.1	0.8	0.6	1.1	1.1	
3		29	14	46	63	13	12	18	12	50	20	11	26	16	330
		8.8	4.1	13.6	18.6	3.8	3.6	5.3	3.6	14.8	5.7	3.4	7.7	4.8	10.9
		12.5	11.9	7.8	11.2	9.0	14.3	15.5	6.2	12.7	10.5	9.5	11.5	10.3	
		0.9	0.4	1.5	2.0	0.4	0.4	0.6	0.4	1.6	0.8	0.4	0.8	0.6	
4		13	5	45	41	12	7	7	14	37	12	10	15	13	231
		5.6	2.2	19.5	17.7	5.2	3.0	3.0	6.1	16.0	5.2	4.3	6.5	5.6	7.4
		5.6	4.3	7.8	7.3	8.3	8.3	6.0	7.4	9.5	8.3	8.6	6.8	8.4	
		0.4	0.2	1.4	1.3	0.4	0.2	0.2	0.4	1.2	0.4	0.3	0.5	0.4	
5		5	6	31	36	14	5	10	14	24	14	10	13	7	193
		2.6	3.1	16.1	18.7	7.3	2.6	5.2	7.3	12.4	7.3	5.2	6.7	3.6	6.2
		2.0	5.2	5.3	6.4	9.7	6.0	8.6	8.8	9.4	9.6	8.6	8.7	8.7	
		0.2	0.2	1.0	1.1	0.4	0.2	0.3	0.4	0.8	0.4	0.3	0.4	0.2	
6-10		27	18	56	95	22	4	18	28	63	29	17	34	22	473
		5.7	3.8	11.8	20.1	4.7	0.8	3.8	5.9	13.3	6.1	3.6	7.2	4.7	15.1
		11.6	15.7	10.0	16.9	15.2	4.8	15.5	14.8	16.0	15.3	14.7	15.0	12.6	
		0.9	0.6	1.8	3.0	0.7	0.1	0.6	0.9	2.0	0.9	0.5	1.1	0.7	
11-30		9	16	137	106	21	8	14	40	42	26	10	37	16	485
		1.9	3.3	28.2	21.9	4.3	1.6	2.9	8.2	8.7	5.4	2.1	7.6	3.3	15.5
		3.9	14.2	23.3	19.6	14.5	9.5	12.1	21.2	10.7	13.7	8.6	19.5	9.4	
		0.3	0.5	4.4	3.4	0.7	0.3	0.4	1.3	1.3	0.8	0.3	1.2	0.5	
31-50		2	2	12	22	4	1	3	7	9	5	0	6	2	76
		2.6	2.6	15.8	28.9	5.3	1.3	3.9	9.2	11.8	6.6	0.0	7.9	2.6	2.4
		0.9	1.8	1.3	3.9	2.8	1.2	3.2	3.7	2.9	2.6	0.0	3.6	1.8	
		0.1	0.1	0.4	0.7	0.1	0.0	0.1	0.2	0.3	0.2	0.0	0.2	0.1	
51-100		0	0	16	11	0	0	2	8	1	2	1	2	2	95
		0.0	0.0	43.2	11.6	0.0	0.0	2.6	25.7	2.6	2.6	2.6	2.6	2.6	3.1
		0.0	0.0	2.7	0.7	0.0	0.0	0.9	4.8	0.3	0.5	0.9	0.4	0.4	
		0.0	0.0	0.5	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	
MORE THAN 100		1	0	3	0	1	0	1	1	0	0	0	0	0	7
		14.3	0.0	42.1	0.0	14.3	0.0	14.3	14.3	0.0	0.0	0.0	0.0	0.0	0.2
		0.4	0.0	0.5	0.0	0.7	0.0	0.9	0.5	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	COLUMN TOTAL	232	115	550	563	145	84	116	189	393	190	116	227	172	3130
		7.4	3.7	17.9	18.0	4.6	2.7	3.7	6.0	12.6	6.1	3.7	9.2	5.5	100.0

WORK FUNCTION (L) BY EXPERIENCE (Q)



SUMMARY OF MULTIPLE RESPONSE QUESTIONS

V. Check all of the following statements that correctly describe the current status of this patent:

Patent has been assigned to employer	86%
Patent is being used commerically	23%
Patent has been licenced or sold	6%
Process or product development is in progress....	14%
Patent is not in use	30%
Patent has been released to me by employer	1%
Current status unknown	15%

X. Has this patent resulted in, or do you expect it to result in: (check all that apply)

Recognition (public or private) from your employer	31%
Monetary award or bonus (or "points" leading to such an award)	17%
Non-monetary commemorative medal or plaque	8%
A change in job assignment or favorable consideration	11%
None of above	49%

American Chemical Society

DEPARTMENT OF CHEMISTRY
AND PUBLIC AFFAIRS

Robert G. Smerko, *Director*

1155 SIXTEENTH STREET, N.W.
WASHINGTON, D.C. 20036
Phone (202) 872-4474

June 13, 1979
1148-79

MEMORANDUM

TO: ACS Task Force on Compensation for Employed Inventors

FROM: Ms. Kathleen A. Ream

SUBJ: June Meeting of Task Force

In preparation for the June 27, 1979, Task Force meeting, Dr. Willard Marcy has requested that the enclosed written comments that were received in relation to the compensation for employed inventors survey be forwarded to you for your review.

Dr. Marcy urges you to read all of the written comments which were received, since the primary topic of discussion at this meeting will be the survey results. Tabulations of the results will be transmitted to you by the end of the week.

We look forward to seeing you.

Kathleen A. Ream

Enclosure

cc: Mr. R. Avery
Ms. P. Ayre
Dr. W. J. Bailey
Dr. D. R. Baker
Mr. H. Foxwell
Ms. C. J. Frischmann
Ms. B. R. Hodsdon
Dr. E. Hopkins
Mr. A. Jecminek
Mr. B. Jones
Mr. E. M. Klinefelter
Dr. R. P. Mariella
Mr. R. K. Neuman
Dr. R. G. Smerko
Dr. R. G. Squires
Dr. G. W. Stacy
Dr. D. T. Zentmyer

A. MY COMPANY DONE ME WRONG

1. My present salary does not reflect my inventive capability. I left my previous employer, who owns all my patents, because he failed to recognize my contribution to the company.

2. On inventions: The most successful inventions which were commercialized were outside my assignments. Thru diligence & persistence against obstacles I pursued until company recognized invention for its commercial capabilities.
I received $1.00 but never any compensation. (In 1978 the sales amounted to $8MM (50% gross profit). I could accept this if it weren't for the invention being outside my work assignment. I feel I should have gotten something for such a colossal effort. Oh well, such is the inventor's life.

3. I pioneered this invention from laboratory to pilot plant to manufacturing at two locations. When either location made bad material it was the fault of my invention, even though it had been manufactured for years. I have sat in many meetings where 2 V-P.'s and even the P would point fingers at me. After flying to the problem plant and correcting the manufacturing problem, some engineer would be fired, calm would set in until it happened again.
Now, since sales have reached a million dollars, there is a patent litigation against a competitor who has exactly copied the invention. I am now in the midst of a patent suit. The patent lawyer said (3,000 miles away) that I did an outstanding job on the interrogatories. If we win the case fine, however if we loose, I predict that the same V.P.'s will be pointing their fingers at me saying I should have done so and so and why didn't I do this or that or how come I even applied for a patent and If I did I should have done a better job of preparing it...ad nauseum.

4. I do not believe the company gives adequate recognition to employee for patents unless it is fruitful for the company.

5. When I am hired as a scientist it is recognized by me that anything related to my company is the property of my employer. I think this is as it should be. The token payments usually given, $1, $5, $10, are just that, tokens. Salary, promotions, etc. should reflect one's value to a firm. My observation would say that is generally true.

6. I am no longer employed by the company where my invention was protected. I found out by accident from one of my colleagues that the patent was issued in my name. Only by writings to the company was I given a copy of the final patent. I never received even a $1 payment for my invention.

7. X/2: There was a bonus system with employees (in 1976), I never received money because they miscalculated the pilot runs (R&D costs) for production's sales price bases. I left the company so I have no knowledge about the rest of the 3-4 years time of bonus calculations. Maybe my co-authors got something (SyGron division). At my recent employers the "one & for all $1.00" prevails.

8. I have no quarrel with the handling of my existing patent. It was something I came up with in a routine tech service job while I was in R&D.
But during the past year I was fortunate enough to solve a technical problem in an elegant way, but one with marginal patentability. The production manager said "I have half a dozen patents, but you did something that happens once in a career." The plant manager said that it is "worth millions."
So I am at age 40 making less than $25,000; I got a whopping 7% last year, a month take.(If you finesse 12 people out of one month's increase each, that's like getting one guy for a whole year.) At the last informal company gathering, I was introduced as "our mad scientist."
With all of this, you will note that I did not check that I am seeking employment. When I move I will have to move quickly. This is a regional industry where it is hard to keep a secret. If one is caught looking around, a few discreet phone calls can lay the blackball on one. That sounds hard to believe, but I know people it has happened to. Try that with migrant fruit pickers and they'll get you on peonage charges, and that's a "federal case," as they say.

9. Patent was recognized by luncheon and gift worth less than $25.

10. Re: Last Patent: Employer pursued application to the point of acceptance by Patent Office, but required to finalize by paying issuing fee, because of change in policy towards patents. At same time, employer refused to assign patent to me, or to allow me to pay issue fees (approx. $100) even though I offered to waive $200 award (for patent) and continue to assign patent to employer. Finally, patent was offered to U.S. Army by employer, free; U.S. Army accepted and filed on patent. I was awarded $200 by employer for successful patent. U.S. Army has patent.
Someone needs to explain all that to me!!

11. Regarding Company Benefits Accrued By Employee Patents
1. Cash Received - insulting low ($1.00)
2. Company should assign cash benefits resulting from increased sales/profits due to patent use. Profit Sharing (% of increased monies) is preferred.
3. Lack of proper company recognition and profit sharing to employee promotes decreased activity, re: creativity and interest for future patent work.

12. I believe that corporations would induce many more inventions if inventors were appropriately rewarded financially and otherwise for such distinctive contributions. Note that salesmen who sell large lots receive commissions corresponding to the size of the sale. Executives receive extra income, stock, stock options, etc. when they direct a company through a good year. I consider inventions to fit in these categories.
One of my inventions resulted in a new product which sold an amount of over $1,000,000 while I was employed by the company - maybe much more after I left. I received $3 (no bonus, no special salary increase) - $1 for each of U.S., Canadian, and British patents. I consider that unfair considering salesmen's commissions and executive bonuses. It was one reason I left industry to teach, and conduct my own research (which has been very successful).

13. You asked for the most recent U.S. patent that resulted from my work as an employee, but that was not a patent that covered any invention of much value to my company. They did not use the technology directly, although the principle was applied and expanded in production processes later, without patent protection, as far as I know.
An earlier patent in the same technical area resulted in the establishment of a product line that has been maintained for over 20 years. Numerous modifications have been made, but the basic principle still applies. For this I received a $100 confidential* bonus and a promotion to project leader with a modest salary increase I'm not sure how it would have been fair to provide some kind of royalty for this because a large number of production & laboratory people eventually contributed to many additional steps in achieving and maintaining production of the products. Almost any system for compensation for patentable ideas can cause problems because of the problem of deciding who contributed enough to warrant the compensation as extra incentive. Large corporations are not properly organized to handle this problem without creating even more difficult ones, but it is an area that deserves attention and search for a better way to compensate the technical man who makes a lot of this industry tick.

*I was instructed to tell no one I had received it. !

14. The status of the scientist - inventor - is a very unsatisfactory one. The President/owner often uses his own name as inventor or co-inventor on the patent application and apart from a casual statement of the official acceptance of the patent - the scientist receives no monetary reward. In many cases even the prestige connected with the invention (reading of a paper, etc.) is going elsewhere.

My company's owner believes the payment of regular salary is a sufficient reward to the scientist, who, after all is paid just to do that! The profits my company is reaping amounts to several millions a year - on this one patent only! Needless to say all older employees (with nowhere to go) are very bitter about the situation, yet unionism doesn't appeal to professionals.
For all practical purposes - we are very much like the medieval serfs. I have seen to it my two children went into other professions.

15 Since the difference in salaries between creative and non-creative chemists is very small in industry, an appropriate mechanism should be devised to provide additional monetary compensation to inventors - to recognize past achievements and provide encouragement for future inventions. By and large, inventors' contributions are not adequately appreciated.

16. While the company has recognized my contribution they "in no way" feel obligated to provide any monetary compensation for a product recognized as a major medical breakthrough which has accrued in excess of $1 million profit.

17. In my company, there is no way to predict what benefits may eventually result from any given patent. A letter of recognition routinely accompanies a copy of each inventors patent; this is signed by the head of the legal department.

18. I'm the only one in my department that has a patent on a material and also process.
The company will get over $1 million dollars clear money from just license fees. I've received nothing except a little recognition.
I had a third idea on which I believe our company and the industry could be greatly benefited, but I've decided the extra work required in research and time is not worth it.

19. I have directed research that led to a patent on a compound that was commercialized. I had started part of the research program that led to the compound. A member of my research group was co-inventor on the patent covering the compound and had first made it. Over $80,000,000 worth of this material is sold per year. Direct monetary benefits to my subordinate or to myself have been non-existent.

20. I personally think the industrial patent situation is unfair to the inventor. For this reason I have put very little effort into patents and have pursued non-patent research instead. If industrial inventors were allowed royalties on their patents, the patent departments in companies and in Washington couldn't handle the deluge with less than 10 times their present staff.

21. At this research lab, administrative scientists accumulate hundreds of patents in a lifetime, they may, or may not, have contributed anything to a given patent they hold. As most patents are "outgrowths" and not proceeded by invention records, the inclusion of names of contributions (including originators) is at the discretion of the administrator.

22. Re: Pat. No. 3,208,485 (Sept. 28, 1965). The manner of handling this patent by my employer has been very controversial. Many fellow employees, even in upper administration, have asked me about it and have expressed concern.
The subject of the patent is an automatic fraction collector which is a purely mechanical devise and is connected with my training and employment as a chemist only because it is used in a chemical laboratory. I conceived the invention and did the initial development on my own time. Nevertheless, because of the standard patent assigning agreement which I was required to sign at the time I was employed I was told that if I developed this invention and obtained a patent I would be required to assign it to my employer. As a test case to learn how my employer would handle this particular case I proceeded with the development but from this point, did so on company time with company facilities. When I had satisfactorily developed the apparatus, there was considerable demand within the company for units to be used in our own laboratories. With official support, but without assistance, I made outside contracts and supervised the manufacture of these units while I carried out my regular domicile responsibilities. During this time I made a formal written request to the company to purchase my own invention from them. I was told first that I could purchase the invention only if I resigned and bid against any other prospective buyer. While getting in a position to do this, the offer was withdrawn and I was told that I could not buy the invention under any circumstances. (Nothing was put in writing by the company). Instead, the invention was adopted as an official project to be exploited by the company. The patent was licensed to an outside manufacturer and, after the initial contact, all control and influence in the further development and promotion of the invention was taken from me. Regretably, the licensee did not understand the apparatus, and it failed commercially, even though the relatively crude in-company units were very popular and much used. Eventually the company withdrew the license and it has remained idle ever since.
Because of the above unfortunate experience with this invention, I refused to develop and patent several other inventions of considerably more value which I conceived of at that time and they have been lost to society. This experience has been a major frustration in my life.

23. My employer initially discouraged any research work leading to this patent and all work was accomplished on a "bootleg" basis. Only the fact that the work had strong impact on an environmental problem common to all in our specific manufacturing area permitted its survival. Only dogged persistence by our division patent people, myself and lower level management allowed us to obtain this patent. "High level" management did not even want to "hear about it" at one point!! I have received absolutely no recognition for my work, or assistance in this area; in fact, I suspect it has damaged my career.

24. Although I have many ideas of great commercial value, my first encounter with the grossly unfair patent policies of Litton Industries, hopefully, will be my last. At Litton, an inventor must agree to provide eternal defense of the patent, in addition to, relinquishing all patent rights and royalties - all for $1.00! Failure to sign the patent agreement will result in immediate lawsuit and dismissal from employment.
From personal experience I can say that unfair patent agreements by most companies are one of the most effective means of "turning an inventor off".

25. The return to the inventors for patents that produce millions of dollars of profit annually is trivial.

26. Preceding patent resulted in profitable business in $1-3M/Yr. range for life of patent and still today. Other than $100 I never rec'd recognition or bonus for this contribution. Believe I pushed hard for such, but no one would back me!

27. All companies worked for (2 in 14 yrs) & recent 6 months, do not offer any incentive to patent ($1.00) for rights.

28. One or more of my inventions assigned to a previous employer have resulted in several million dollars in profits since 1976. Since some of the patents are "use" patents, it is difficult to assess their commercial impact at this point in time.
I received $350.00 ($5 each for 70 patent applications) for my contribution to this employer. I was promised a large & significant salary increase which did not materialize. I was promised a promotion which did not materialize. I am glad I left this employer.
It is my opinion that, by & large, the U.S. chemical industry rewards only the incompetent and those of low creativity (i.e. administrators & salespeople). Inventors and/or innovators are compensated inadequately in the majority of instances. I would be interested in seeing a correlation of this study with a similar study in Japan. It is my belief that much of the "innovation & productivity" gap can be traced to the abuse and exploitation of the American employee.
P.S. I recently heard a rumor that W.H. Carothers' lab in which the nylon discovery was made has been "preserved" as a rest room. Enough said.

29. Over the years - more than 38 - I have had my name on about 20 inventions - some are good and some are not. There were many cases (inventions) in which I participated and worked and contributed to the invention but because I was the last man on the totem pole administratively (not being a group leader) and technically (not being a PhD) my name was omitted on some patents. I was placed second or third even though it was my efforts which gave the invention. I have not been recognized or rewarded. I am the lowest paid technical man with 38 years experience at Carbide. If this is an indictment of my employer then let it be. I am nearing retirement and it is very painful to see new PhDs just starting at Carbide being offered more money than I am making. I've made some waves but of no avail.

30. Employer was "fair" in that terms of employment contract indicated that all patents were to be exclusive property of employer, and no compensation other than salary was offered or expected. Incidentally, the entire research laboratory was "divested" i.e. fired in 1973, before last patents were issued (6 persons, more than a dozen patents). The patents all were sold or licensed and our former employer continues to collect royalties.

31. At my company, I receive no recognition for patents which are valuable regardless of their worth. Cephadyl currently sells almost $100,000,000 abroad and U.S. and other countries - Japan, Spain, etc. - except I still have a job.

32. Less than a year after the product, for which the patent was issued, was put into production, and which still is in production, I was laid off by the company, holding the patent. At the time of issue, I was presented with a dollar. That's right, one big dollar. The company is still reaping large profits from my work. All I have to show from it is a copy of the patent & the one dollar.
I have found that this is not an unusual case. I have also had the experience of developing a product line for a company, for which no patents were applied, as patents can divulge process information, which is still in operation and generating revenue for the company, and as before, once the gut work was done, so was I. Pay the inventor or developer a percentage of the profits! Of course the company will maintain there is no profit, etc., etc. I know that scam as you do.

33. X,Y. I have patented extensively for 3 [Fortune "500"] companies; in all cases I received less than $200/patent. In all cases, I have not received any type of internal recognition. Rather, on my personnel review, this was listed as a negative factor for reasons that appear to be mostly jealousy by immediate supervisors who were not invited to be co-inventors!!

34. My employer takes the stance that invention is part of the job and expected of professional employees. I am of the opinion there is no effort on the part of the management to determine the contributors to new innovative products or processes not as a result is there any formal recognition offered.

35. Re Y: My several very large industrial employers have used a rather mechanical system to recognize patents. In token payment situations, the money came forth, but there was no attempt to grant recognition to the inventor either in company publications or in group meetings.

B. PATENT RIGHTS BELONG TO OTHERS

1. Y. Patent was issued after leaving employer so no reward was given me as would have been done if I was still employed by the company.

2. My present employer was not my employer when I was actively engaged in research and when the patents were issued. My present employer seems to value my past and present contributions more than my past employer. As you can see, my salary is very meager for a person with 7.5 years experience and a doctoral degree. Another patent will soon be issued from past work. I have never been told that I would receive anything for the patents which resulted from my work in the laboratory. I don't know that these patents will ever be commercially useful. However, if they should be I feel there should be some type of monetary award for the inventor(s). I think that it should be detailed in a contract between the inventor and the company to which the patent is issued as to what reward will be made to the inventor. After all, in most, if not all cases, the inventor signs a contract giving full ownership of the patent to the firm sponsoring the work.

3. I wish to make clear that my employer's policy of confiscating all patentable research is the primary determinant of my decision not to pursue lines of investigation which might lead to patents.

4. Sharing by an inventor in profits due to patented invention should be assured by federal law. Freedom to file patent application, covering inventions the employer decided not to file upon and not to utilize, should be given to employed individual inventor by federal law, after a grace period of two years after inventor filed a memorandum requesting filings or release by company (employer).

5. Single patent as employee was assigned to employer - a large corp. - for whom I no longer work. Left employment to form a small company based on other non-related patents. Saw large company fail to commit to patent - on the other hand my small company has survived on minimum financing and should soon receive considerable royalty payments from other 2 patents - now wish I had the first. Main employee-employer problem concerning patents: employee may easily loose control of financing and development work, and idea is shelved, given that the number of ideas in a lifetime is limited this is very discouraging. On the other hand, inventors are often incapable of development and market perspective and will drive an idea to destruction if left alone, therefore, large company is often justified in removing inventor from scene. - Not very conclusive. - Patents and inventors are very strange!

6. Companies often outright lie about placing names on patents. People who do the work and make modification of the original idea are cheated out of being named on the patent after making major changes in methods and major contributions to the patent. This has happened to me. I am affraid to say anything or take legal action out of fear of losing my job.

7. Question "W" - My employer awards one dollar ($1.00) for each patent. However, in the event of commercial use, bonuses are paid. The amount of the bonus is dependent upon the extent (impact) of the commercial success.

8. University policy requires assignment of all patents to University. This has severely inhibited work in applied areas.

9. Under terms of the assignment of inventions agreement between myself and employer, the employer makes claim upon inventions developed outside of the employer's facilities and area of interests. This limitation reduces any incentive toward invention outside of those areas assigned by the employer.

10. In my particular case, the patents were developed as a result of a project carried out for a client who contracted with our consulting firm. The patents belonged to the client who paid for the work -- not to the consulting firm who employed me.

11. I tend to side with the employer on patent right assignment - it was their money & lab. A suitable bonus would be welcome, but I fail to see how it could be considered mandatory. Many contributors are key to a patent other than the one (or more) listed & at times the true inventor does not have his name even listed because of industrial policies.

12. Re: Patents - Am "employed" as Technical Director, OA Special Projects, Inc. which undertakes contractural agreements with independent entrepeneur(s) (usually chemical sales).
Co-inventor of three (3) product "inventions" wherein I was the person who "reduced to practice" and acted as consultant with Patent Attorney.
Areas: (1) Cleaning - Striping (Industrial) - Status?)
(2) Nail Polish (foam) Remover (Cosmetics) Pend.
(3) Lubricant (Industrial) Pend.
Client "owns" inventions.

13. The boss takes the patent out in his own name.

14. This latest patent was awarded me as an employee of the U.S. Government (one of many privileges) since it was developed by me on my own time, away from government premises, no help or assistance of any kind.

15. Although my training in organic & biochemistry has been useful in my present assignment, that is incidental. I was given the assignment because there was a need for someone to do it. I have had many assignments that were non engineering consumer opinion polls, physical chem. etc. I was told by my first supervisor that I was hired because I had demonstrated by my PhD & post-doctorate the ability to solve problems, not for specific knowledge. That has been the case call it "industrial chemistry" if you will. I am not unique among my fellows. The hardest part is being asked to invent upon command, based upon a pet idea rather than market research and having to defend (or give reasons) for commercial failure. This is an anti-professional condition.

16. There should be guidelines established by ACS regarding patents developed while working on company projects and for patents developed as an independent inventor - even though professionally employed. As it is now, if an idea outside of the job is developed, permission from the company must be obtained prior to filing for the patent - even though the idea is not job related and non-company time or money would be used. Just doesn't seem fair.

17. I am currently working on a potential of 5 patents for the company I am with. Only one has been applied for. Two more are at the patent lawyers office. They are not my patents but I developed them.

18. I worked on an invention for which a patent was filed. However, I left the company about the same time. Although I was promised that my name would be on the patent as one of the principal inventors, it was removed prior to the actual submission of the patent.

19. Patents at my company are assigned. It is expected that employees will develop products and processes and that these will be covered by patents where possible. There are no monetary rewards or bonuses but it is part of the data considered in raises and promotions. Inventions outside the company sphere of activity may be released by the company formally. In such case the employee is free to patent his invention in his name. This has happened, although not frequently.

20. I was inventor of a process the rights to which were sold by a former employer to another firm. The purchasing firm was then issued a patent in the name of another inventor although my invention date preceded his by several months. Records substantiate this.

21. The patent system as it now exists is of great benefit to both employer & employee as well as U.S. society in general. The ACS should involve itself in the ongoing efforts to keep the patent system from being eroded or destroyed by misinformed people.

22. My employer recognizes patents by:
    1. Token monetary award
    2. Public (within co.) recognition - i.e., they give out a plaque at a luncheon. When a person has filed a certain large no. of patents they get more recognition & money. Should a particularly critical invention be patented (say once in 5-10 yrs) a reward of $10,000 is given. I have slim chance of partaking in any of this, alas, because in this firm patents come mainly from the engineering dept. I am not part of that division.

23. In regard to patents, I find it best to ignore them. While I have had several invention disclosures and have received 2-$50 awards, I did not push to get the patents issued and they died a natural death. Most of my ideas haven't been disclosed and I took them with me when I left.

24. I think the questions on patents are not particularly well chosen to give an accurate reading on the employee's contribution and relative reward. The questions relate only to the most recently issued U.S. patent, which may not give any real indication of the scientist's contribution. It is quite common for prolific inventors to have a large number of patents with only a relatively few of them describing the person's real contribution.
    The questions are also restricted entirely to patents, and therefore exclude inventions which were not patented for whatever reason. In industrial organizations it is quite common for many very significant inventions to be held as trade secrets and not be patented. The commercial impact of these, in many cases, could exceed the value of the same employee's patented contributions.
    I think a better approach would be to ask the respondents to identify in their own mind their most important inventions. Ask how many total inventions this person has made, identify whether the major commercial ones were patented or unpatented, and then proceed with questions W, X, and Y concerning the employee's reward for these inventions.

25. At least one other product was patented in a foreign country, but company decided not to develop.

26. Although I have no patents assigned to me, I have contributed to many patents assigned to others. It is difficult to attribute the true invention (patent) to any one individual in an industrial organization. Quite often the germ of the idea arises from a discussion among chemist or the concept that really mattered may have come from someone not related to the patent.

Many chemical patents, in fact most, are not true inventions, but merely a translation of a series of reactions from one homolog to another, e.g. from one aromatic to a heterocyclic or one heterocyclic to another. I didn't think I could vote 1% of the chemical patents as being truly creative. To assure that all patents are equal contributions is to ignore reality, the history of chemistry, and the meaning of patent law and practices. Relatively few chemical patents have the makings of a good publication - most would not survive the peer review of an ACS journal. I think the ACS Task Force has yet to learn the problem.

C. RELEVANCE OF MOST RECENT PATENT

1. The most recent patent was issued approximately 10 years ago and is assigned to a former employer. Don't know if it is (or was) used.

2. It so happened the last patent wasn't a particularly important one. The others have done very well for me.

3. Additional comments on U through Y: My answer for the last patent received was given as you requested. Had you asked for answers for the firt then the answer would have been much the same, however, for the second patent they would have been:
   U '70
   V assigned and used
   W over 9,000
   X reward and promotion
   Y agree
   In each case of the technologies in which I have worked there have been many contributions by many different people. Only a few were patentable or patented. Achievement in innovation is poorly measured by "patents".

4. In regard to questions U-Y, I believe that my contributions (e.g. patents) are reflected in my advancement and salary. Your questions apply only to the last patent (not to all of them) and answers can be interpreted to infer little monetary recognition for inventions which may be contrary to the facts.

5. This is an idiotic question. In my case few patents are associated with products and to simply pick out the latest patent is meaningless. You should have asked about a patent on a marketed product.

6. The questions relating to the most recent U.S. patent will not give you the kind of information you are seeking. The reason for this is that the last issued patent may not be the most significant invention and it may not be practiced. On the other hand, previously issued patents may be of much greater importance. I therefore feel that this questionaire on invention is going to give you meaningless data. It should be restated to refer to any significant patent which is being practiced and which has an impact on employer's business.

7. Picking the "most recent" patent shades the answer. Some earlier ones were very useful and one process was in production over 20 years, and may still be.

8. Question on most recent patent is not relevant!

9. My company has no written policy on compensation for a commercial product coming from an invention assigned to the corporation. If one of my compounds eventually succeeds to the market, what this means in raises, promtions, & recognition is speculative. However, some benefit would surely accrue. I do not feel I am over compensated for what my work has produced.
Some patents are filed only to protect the "company's investment", while others have commercial potential. I do not think a policy should exist where an inventor is given a flat fee (of some monetary significance) for each patent. Only those that are of potential commercial interest and are worthy & then, perhaps, only after commercialization. Then the award should be substantial.
The most recent patent is not as good a choice as patents of potential commercial and/or commercial value. Several of my patents are much more valuable (at this time - patented) than others (the most recent for example).

10. Your choice of "Most Recent U.S. Patent" for the survey will give inaccurate impressions in mine and many other cases, I believe. Since most patents are not practiced a better. Questions could be better directed and more informative if they referred to the "...Most Important U.S. Patent covering an invention resulting from your work..."

11. Question V - Patent was assigned to the U.S. Dept. of the Interior because it resulted from a Government contract.

12. Not relevant, since I work for U.S. Patent & Trademark Office.

13. One of my earlier patents was of greater commercial significance than my last one. Thus the survey question focussing only on the last patent must be carefully interpreted - likewise the response.
For professional chemists employed by U.S. chemical industry, I strongly endorse the present policy of required assignment of patent rights accompanied by standard recognition and payments established by the company. Thus I would strongly oppose any legislative mandate for compulsory sharing of license royalties, etc.

14. In Europe and certain other countries, financial renumeration to an inventor is more directly related to an individual invention than in the U.S. Perhaps a trend in this direction in the U.S. could help stimulate interest and creativity.

15. Your questions relate to U.S. Patents only. Often foreign patents are also of great commercial value as well. Also, you should, I would think, also be interested in the number of U.S. and foreign patent applications on file but not yet issued, to obtain a better indication of the level of activity of individuals in this area. With a log time of 1-3 years (sometimes more) in the U.S. Patent Office, together with a normal "induction" period before a new employee has reached a point in his work at which patentable ideas are being processed into patent applications, the measure of patent activity should not be just issued patents, especially not in the U.S. alone.

D. PATENTS NOT IMPORTANT SUBJECT

1. All comments on patents refer to the period 1953-1958. I'm not particularly, nor was I then, particularly bothered by patent problems.

2. Who is my employer? - One supervisor in a company of 30,000 employees? Let's face it, a patent of little or no real worth isn't going to get anybody a halo. My supervisors (immediate - just a few people) recognize me as a creative individual. I don't expect much more. If some of them (the patents) had led to $100 million in new business I'm sure the recognition would be a lot greater.
I have no quarrel with the present system. If the malcontents don't like it, they can always quit and try to make it on their own. Some would, most wouldn't. Few would try. More would continue where they are and continue to complain.

3. Addressing technological innovation in private industry is a multidimensional question that cannot be answered by simply asking about patents and awards for patents. Innovation in highly-competititive technologies involves an approach to trade secrets, as well as patents, the process of what is commonly referred to as "the learning curve", and the complexity of series and parallel innovation leading to advancement. Thus, patents are one important facet, but not a comprehensive measure of innovation and the worth of a patent is difficult to judge in light of the fuller view.

4. Why the emphasis this year on patents?

5. Why is 1/3 of questionnaire on patents? Seems strange.

6. The questions on the previous page seem to assume that an important contribution in industrial research results in a patent. Most of the time this is not the case.

7. Why the concern about patents?
They are typically, in my opinion, a very small part of the information exchanged between a productive industrial research man and his employer.

E. RECOMMEND OTHER INCENTIVE PLAN

1. Inventions are not necessarily of monetary value to an employer since many patents are sought for a variety of reasons not necessarily to dominate a commercial or technological important area. Just as important "inventors" devise basic and minor modifications to commercially important processes/products which are fully implemented into the business yet for a variety of reasons are not patented by the employer. It is unfortunate there is no way to identify these individuals who in many respects have much significant contributions which can be even of greater "creativity" or financial importance relative to inventors and their inventions.

2. There does not appear to be an effective mechanism in many companies where inventors are rewarded commensurate with the value of an invention. I believe there should be a fixed % of profits which go to the inventor(s). Furthermore if a corporation does not develop a patent - if it seeks to license a % of the license value should be assigned to the inventor(s). If the product is not developed or licensed or being actively pursued for development, the patent should be given to the inventor(s) within 5 years after patent issue to use, license, etc. as he desires privately.

3. The business of my employer depends on inventions and patents, and it is understood that my salary includes compensation for invention and achieving worthwhile patents.

4. With my present employer, any patent which results in a commercial product will be rewarded by more favorable salary increases and stock options. There is no standard, well-defined reward system for patents.

5. I think a bonus system recognizing the commercial value of employee contributions should be inaugurated in all companies to go along with promotions.

6. Recommends that profit oriented corporations, particularly with management changes of yearly frequencies, should make provision for inventive talents in the form of a) monetary award, or b) multiple choice type compensation in order to stimulate such activity.

7. Profit sharing, no matter how small a percentage, between the employer ant the inventors, would encourage the employees to be more innovative and to be more relevant. The key is the profit generated from the invention. Good inventions not commercialized can be recognized by bonus to the inventors.

8. Having been both research chemist and administrator as well as a manager of patent and licensing activities, it is my opinion that the employed inventor usually receives an adequate reward for his innnovations.

The generation of corporate income in consequence of a particular invention requires a very great contribution in money and a variety of talents from many persons. When summed up, the contribution of the inventor, however essential, is generally a minor factor. Further, if left to the inventor most inventions would never generate income at all.

The clamor for participation by the inventor in the ultimate fruits of his contribution makes sense only if one similarly recognizes the contribution of team-mates, engineers, laborers, managers, financiers, etc. All are paid to make their unique contributions to corporate success. Therefore, the inventor should look to his salary treatment, and, if this is adequate, be satisfied.

6. The patent was applied for while I was employed at a research institute (non-profit). Management had no interest in my patent application although they did award me $100.

7. I presently have four patent applications filed, but patents have not yet been issued. The patents will be assigned to my employer. I was given $1 per patent at the time of filing the application. I feel I have been more than adequately recognized for my contributions to these patents.

8. I am a patent agent working for a large corporation. The inventors who derive patents assign them to the corporation. The inventors are recognized for their contribution in promotions, salary raises, and internal recognition. Very few complain. At one time (past) percentages of the profit derived from their product was paid to an inventor. However, with time "we" found this stiffled creative development, sharing of knowledge, aided rivalry, etc. Now, research is done and knowledge is shared without profit % reward.

9. My employer has a program for recognition of contributions to patents. It includes monetary awards plus personal recognition. I consider the company program to be fair and equitable. While my patent ideas did not result in issuance of patents, company attorneys in the Patent Section of the Law Dept. pursued the ideas vigorously and fairly. My having to sign the patent rights over to the company has never been a bone of contention with me.

10. Even though I am just starting out in the field, I feel that my superiors have been treated fairly in regards to their inventions. They do not receive a bonus at the particular time, but they will see it reflected in their paychecks. I believe my employer is uncommon in this practice.

11. My feeling on patents is - that's my job - to invent for my employer. I get paid during the years that I don't invent something, too; so - it all balances out.

12. Re: Patent Recognition: Maximum amount received for any patent was a $1.00 token check by one employer. My current employer recognizes all inventors who have assigned 5 or more patents with a certificate, and his name is placed on a plaque of Inventors in its Research Laboratories.

13. I will receive a modest monetary award for my most recent patent. At this time it is difficult to assess value to the company. Often, it takes several years to determine value, and only in a relatively few cases, is it possible to assess value immediately with any real accuracy. The great majority of patents will probably be worth little

F. ASSIGN RIGHT TO EMPLOYER

1. On the whole, my company's management is pleased with my effort. However, my supervisor is pissed off.

2. On patent information - All patents were obtained while employed by a former employer. Current employer requires assignment of patents agreement. Recognition of patent activities is significantly better by current employer.

3. Current employer provides greater monetary compensation for patent contributions.
Substantial compensation or a share of royalties or sales derived from a patent tend to promote secrecy and competition in the R&D group as individuals strive to gain a position as inventor or coinventor. Potentially patentable concepts are withheld and protected for personal exploitation within the employer's system of rewards.
A middle ground which rewards employed inventors and still promotes free exchange of ideas is difficult to achieve.
I shall be most interested in the results of your survey and your recommendations.

4. My last patent was applied for by my industrial employer over 20 years ago, so I have no recent experience in the area.
My name is on about 7 or 8 patents. Part of these originated from my doctoral thesis. The remainder from research done in industry. To the best of my knowledge, none ever resulted in any significant monetary gain. Had they done so, the proceeds would not have come directly to me. However, I think I would have been fairly treated by the institutions involved, either academic or industrial.

5. Although I believe that my employer has been fair in recognizing my contributions in the form of patents, I think that he could do more in the form of public recognition of these accomplishments. Most of my employer's recognitions comes in the form of a special bonus plan which recognizes persons making unusual contributions to the company's welfare. Thus, a person who is granted a patent which leads to a financial gain for the company will be compensated with this paid bonus. I think this is a good plan from the financial point of view. However, it is not satisfying from the personal point of view. The recipients of these special awards from the company are not disclosed to the public. The reason for this is presumably to avoid feelings of jealousy and discontentment from other employees who weren't so compensated. However, I think that persons making contributions for which the company gives special financial rewards should also receive some public recognition, as well.

monetary value to the company, and therefore employee awards in these cases are probably fair and equitable. However, the same modest award would also apply for patents which generate large profits in the company. In this sense, the aware system employed by our company is unjust.

14. The economically important patent which is referred to was the cause for my departure from the company where the work was done. The original draft was very broad which resulted in the usual narrowing in the patent office. The resubmitted draft dropped the names of the two people who had assisted in the development and added that of the principle owner of the company along with mine. This I had to accept if I wanted the job. But when all of the patent office action was completed a resubmition was made with my name removed. This was one of several reasons why I quit. Since I refused to sign the necessary papers, even under the threat of legal action, the patent eventually issued with both names.
To complete this story, I spent several years on my own developing a new product which went around the patents claims. It is the second generation of this development that is the basis of my present consulting arrangement.
In my present contract it is clearly defined that I will conduct research and development in a certain area for the benefit of the company with the patents being assigned. I am also expected to render assistance to sales on request. My renumeration, beyond a base fee, is tied to sales so there are mutual advantages to produce. It is not just a pie in the sky or the wilted carrot.

15. Without employer backup there would have been no inventions direction, equipment, financial security and legal costs were all borne by the employer allowing me freedom to create. Additional recognition in form of corporate stock.

16. As supervisor of a process development group, it was my job to devise better, more efficient ways of synthesizing certain organic chemicals. Over the years several processes were developed and used that were considered to have sufficient novelty to be patentable. It is corporate policy to enter into an agreement, if employed in R&D, whereby all patents issued in the name of the employee are assigned to the company in return for the sum of $1, and other considerations (namely your salary). I feel that this is fair and that I have been well compensated in return. Those patents issued in my name were largely routine disclosures representing ordinary technological advances - not embodying new concepts so radical as to have huge commercial potential for bargaining or licensing. Individuals who have been responsible for the latter - have gained the recognition of their collegues and have been promoted rapidly in the corporate structure.

17. Two of my patents were quite profitable to the company. I feel that I have been adequately paid. I could not have done the research and carried on the development work on my own. It was very much a long-term team effort.

18. The patent reward system was changed within the last several years to include more personal recognition of the inventor, including a plaque presented at a general meeting (mostly technical). All inventors who have filed patents during a given time period are also honored at a corporate-wide dinner (with spouses) at which the contributions are discussed by a corporate officer.
Although an individual does not get offered "points" for inventions, such credits are considered during performance reviews and in the annual scientist salary administration review. Many scientists receive internal recognition for work which will not be patented because of its "sensitive" nature.

19. By focusing on the most recent patent you have, as in my case, risked assessing a relatively minor invention. For more significant contributions my employer is more generous.

20. Though I moderately agree that my employer has treated me fairly in my latest patent application, I do feel that my company (as well as many others) are lacking in that they do not provide a fixed token incentive (e.g. $25 or $50) for inventor for issued patents. This small monetary compensation would promote improved employer-employee relations & productivity. It woud also avoid most of the problems that would inevitably arise in employer attempts to allocate larger incentive payments to one or more inventors of a patent in a fair and equitable manner.

21. Concerning Question 5: A number of years ago I was a co-inventor of a process for which patent was applied for in USA and France. I believe both applications are still pending. Although the patent had not been awarded, the process was licensed to a company in this country and I received royalties for this process for several years -- over $1000 in all, I would guess. At present the process is not in use, I believe. My employer at the time was more than fair in recognizing my contribution to the invention.

22. I answered the patent questions straight, however my latest patent was of little value to the company. On the other hand I think my promotion to research management (technical) has been influenced by a steady flow of ideas, many of which have resulted in patents.

23. My contract with my employer states my return as regards patents. I accepted this when I joined the company - as part of my responsibility to the company.

24. You might be interested in the following comments in the patent picture:
Of the patents 4 were of a "protective" nature and the companies to which they were assigned accrued no visible earnings. The remaining five patents accrued a total of more than $5 million dollars annually in cost improvement. The total savings to date has been more than $68 million dollars. However each of these developments were team efforts which cost the company many millions of dollars. Of course there were other research programs from which no calcuable savings, or patents, were obtained.
My personal feeling is that my research efforts have been mutually beneficial to myself and to the companies which employed me.

25. Company paid salary leading to my work on the patent. Therefore, any benefits should be theirs. I would still have been paid even if the patent didn't come about.

26. I'm not familiar with all of the issues relating to the compensation of inventors. However, it would be my feeling that inventorships of significant commercial importance are generally well-recognized and fairly compensated. Obviously this is a little bit like Social Security in that the fruits of some good efforts are spread over a larger number. But the opportunities, facilities and support (e.g. analytical) not to mention the security offered by an organization sponsoring the work also makes a major contribution to the invention. In addition, establishing true inventorship is sometimes sticky. It would be my opinion at this point that any initiatives toward a different formula for compensating inventors within an organization would be difficult to justify and if successful might be detrimental to the chemical profession. The best approach might be to develop a structure for outstanding inventors, who are willing to operate in the market place, that would allow them to divorce themselves from organizations and work independently.

27. I am strongly in favor of assigning patent rights to an employer. If a person uses the facilities, personnel, acquaintances he has in a co. to get a patent, he has no business receiving private compensation for the patent. When direct awards occur, I expect exaggerated competition, secretiveness within the organization, degradation of the quality of the place of work. Status seeking, among both professional and non-professional employees, is a severe enough problem as it is. Non-assignment will aggravate this.

28. Why all this bunk on patents? When you are hired and sign a patents release to your employer you have made a contract. You use his time, equipment, technical legal support to make the "invention". Why should you beef? If you didn't like the basic arrangement you should have not joined the company to begin with. I have no patience with this sort of crap.

6. EMPLOYEE RECEIVES TOO LITTLE

1. Item X: The recognition received is a dinner for my wife and me, plus a copy of one issued patent.
   Item Y: I feel that my employer is fair in that this is the policy of the company and all inventors are treated the same. However, I feel there should be a monetary benefit to the inventor, such as money based on the amount of sales resulting from the patent.

2. Note (1): I was unemployed for over 5 years (July 1, 1972 to Oct. 16, 1977), to the life and career of any person, and particularly one who had accomplished a significant number of achievements as I had. I believe I was unable to be reemployed sooner because I was over 50 and industry has an unwritten rule not to make such hires except on an executive level. I'm grateful to the Federal Government for overlooking the fact that I was over 55, though they did take advantage of my situation to higher me at a grade below that for which I was qualified.
   Note (2): All 47 of my patents were assigned by contract to my employers as was standard practice, and the most I've received were nominal honoraries in a few cases. The patent noted above (1965) was patented in 51 countries and could have been the basis of a major breakthrough, did not become a major product since it could not become an over-the-counter item. I believe the money spent on its development was held against me and led to my separation.
   Many of my patents were utilized if only in cross licensing (They cover prednisone prednisolone and dichlorisone & mayletool drugs). I believe there should have been direct compensation for the useful ones, as is, I believe, true in Germany and was true with Hoffman LaRoche.

3. Re: Patents - The only thing my employer gives for patents is one "attaboy," whether they are profitable or not.

4. I am an independent consultant and I am engaged for a significant fraction of my time in independent R&D work. I have avoided full time employment so as to have the time and "patent freedom" to do this work on my own proprietary activity. My contracts with clients specifically exclude any assignment or other dillition of my proprietary rights to my creative output.

I recognize that in a free country, if I wish to be entrepreneivial, I must take some risk, act professional, and insist on independence if I value it. This course is open to any person.
If the ACS wants to help its members in this area, I believe it should assist them to understand the law of these "Thomas Edison" contracts. Many are unenforceable. Also, it should create an environment of understanding in which the individuals are more able to resist allen-compassing contracts, and to negotiate terms favorable to themselves. Most good ideas languish and are not developed, often due to corporate focus being directed elsewhere. Individuals might make some succeed if they could own the fruits.

5. Without a system of rewards, whether prestige or monetary, one cannot be too enthusiastic about developing patents for "The Brass" to receive the recognition.
Publications and memberships (including offices held) in other technical or scientific societies might be of interest.

6. My employer gives no perceptible benefit to generating a patent.

7. I believe fair reward would be a minor percentage of profits from the insertion (minus development costs).

8. re: Patent Policy: When Boston University, University of Colorado at Boulder, or Stanford University offer patent inventor 33% - 50% of patent royalties, they will get more response, and good patents, than industries which offer nothing.

9. We are given $25 for each patent area. If the work finally results in more than one patent we do not receive any more money.

10. Comments: 1.) Need more recognition from our employer.
2.) Patents (inventions) derived on ones' own time and own property should belong to the inventor even though he/she has a full-time job.

11. If the patented invention by an employee is assigned to the employer and is being used commercially, the employee should receive a certain percentage of the profits resulting from such commercialization.

12. I would strongly suggest that another question be considered regarding patents. "How many inventions have you initiated or contributed significantly to but were subsequently not included even as a coinventor in the patent - i.e. other(s) (superiors, etc.) took all the credit?"

13. Patents are frequently credited to employers without regard to who was the true inventor. This is done deliberately. There is no prescribed system for recording inventions for this reason.
ACS should publish names of companies which 1) discourage publications and 2) have patent policy of not recognizing and rewarding inventors.

14. It is high time that the ACS took an active role in helping to come up with a workable system to give employed inventors a share in the profits from their inventions. Arguments that the European Systems would not work here must be answered by a viable alternative, not simply to ignore the issue. Successful employed inventors have a right to expect definite financial rewards, not just plaques or platitudes, or the necessity to hawk their credentials and track records to another employer to find their own rewards. If a system of fair compensation has significant costs, they must be considered a necessary business expense with the very attractive payoff of encouraging employed inventors to be creative. Those who kid themselves that such individuals will be creative anyway have lost touch with the realities of inflation, college expenses, gasoline prices, etc., etc., which have torn down the protecting walls of the industrial research ivory towers and plopped those inventors into the real world with everyone else who must eat, put kids thru college, and drive 40 miles to the ivory tower where they work.

H. GOVERNMENT PATENTS

1. Government employees have no patent rights that I am aware of. This seems unfair in comparison to industry workers who are able to receive some benefits for inventions. The Federal Government pay system, retirement system, and social security constantly change and usually with less consideration of the individual as of late, perhaps a government worker who invents something could now be compensated as do industry people.

2. Regarding Section V (first statement), patent was assigned to U.S. government agency (DHEW) sponsoring work done at non-profit research institution.

3. On the subject of Government patents I don't feel that the present policies give a very high yield on taxpayers money. This might be improved if participation on licensing were permitted on commercialization and better licensing arrangements similar to NASA plan is needed on Government wide basis.

4. Please note: In our work, as an employee of a government contractor that operates a production site for the Department of Energy, there is absolutely no incentive to patent any of our work. In fact, when publishing a paper, the practice is to declare that nothing patentable is covered, to avoid any bureaucratic delays while various contractor and government administrator debate if you should be allowed to deliver the paper. I would certify that I personnally would have a number of patents if they were worth anything even in recognition if not money.

5. Answers to questions R-Y were difficult to define - when employed by a university and one signs a patent agreement assigning patent rights to Federal Government in conjunction with research contract. How to answer some of the items is unclear.

6. The Federal Government has first choice of patent ownership. If U.S. Government is not interested, the inventor may apply for patent.

I. COMMENTS ON SPECIFIC ANSWERS

1. The ACS should take measures to insure that chemists are recognized and rewarded financially for their patents!

2. This particular patent describes a process which competes with a present commercial process practiced by my employer. Its value to my employer is thus defensive, to prevent a competitor from using this technology.

3. Society should push for sharing arrangement of monies realized from invention.

4. Question Y is biased. Statement 4, especially, may well mean that I was not named as an inventor when I felt I ought to be, making this something of a moot exercise. The answers will tend to be toward agreement.

   Re: Inventions
   When the three indicated patents were assigned, the assignment was for $1 and other considerations. I have three applications pending from my most recent employer from which not even the $1 is forthcoming. I firmly believe that patents which are used should result in a substantial reward to the inventor. Patents which are commercially viable but not practiced should be turned back to the inventor for, within sound commercial judgement, exploitation.

5. I am senior co-inventor of a product patent that is the basis for a highly successful diversification by my previous employer. The product is number-one in market share on a worldwide basis and is estimated to have netted my previous employer 15-20M to date with 5 years left to run. (After-tax earnings basis)
   My experience in not receiving any specific compensation or other recognition is a consequence, as I see it, of the present rules of the game: not anyones fault.
   Should the "rules" be changed? Would statutory compensation requirements be fairer? From a purely subjective standpoint, the question is easy enough to answer. Objectively - I don't know.
   I would hope that, at minimum, the ACS task force be resolute in pursuing and publish current employer practices as a guide for prospective employees.
   If I can be of any assistance in furthering the work of the task force, please let me know.

6. Some patents (applications) have been filed but not yet arrived. Others are in preparation. At the time of filing my compensation is $1.00.

7. I do not feel that the probable lack of utilization of my patent is the fault of my employer. The patent is in the field of nuclear fuel reprocessing, so I feel that the fault lies with our President and his foolish attitudes toward nuclear power in general and reprocessing in particular.

8. Resigned to continue graduate school full time before patent issued. Found out patent issued from C.A. No communication with former employer. However, public recognition given to employees normally upon issuance of patents.

9. Question V - Part 3
Patent is being considered for licensing.

10. The patent was issued to the Federal Gov't for 4-methylumbelliferone fatty acid asters for use as indicators of lifase and esterase activity. It was developed by T.J. Jacks and myself at the Southern Regional Lab, NSDA, New Orleans. The work was published in Analytical Biochemistry - I have no idea why the government spent the money having it patented.

11. The response to Statement Y needs comment. This particular invention was not especially profitable for the Company so I think the Company's recognition is fair. However on successful patents I disagree strongly with the statement.

12. With Regard to Question Y: This patent did not produce process results desired in specific application.

13. Patents represent only one of many ways which chemists contribute to the welfare of a company. Too often some chemists believe that patents are the major or sole measure of the value of a chemist. I believe it is very short-sighted to believe this. Contributions of chemists, whether via patents or other activities, can be and should be, and are usually rewarded by level of compensation and not by payments related only to patents.

14. I feel that the contributions of analytical people tend to be overlooked in patent award situations.

15. I don't think employers should be obliged to give any monetary award for patents. We are being paid to invent and give our best effort to the company who employs us.

16. Recognition of the intellectual efforts of inventors is in a sharp decline at my place of employment. Individuals who have invented and/or developed new products worth many millions of dollars per year go unrewarded.
ACS should become acutely involved in publicizing and exposing with the aim towards correcting this deplorable situation in my industry.

17. "Who has Patented What" is not easy to determine. 4 of my 5 patents came as a result of a company department of patents reviewing our R&D notebooks, rather than their usual company's "Patent Application Process." This action provided me those patents but a number of people were hurt in the process. It is the real reason I have not sought to obtain a patent since, except where the company patents department started the action.

J. MISCELLANEOUS RESPONSES

1. I have one patent application filed.

2. Note: Patents were not result of present employment but while employed in industry (before 1967).

3. Doesn't apply currently.

4. W - Monetary reward was a single payment honoraria - of $50. or $80., I don't exactly remember.
X - This was the reward and only this question worded unclearly.
Y - Recognition + monetary reward & written in management newsletter, otherwise nothing - the project was dropped! There is never any profit sharing, sometimes a promotion may result.

5. Specific money awards are $150. - 50. on filing, 100. on granting.

6. My employer from 1965 to 1970 was a very large corporation who was merged with an even larger corporation. My patents that were assigned were simply "lost in the shuffle", as usual under the circumstances. The patents have only a few more years to run and in time, another patent will be obtained on the same subject.

7. One Canadian patent was issued me in 1967. I also have five trade secrets.

8. The patents referred to on preceding page resulted from my employment as a consultant, not a regular employee.

9. Two of my patents issued in 1949 were used commercially, and the products that were covered are now being produced by three companies. After 21 years in research and research management, I moved into top management in a sizable company. My exit from the "rat race" and return to professional work is fairly recent.

10. Unfortunately patents on losers aren't winners.

11. In 1952 I signed a patent agreement for duPont but left them in 1956. Idaho State University does not have an adequate patent policy either for encouraging patent application or assigning patent rights.

12. In 16 years of employment with two major corporations since my PhD., my inventions were usually cut short of final development or, when they did proceed to a "finished" stage, they were not put on the market, were not patented or were patented for "protective" reasons.

Because I wanted to see my ideas in the marketplace, I became self-employed in October 1973 and have been a free lance inventor. Unable to find investors or competent business people, I am finally resorting to seeking employee status again.

13. Rights to recent patent(s) were released to me by employer at time of separation from employment.

14. Having worked in the Patent Department of two major chemical companies, I find the questionaire very interesting. The rewards in both companies/patent were in the $5 & under category, but salaries were increased in consideration of number of patents issued & utility.

15. Producing patentable items for my employer is part of my job.

16. My main output is in the form of published scientific papers upon which my work status (salary, etc.) is based. My most recent patent is regarded in much the same way as another scientific publication.

17. In our organization all patents are assigned to the company. The employee is compensated $1.00 (one) for each patent since "a research chemist is hired to invent."
Indirectly, though, a number of patents applied and/or issued is believed to contribute to the scientist's promotion or salary increase.

18. Patents, developed or invented, as part of a written or implied contract of employment are, in my opinion, an expected part of the job. A patent which is or becomes a significant contribution to a company should, in addition, be recognized as a contribution of the individual inventor. This inventor should alas share in the monetary rewards obtained as the result of this invention.

19. Question W does not provide for a meaningful breakdown. I suggest
0 - 25
25 - 100
100 - 1000
1000 & up
Question H was written by a radical bigot. I suggest we forget about religious background and not list any statistic by a bigotted label. I pay your damn salary, its about time you did as we tell you.

20. A person who changes employers would, I believe, lose the advantage of the patents existence when it was assigned to the first employer. So questions W, X, & Y may be meaningless.

21. The span of $5 to $1000 is too big.

22. I can appreciate your desire to learn more about patents. However, if an employee has signed a patent over to the employer which is the usual pattern, and then leaves the employer for employment elsewhere, he will not know what has become of the patent.

23. W, X, and Y

During the 9 yrs with my last employer, I was the inventor of a whole series of U.S. and foreign patents. The patents protected processes & process improvements on a class of chemicals. As a result of the successful processes, etc., one of the products covered by patent has become the employer's largest selling single product. The product on O-T-C USY drug has brought employment to about 150-200 individuals, turned around a money losing plant which has been a financial strain on the Co. for 6 years when the original plant had been built for an abortive, NM-existant product. The plant had been padlocked without having produced a gram of the fraudulent "consultant's product."
During the years required for me (+ other lab colleagues) to subject new processes, new products, and one USY OTC drug, my health failed. Only a last minute, 10 hrs. duration open-heart surgery procedure saved my life, but left me more-or-less disabled, and declining rapidly. During my recuperation (at home) from the surgery, my employer required that I answer detailed questions on the new processes, the plant for which was then under construction. After my illness had kept me away from work for 6 months. A company sponsored, (but employee contribution based) long-term disability insurance plan began to pay me monthly disability benefits (a supplement to social security).
After I had been away from work for 9 months, and had been receiving disability insurance checks for about 4 months, I foolishly decided to return to work. I mainly believed that if I then felt too weak to continue to work, then I could return to disabled status & receive disability payments.
In reality, my employer took the opportunity for my departure from disability pensioneer status to seperate me from the Co. and freeing him of the insurance plan from my support in the event that my health failed for a second time.
Within 9 months of my return to work (bearing a synthetic plastic & steel aortic heart valve) my employer discharged me. After all, the new process which I had patented no longer needed my supervision, the new plant had come on stream, there were few problems requiring my attention. I was not given the opportunity to reapply for disability benefits.
My employer made sure that I had not been invited to re-apply for disability benefits. In fact, he changed the benefits plan and the insurance carrier after I had returned to work.

24. I don't think patents are a proper measure of productivity!! One of my developments failed to result in a patent although novel, because the legal department made an error that prevented obtaining a patent due to the statute of limitations. However, the results produced over $20,000,000 sales at about 7% net after taxes, and the technology was later sold in Europe for $1,000,000. I'm not bitter. I'm very happy with my employer and am now in my 28th year with the same company.

25. Bench chemists are probably one of the most exploited groups in the business arena. Patents are only one example. It is my opinion that, unfortunately, the only answer to this is a union. I don't mean a namby-pamby "association", I mean a union, e.g., the teamsters etc. It is truly sad that there is no good will among men. The best thing I could have from my employer is my 1968 purchasing power. It might be instructive to publish (C&EN) a comparison of chemist salaries vs. purchasing power ('68 dollars) to reflect what is really happening in compensation. Also compare machinists etc. or other skilled union workers.

26. Patents - I have been managing support groups, particularly in analytical chemistry, since 1974. Both the people I have been managing and I have been instrumental in a number of product development scientists securing patents, yet we do not receive any credit. This system is typical throughout the chemical industry and the ACS should investigate this matter.

27. The several inventions by me for my employer have not been patented but have been 1) given away to help sell our commodity fibers or 2) kept secret in proprietary formulations.
The American Chemical Society is a pitiful bureaucracy. It sits like a beached clam or jellyfish, unable to help itself or any other "creatives" except to be devoured to feed the other "creatures". The ACS cannot help the chemists who are terminated -- the ACS is just a reporter. The ACS cannot help the employers in a meaningful way -- it is a laughingstock compared to SOCMA, MCA, etc. The ACS is an incredibly inefficient behemoth compared to the National Rifle Association, Airline Pilots Association, Bass Anglers Sportsmen's Society, American Medical Association, etc. The ACS initials should be WABOA! -- What A Bunch Of Amateurs

28. Work being considered for patent.

29. A patent issued in 1975 to me is the most used patent I have been issued. Aproximately 150 plants are now using the process which was patented and is limited to this number because no additional raw material is now available in the U.S. Additional plants in foreign countries are also using the process.

30. *Chemical inventors should be paid royalties even though employed* privately. 6 projects which I worked on exclusively were filed for patents under my managers and supervisors names and I was not included. I was told that the company did not permit more than two names on the applications. The company I now work for does not require a written agreement for assigning patents, but I am told that anything resulting from my work related projects belongs to them even if I applied for a patent independent of the company.

31. Your questionaire on patents is a very significant exploration into a sordid area. Similar questionaires should be made in the areas of (a) discrimination (b) favoratism and (c) competence of management. Thank you for your interest and attempts at understanding.

ROBERTS v. SEARS, ROEBUCK and CO., THE CASE OF THE LUDICROUSLY LONG LITIGATION.

by

NEAL ORKIN

ADJUNCT ASSISTANT PROFESSOR

of

BUSINESS LAW

DREXEL UNIVERSITY

COLLEGE OF BUSINESS AND ADMINISTRATION

PHILADELPHIA, PENNSYLVANIA 19104

Copyright 1982 Neal Orkin

Published in the May 1982 issue of The EUROPEAN INTELLECTUAL PROPERTY REVIEW.

I. INTRODUCTION

Most technically oriented American employees must contractually assign their patent rights to their employer as a condition of employment. Since no legislation exists on this subject, American employers are free to draft extensive provisions covering both the so-called "service" and "free" inventions of the European and Japanese statutes[1]. On rare occasions, in the absence of a contract, the employer and employee find themselves as litigants, exercising their rights under the common law of employee patent rights.[2] This doctrine divides the rights into three distinct solutions: (1) employer ownership[3]; (2) employee ownership[4], and (3) employee

[illegible]

[1]See generally, Phillips, Employees Inventions: a Comparative Study, Fernsway Publications, 1981.

[2]Ibid., pp. 153-155.

[3]This occurs when an employee was specifically hired to invent or his assigned duty was to devote his or her efforts to a particular problem in the course of employment.

[4]This occurs when the employee was not hired to invent, or where an invention was conceived independently of one's job or deals with subject matter unrelated to employment. [illegible] ownership subject to a shop right in favor of the employer (a non-exclusive, non-assignable, royalty-free license to use the invention for the duration of the patent grant).[5]

Roberts v Sears, Roebuck and Co.[6] is one such recent case decided by using elements of the common law. It's main points of interest are derived from the excessive duration of the litigation and the huge sums of money at stake. As the case - or series of cases involves highly complex legal issues [illegible] not related to patent law, the author will attempt to resolve these issues for his European colleagues as painless a manner as possible.

[5]This results when the employee has a non-job related invention, but has utilized the employer's time and/or facilities.

[6]The case citations will be noted chronologically as the article progresses.

FACTS:

In 1963, Peter M. Roberts, as an 18 year old Sales Clerk in the employ of a Sears, Roebuck and Co. (Sears) store in Massachusetts, constructed a prototype socket wrench with a quick release feature that allowed the user to change sockets with one hand. As Roberts had only a high school education and no practical business experience, he showed his invention to the store manager who persuaded him to submit formally the idea as a suggestion to Sears. In May 1964, the protype and suggestion form were sent to Sears' main office in Chicago, Illinois. Afterward, Roberts left the employ of Sears when his parents moved to Tennessee.

Sears then ascertained both the utility and profitability of the invention, and by June 1965, determined that the manufacturing cost of the quick-release was a mere 20 cents per unit. Roberts, meanwhile, had retained a patent attorney who contacted Sears about the item's patentability even before he informed his client that a patent had been issued.[7] Negotiations between the parties began in January 1965. In April 1965, Sears' Attorney, in a letter seeking merely a license, told Roberts that the invention was not new and that the claims in any patent issued would be "quite limited". Other assertions made by Sears' Attorney were that the quick-release feature would cost 40-50 cents, the feature was only worth $10,000, and that once Sears had paid off the royalty expense they would probably take the amount previously allocated and use it for promotional expenses if Sears desired to maintain sales on the item.

7. It was also shown at the trial that the attorney performed some routine legal matters for Sears, raising some doubt as to the independence of his advice to Roberts.

On July 29, 1965, the parties entered into a contract providing Roberts a two cent per unit royalty up to a maximum of $10,000 in return for complete assignment of all Roberts' rights.[8] Also included in this agreement was a provision of what would happen if Sears failed to sell 50,000 wrenches in a given year, thus reinforcing the impression that the wrenches might prove a commercial failure.

The contract contained a clause that dealt with the possibility that a patent might not be granted even though Sears, and not Roberts, knew that a patent had already been issued. When it signed the agreement, Sears knew of the tremendous commercial potential, yet it did not disclose this vital information to Roberts. Just days after the parties had signed the agreement, Sears was manufacturing 44,000 wrenches per week, with the patent number neatly stamped on them. Nine months later, Sears had sold 500,000 items, paid Roberts' his maximum royalty, and had acquired all his rights. In the ten years between 1965 and 1975 they sold more than 19 million wrenches, many at a premium of one to two dollars profit.

[8]Roberts' attorney even gave Sears all his foreign patent rights at no extra charge.

III. THE LAWSUIT

In December 1969, Roberts (then a Tennessee resident) filed suit in a federal district court against Sears, an Illinois Corporation. The suit was able to be heard in a federal court as it was based on diversity of citizenship.[9] Roberts' sought a return of the patent and restitution of damages for fraud, breach of a confidential relationship and negligent misrepresentation. During the month long trial that ended on January 18, 1977, Roberts proved the facts as listed above. Sears claimed that it did not misrepresent any facts and that the success of the invention was due to the unforeseeable boom in do-it-yourself repairs. The jury believed Roberts' evidence and found Sears guilty on all three counts alleged by the plaintiff, entering judgment of damages for one million dollars on each count, but not making the award cumulative.

[9]Citizens or corporations of one state may sue citizens or corporations of another state so long as the amount in contention at the time of this suit had exceeded $10,000. The basis for suit is found in the U.S. Constitution in Article III, Section (2), and is codified in 28 U.S.C. § 1332. Had the suit alleged patent invalidity or infringement, it would have been instituted under 28 U.S.C. § 1338, which grants jurisdiction to the federal district court for civil actions concerning patents and arises under an act of Congress. See Lockett v. Delpark, 270 US. 496, 510(1926).

At this point in the article, the author feels a need to digress somewhat from the case in order to explain the nuances created by a case brought under the federal court's diversity jurisdiction. A federal court is to apply whatever substantive law would be applied by the courts of the state in which the federal district court is sitting.[10] One point of contention that arises in such cases is whether the law to be applied is "substance" or" procedure" and hence, whether the federal court is free to apply its own procedural rules. This issue will be noted during the discussion of the appeals of the case.

[10]Klaxon Co. v. Stentor Mfg. Co., Inc., 313 U.S. 487 (1941).

IV. THE APPEALS

A. ROUND ONE

Both parties appealed the judgment to the U.S. Court of Appeals for the Seventh Circuit.[11]

Sears argued that the district court should have determined the validity of the patent, for if it were found to be invalid, then Roberts could not have been injured by fraud, as Sears would have paid $10,000 for a "worthless" invention. Sears cited Lear, Inc. v. Adkins[12] in which the U.S. Supreme Court held that a patent licensee was not stopped to contest the validity of a licensor's patent, and was not required to pay the contractually-provided royalties for the license on the invalid patent during the pendency of the litigation. The appeals court rejected this argument for two reasons: (1) As there was a complete assignment of the patent rights, Roberts had no legal basis for exacting any "tribute" until the patent rights were returned to him. Hence, when that occurs, the validity of the patent could be tested in an infringement suit or after Roberts entered into a licensing agreement. (2) Lear required the parties, as in any contract, to have acted in good faith. Sears' actions were a blatant violation of this requirement.

Sears also argued that Roberts at the trial had failed to prove that a confidential relationship had existed between the parties. The appeals court rejected this argument as a decision concerning this relationship was best left to the jury.

The most interesting point in the initial appeal arose from Roberts' contention that the district court should have ignored the jury's damage verdict and instead should have granted rescission and restitution.[13] The equitable remedies of recission and resitution would have placed Roberts in a position he had held prior to the agreement; i.e., he would own the patent and would recover all the profits unlawfully gained by Sears. The appeals court had to determine whether the Illinois election of remedies doctrine was controlling. At the time the suit was filed, Illinois had retained separate courts of law and equity. However, this distinction had long been abolished in the federal courts. Sears contended that once the plaintiff takes his case to the jury in a court of law, under Illinois law he can not later seek rescission of the contract from a court of equity. The federal appeals court felt that the state procedural rule was too antithetical to that of the federal rule and declined to follow it. It concluded that the lower federal court erred by not considering whether contractual rescission and return of the patent were appropriate remedies, and it remanded the case back to the district court to determine whether rescission was appropriate.

[11] Roberts v Sears, Roebuck, & Co., 573 F.2d976(1978).
[12] 395 U.S. 653 (1969).
[13] The damage verdict is a legal remedy, while rescission and restitution are equitable remedies. These remedies under Illinois law will be discussed in detail later.

B. ROUND TWO

In Roberts v. Sears, Roebuck & Co.[14], the federal district court was asked to make determinations based on Illinois law. It decided that the elements of fraud justifying a contractual rescission in equity are the same as those for a damage action at law. Under the state law, rescission - the declaration that an agreement is void from its inception - is available for fraud, breach of a confidential relationship, or misrepresentation, and thus, the court ordered that a decree of rescission be entered.

The court further ordered Sears to reassign to Roberts both the U.S. and Canadian patents that had been granted. It noted that Sears had offered a reassignment without the right to recover damages and profits, which was subsequently rejected by Roberts. The court also ordered Sears to account for and pay to Roberts all the profits gained from May 7, 1964, when it acquired the protype to the present.[15] It rejected Sears' argument that the appeals court mandate limited the lower court soley to a determination of rescission and restoration of the patent. The court stated that under the substantive law of Illinois, where the right to rescind a contract exists, the person wronged is entitled to an accounting of profits wrongfully gained, and it ordered a complete accounting.

[14] 471 F. Supp. 372 (1979).
[15] Roberts claimed that he presented evidence to the jury, much of it uncontroverted, of a profit of $44,032,082 up to and including December 31, 1976.

The U.S. Supreme Court refused to hear the case when it denied certiorari, 439 U.S. 860 (1978). When it does so, the Court issues no reasons for its refusal, but it is the author's opinion that the lack of any important federal issues provided the necessary justification.

C. ROUND THREE

Sears appealed the district court's decision again to the federal court of Appeals of the Seventh Circuit[16]*, alleging that the lower court went beyond the instructions given it by the first appeals court decision. This time the Court of Appeals agreed with Sears and in a masterfully worded opinion replete with Orwellian NEWSPEAK decided:

Indent

In our prior opinion, we repeatedly referred to the "return of plainiff's patent" and when we used the word "rescission," we used it in the context of returning the plaintiff's patent. We did not say that the plaintiff could under any theory upon remand be entitled to restitution or additional damages or profits. In fact, we expressly, said that the plaintiff did elect his remedy as to past damages or profits up to the time of the jury verdict and that return of his patent might be the most effective way of insuring that the plaintiff receive the future benefits of the patent. We remanded the case for the purpose of determining whether as an equitable matter the plaintiff should recover his patent. In retrospect, we would have been better advised to use some other word such as cancellation, termination or forfeiture of the June 15, 1965 agreement, or reconveyance or reassignment of plaintiff's patent. In any event, we believed that the language of our opinion made it clear that the plaintiff had elected his remedy as to past damages or profits and, because that remedy continued only up to the date of the judgment, it might be equitable to return the patent to the plaintiff as of that same time to insure that he would realize any future benefits which might accrue through his ownership of the patent as of the time immediately following the entry of the judgment. We did not say nor intend that the June 15, 1965 agreement be subject to being declared void as of any time prior to the date of the entry of the judgment if the district court upon remand found such cancellation to be equitable.

* footnotes on last page.

Indent

In addition to what we said and intended, the law does not permit the remedy the district court attempted to award upon remand. In the earlier opinion, we accepted Illinois law as to election of remedies for past damages or profits, as had the district court immediately after the jury verdict. We parted with Illinois law only to give the plaintiff an opportunity to protect himself against future damages. The district court would now entirely ignore Illinois law as to election of remedies but would seem to apply the Illinois law of ab initio rescission plus complete past restitution.[17]

To justify its logic, the court, in a footnote, stated that rescission ordinarily means abrogation from the beginning, but the law of Illinois recognizes the concept of partial rescission. Also, the word "Rescission" is often used when a patent or copyright license is terminated after partial collection of royalties.[18] The court vacated the decree of the district court, and remanded it for further proceedings consistent with its opinion. The results were that Roberts was able to retain the $1,000,000 judgment that had been satified earlier, and that he was to be considered the patent owner from January 20, 1977 on.

In a dissenting opinion, Judge ~~Sumgaert~~ Swygert agreed with the majority that an accounting for the period from the date of the contract to the date of judgment was prohibited by the earlier appeals court decision, but he felt that an accounting for the period from January 1, 1977 to the date of the accounting was [redacted] proper

The dissent stated:

We held that the jury award for past profits did not bar an equitable remedy for future benefits. Roberts v. Sears, Roebuck & Co., supra. The majority concedes that ~~that~~ the damages remedy continued only up to the date of the judgment, after which ~~which~~ time the equitable remedy of rescission attached.

Indent

Indent

By denying the plaintiff an accounting for the period after which his damages were assesed but before he was in a position to benefit from the return of his patents, the majority has, with no justification, left a substantial gap in the plaintiff's rightful recovery.

According to the majority, the contract was rescinded or cancelled as of January 1, 1977. It is not disputed that the remedy of rescission generally carries with it an accounting for profits unjustly earned. Yet, the majority holds that in order for the plaintiff to recover the defendant's profits, he must start a new action at law for patent infringement. Apparently the majority is concerned lest the plaintiff have a second chance to recover in equity what he has already received at law. But the jury award for damages continued only up to the date of the judgment. Here we are concerned exclusively with profits made after that date. Because we have held that the contract was void after January 1, 1977, profits earned by the defendant after that date must be disgorged to prevent unjust enrichment. Because the jury was never asked to award damages for this period, there is no possible double recovery or factual inconsistency in this result. I would give the plaintiff the full equitable relief to which he is entitled upon the finding that rescission is appropriate.

"Big" business ethics have of late come under ~~heightened~~ heightened scrutiny and criticism. That scrutiny and criticism may appear to be justified if Sears' monumental fraud visited on the plaintiff is any measurement. Evidence before the jury indicated that Sears' incremental profits on the patented wrench had been $44,032,082 from the date it fraudulently acquired the patents up to December 31, 1976. The jury awarded the plaintiff one million dollars damages for that period. Beyond December 31, 1976, according to the directions of the court in the present appeal, the plaintiff will have back his patents with the opportunity to sue Sears for infringement, subject, however, to Sears' defense of invalidity.

Intent

For me this result not only condones the proven unethical conduct of Sears but it is manifestly unjust to the plaintiff.[19]

V. COMMENTS

Peter M. Roberts, lost his fight for "Truth, Justice, and the American Way".[20] After more than eleven years spent in the courts, and eighteen years after his invention was conceived, Roberts must be one frustrated individual.

During the litigation, it seemed that the issue of common law employee patent rights was never in contention, as the parties likely assumed that the original ownership rights belonged to Roberts. Had Sears originally contracted in good faith, it would have saved both parties hundreds of thousands of dollars in legal fees, and would have prevented years of disappointment.

Although the ownership rights were not covered by a statute, the author would like to point out that had proposed federal legislation been adopted, Roberts would have been required to offer Sears a right of first refusal subject to compensation for the invention.[21] If the issues remained in dispute, they could have been easily disposed of through an arbitration hearing.

And so, Peter M. Roberts, may "The Force" be with you.

---

[16]Roberts v. Sears, Roebuck and Co., 617 F.2d 460 (1980).

[19]Its unknown to this author whether the parties have subsequently litigated the patent infringement and validity issues.

[20]The author expresses his humble apologies to Superman, Clark Kent, Lois Lane, and others now involved in carrying on this tradition.

[21]See Phillips, op. cit., at pg. 167

17 617 F. 2d 460, 464 (1980).

18 617 F.2d 460, 464, Fn. 3 (1980).

Patent Bill Returns Bright Idea to Inventor

And in the process it would help federally funded inventors and their institutions to pick up a little cash

When your innovative idea gets tied up by piles of paperwork and months of delay as Washington dawdles over whether to let you market the thing or not, nasty thoughts about U.S. patent policy are never far off.

Just ask Sydney E. Salmon, a biomedical researcher at the University of Arizona. In 1977, Salmon and another scientist found that by growing human tumor cells in a Petri dish and adding anticancer drugs, they could predict what drug or combination of drugs would best shrink a patient's tumor. The method could also be used to screen the effectiveness of new anticancer drugs.

Salmon wanted to patent the technique. But since the salary of one researcher in the lab was paid by the Department of Health, Education, and Welfare (HEW), all rights reverted to the agency. To make sure the method did not just sit on a government shelf, Salmon on 5 July 1977 asked HEW for the patent rights, and on 29 July published his results in *Science*. An editorial in the *New England Journal of Medicine* soon took note of the technique, and even *Time* ran a story on it. Not long afterwards, drug companies showed up at Salmon's door, wanting to market the method. HEW, however, had not yet ruled on the patent rights, and the companies soon lost interest. It took until March of this year, in all some 20 months—before HEW finally decided to hand over the rights. The drug companies are only now starting again to ask about licensing the patent rights.

"This invention will spare cancer patients from receiving toxic drugs which we can predict would be of no benefit," Salmon recently told a Senate hearing. "Yet this slow process of gaining HEW approval delayed its availability to the public by at least 1 year."

It is an oft-told tale on Capitol Hill these days. A steady stream of inventors has been showing up at hearings to complain about the bureaucratic knots that tie up the transfer of patents derived from federally funded research. Their goal is to boost new legislation, and it seems to be working. Support has been building for a Senate bill that would automatically give patent rights to universities and small businesses. The bill, the University and Small Businesses Patent *Procedures Act (S.414), is coauthored* by Birch Bayh (D-Ind.), chairman of the Senate Judiciary Committee's subcommittee on the Constitution, and Robert Dole (R-Kan.).

The bill would let any federally funded university or small business make some money off their bright ideas. Say, for instance, that a researcher on a Department of Energy (DOE) grant came up with a cost-efficient way of converting coal into gasoline. Under the bill, the inventing organization could apply for a patent—without waiting for permission from DOE—and then license the idea to a company for up to 8 years. A portion of the money made during commercialization would be returned to the inventing organization with the stipulation that the funds, over and above administrative expenses and a fee to the inventor, be used to support further scientific research.

Not only university researchers are backing the bill. A study by the Department of Commerce has recommended the exclusive licensing of patents derived from federally funded research. The General Accounting Office (GAO) has come out in favor of the Bayh-Dole legislation. And the critics of such legislation, who in the past have railed about the "giveaway of public funds," have grown unusually quiet. The reason seems clear. Industrial innovation has become a buzz word in bureaucratic circles. The White House, for instance, is about to release a study on how to cure the alleged decline in the innovative spirit within U.S. industry. The patent transfer people have latched onto this issue. It is about time, they say, to cut the red tape that saps the incentive to be inventive.

The way things currently stand, the incentive is indeed small. Years can slip by before a funding agency decides whether or not to retain patent rights to an inventor's organization, and, as often as not, the agencies decide to hold on to it. The agencies, moreover, prove to be poor *businessmen. Of the 30,000 inventions* now in the government's patent portfolio, an estimated 4 percent have been licensed, and even fewer make it to market. One reason is that the government insists on issuing "nonexclusive" licenses—which means that any number of companies can jump in along the road to development and marketing (though few take the chance). Another reason, say many researchers, is that the government doesn't know how to market an invention. The further one goes from the source of the idea, the inventor, the less one knows about how to put it to work.

The government is not all thumbs, however. To help cut through this web, federal agencies over the years have worked out agreements with certain universities that show a knack for peddling their inventions to companies that will produce them. Called Institutional Patent Agreements (IPA), they allow a *university to become the owner of a* patented invention resulting from federally funded research and to give an exclusive license to a company for up to 5 years. IPA's are few and far between, however. They are in place at only 72 HEW grantee institutions and, out of 1200 institu-

> Critics of such legislation, who in the past have railed about the "giveaway of public funds," have grown unusually quiet.

tions that receive National Science Foundation funds, they are in place at about 20. And not many more are expected, since the agencies are conservative in identifying institutions that have what it takes to promote technology transfer.

The Bayh-Dole bill goes beyond the IPA concept in that it makes no distinction between institutions that have a knack for marketing their inventions and those that do not. It says *any* university or small business can manage its own inventions better than the government can. The IPA, moreover, is limited to inventions discovered on government grants, not contracts. Not so with Bayh-Dole. Most everyone on any kind of funding is covered, with the exception of big business, and that is mostly for political rea-

0036-8075/80/0801-0423$00.50/0 Copyright © 1980 AAAS

sors. "We'd like to extend it to everybody," said one Senate aide, "but if we did, the bill would never have a chance of passing." Such was the situation several years ago when similar patent legislation that applied to all businesses was introduced. Consumer advocates and trustbusters at the time cried giveaway and monopoly, and the bill soon died.

To further mute critics this time around, the Bayh-Dole bill also has a *payback clause. This would provide a* payment to the federal agency that funded the project, provided the patent proved to be a money-maker. It would give the government 50 percent of all net income above $250,000 received by a university from licensing an invention—not to exceed, however, the amount of government funding in the first place. It sounds straightforward, but some researchers see problems with it. "In arriving at a remuneration formula, is the government support to be determined on *the basis of one year? Two years? Ten* years?" asked Baruch S. Blumberg, a Nobel laureate who recently testified on behalf of the bill. "Some grants are now in their 20th year. Resolution of this question could become an accounting nightmare."

Despite such problems, which according to Senate aides will be ironed out in conference, the bill has gained considerable congressional support. It has 28 cosponsors that range the political spectrum from Senator George McGovern (D-S.D.) to Senator Strom Thurmond (R-S.C.). Identical legislation (H.R.2414) has been introduced in the House by Peter Rodino (D-N.J.), chairman of the House Judiciary Committee.

The GAO has also given its seal of approval to the bill. "We believe a clear legislative statement of uniform, government-wide patent policy is long overdue," said Elmer B. Staats, Comptroller General, in testimony before Senator Bayh's subcommittee on the Constitution. He noted, moreover, that a recent GAO study showed that HEW and other departments have been moving from what was once a liberal policy on the transfer of patent rights to one that is much more conservative. He said "an easing of the red tape leading to determinations of rights in inventions would bring about an improvement of this record."

In a move that may gain Administration support for the bill, a Commerce Department study has backed the idea of granting exclusive licenses from federally funded research. The recommendations grew out of an Administration domestic policy review on problems with industrial innovation. "If the results of federally sponsored R & D do not reach the consumer in the form of tangible benefits, the government has not completed its job and has not been a good steward of the taxpayer's money," said the advisory subcommittee on patents and information chaired by Robert Benson of Allis-Chalmers Corp. "The right to exclude others conferred by a patent or an exclusive license under a patent may be the *only incentive great enough to induce the* investment needed for development and marketing of products."

Foes of the legislation are few, but they do exist. One is Admiral Hyman Rickover, the Navy's veteran apostle of nuclear-powered ships. The reason so many government-owned patents are not used, he recently told a Senate hearing, is that the vast majority of them are worthless. "These patents are filed defensively, or as status symbols. Other times an inventor simply misjudges the *attractiveness of his ideas. . . . In my* opinion, the bill overemphasizes the importance of patents, and, if enacted, would divert attention and resources of the government agencies away from their main functions."

Rickover also criticized as cosmetic a provision in the bill for march-in rights (which let the government take back the patent if it feels a discovery is being marketed too slowly). The government has had march-in rights since 1963, he said, but it has never used them. "To be in a *position to exercise these rights* a government agency would have to stay involved in the plans and actions of its patent holders and check up on them. If a government agency ever decided to exercise its march-in rights and the patent holder contested the action, no doubt the dispute would be litigated for years."

Though Rickover came down hard against the bill, other traditional foes of such legislation have eased up. The Justice Department, usually hostile to anything that smacks of monopoly, says it is reassessing its position. An aide to Senator Russell Long (D-La.), a veteran backer of government-held patents, has told Bayh's staff that the senator will not "actively oppose" the bill. And Senator Gaylord Nelson (D-Wis.), a longtime foe who asked the Administration to suspend new rules for IPA's last year so he could hold hearings to see if they were a "giveaway" of public funds, is not actively opposing the bill, according to his staffers.

With the opposition not putting up their usual fight, is the bill a sure thing? Not quite, say several Senate aides. They concede that the biggest hurdle to overcome is the weight of conventional wisdom. It goes something like this. Such a bill would permit the founding of monopolies that can charge high prices for the fruits of tax-aided research. It's a free lunch, say the critics, and it's not fair. One Senate aide who was skeptical of the bill put it this way. "At the stroke of a pen," he said, "you are creating billions of dollars of property that did not exist before, property that is created with taxpayer support. We are not about to jump on the bandwagon. We have an obligation to the public and to other patent holders. We want to make sure this is good public policy before we start touting its wonders."

For more than 30 years, the government has operated on the assumption that the economic rewards from federally funded R & D should be captured by the government, or shared only grudgingly with others, since public funds were used. Hence, the government's collection of 30,000 patents. That policy, however, has not produced an astounding record of economic returns, and the conventional wisdom on public money and private gain may be in the midst of change. The innovation "fad," moreover, is becoming pop drama, as evidenced not only by the Administration's domestic policy review but by media coverage such as the 4 June *Newsweek* cover story on innovation, subtitled "Has America lost its edge?" The winds of opinion are shifting. It may no longer take a leap of logic to see that good public policy might include a modicum of private gain, especially when the alternative is patent portfolios that gather dust on government shelves.

—William J. Broad

Article continued on page 1838

0036-8075/79/0608-0836$01.75/0 Copyright © 1979 AAAS

LEGISLATION IS NECESSARY AND COMING!

Willard Marcy
Chairman, Committee on Patent
Matters and Related Legislation
American Chemical Society
Washington, D.C.

"Legislation Is Necessary and Coming." The title for this talk is catchy, projects an obvious image and is provocative. Yet I have some trouble with it because of the limitations it implies. Let me explain.

I will start with a general philosophical approach to the topic of compensation for the employed inventor, refer to some translations of this philosophy into specific actions, then discuss the present status of activity in this area, and, finally, suggest some conceivably viable steps to improve the present state of affairs.

Compensation for the employed inventor is a broad subject, and, unless treated broadly, disagreements and controversies will persist. A broad treatment requires definitions.

Compensation means any means for rewarding an individual for work well done. A common means is monetary award, but any other usual or ingenious ways of rewarding individuals are also included.

This paper was presented at the Annual Meeting of the American Chemical Society Corporation Associates, L'Enfant Plaza Hotel, Washington, D.C. 4 November 1977.

An inventor is anyone who discovers or thinks out a new, presumably better, way to accomplish a purpose.

Inventions made by inventors may or may not be patentable; they may be entirely new or may be useful modifications of existing methods or things.

The employed inventor is a person who makes an invention while working for another person or a company, in academia or for a public agency, such as the Federal Government.

Most people who begin to study the subject of compensation for the employed inventor look at the concept from a narrow viewpoint. They are either employers or employed inventors. Seldom do either of these types of individual look at the concept from the public view, much less at the social, moral and ethical values involved. This situation, of course, can and does lead to misunderstandings at best and to acrimonious controversies at worst. In addition, it engenders seemingly endless discussions, proliferating literature, and other multitudinous records.

Historical Perspectives

In order to bring some order and rationale from the confusion and murkiness, let us look at the subject historically, first from the employer's viewpoint then from that of the employed inventor.

The employer believes that any inventive discovery made by his employee belongs to him, the employer, without any doubt and in spite of any extenuating circumstances. The employer pays the employee for this work; therefore, the results of the work belong to the employer. It is as clear as crystal to him.

How did this notion arise? I am told by my lawyer friends that this idea is deeply rooted in English common law going back for centuries into feudal times. It is a modern-day reflection of the master-serf relationship. Under the feudal system there were very few land-owning elite and a large population of uneducated, low-social-level peasants. The major sources of employment were farming, herd keeping, hunting, warring or religion. The uneducated masses were impressed into service by and on behalf of the elite. Because of the great power of the land-owners relative to the worker-masses, the workers were forced to turn over all the products they were able to produce to their masters, retaining only what their masters decided was enough to sustain life. While we have come a long way since those generally unhappy times, the notion that the entire fruits of the employees' efforts belong to the employer still persists and is, generally, a workable idea. Rewards for the employee's efforts, while now in the form of wages or salaries, plus fringe benefits, are still, however, almost entirely at the discretion of the employer.

The employed inventor, on the other hand, believes that he is hired by an employer to do certain tasks spelled out for him either beforehand, or on a day-to-day basis, by his employer. Often, but not always, the employed inventor's duties are described in written contracts, especially when the employee is professionally trained. However, the employed inventor feels that, when he performs some function or accomplishes some happy results over and above his assigned tasks, this should be recognized and rewarded by his employer in some commensurate way. After all, he thinks, in this capitalistic democracy of ours I am not a serf, I am a professional and an independent thinker; in addition, I am performing my job in the best interests of my employer, even beyond what he expects me to do. Therefore, my employer should recognize the extra value of my extra effort and share some of it with me in some way over and above my normal compensation.

Our country's founding fathers recognized the need to recognize and reward individuals who produce inventive concepts and to encourage them to continue to engage in this endeavor when they incorporated into our nation's Constitution the basis for our present patent system. Their approach involved a carrot and a stick. The inventive individual was given a limited time (17 years) during which, by statute, he could protect himself from undue competitive pressure, and, in return for which, he had to disclose his inventions so that others could see what had been done and eventually follow in his footsteps, all to the benefit of the general public.

At the time the Constitution was drawn up, of course, the United States was primarily a congregation of individual entrepreneurs opening up a new land having vast resources, and the strong encouragement of enterprising individuals was essential. Today, of course, we are an industrial nation and most people work for someone else. Nevertheless, and this point deserves more emphasis then it usually gets, the original constitutional basis for a patent system still holds without change, and all patents must be issued in the names of individuals, not corporate entities. Thus, individuals still receive protection under the patent statutes as a reward for disclosing their inventions. And, in keeping with this philosophy, when individuals as employees agree to assign inventions, whether patentable or not, to their employers, then it seems only logical and proper that such employees should be rewarded in some tangible way for doing so.

Therefore, it seems to me the question of compensation for employed inventors comes down to the relatively simple proposition of how best to use this "carrot" to encourage production of better products and enhance the living standards of the general public, while at the same time producing enhanced income and profit for the employer and encouraging the employed inventor to go beyond the letter of his contractual obligations to his employer.

Today's responsible and enlightened employer does indeed recognize his employee's extra effort and does wish to share enhanced income with his especially gifted inventive employees in some way. Just know to do

it, however, remains a knotty problem. In addition, working out and maintaining a fair and equitable reward system can be administratively difficult and expensive.

Rewards for Employed Inventors

Let us now turn to a short summary of various ways in which employed inventors have been and are being compensated.

It is informative to note that fair compensation schemes have been in operation for many years in the academic world. A brief survey of practices in United States universities and colleges was given in a paper I presented at a sympsoium sponsored by the American Institute of Chemical Engineers, subsequently published in the November 1971 issue of CHEMICAL ENGINEERING PROGRESS. This paper pointed out that inventors in an academic milieu, as compared to inventors in an industrial setting, share opposite views as to why they made inventions, and the resulting inventions had dissimilar characteristics as well. Generally speaking university inventions are fall-out from scientific research and are not of prime interest to the university as sources of income and profit. Special compensation to the university inventor is, thus, pure and simple, a reward for extra effort, and not a means for encouraging an increased rate of innovation for the employer. However, since the university inventor is an employee of the institution, most institutions where research is carried on have recognized the basic fairness of a award system to inventive researchers, and have developed written patent

policies delineating unequivocally what these rewards would be. Most institutions now require new employees, particularly those with academic and professional qualifications, to sign a document as a condition of employment signifying understanding and concurrence with their explicitly stated policies. Usually such policies require that any patent rights covering inventions will be assigned to the institution unless the responsible designated administrative officer requires assignment to a sponsor or other organization having a right to develop the invention. Know-how is rarely available from academic inventors and is usually not included in the patent policy statements. While the stated rewards vary, a relatively easy-to-use measure of the worth of academic inventions is the royalty paid to the institution by an industrial licensee of the invention. The institution, which is not itself interested in manufacturing and marketing inventions assigned to it, shares the royalty rewards with the inventive researchers.

In the case of government research employees, agency regulations, to date, have not provided for any single standardized policy for rewarding inventive employees. However, some agencies have invention awards boards which examine meritorious cases having some perceived value on an ad hoc basis. Individual agency patent policies and preemployment contracts are practically non-existent; agency regulations explicitly state that all inventions and patents issued thereon made by government employees belong to the government. This situation may well change in the near future if Congress acts favorably on the

Thornton-Teague bill introduced earlier this year. This bill provides a statutory base for rewarding government employees who make inventions resulting in patents.

Government agencies which award contracts or grants for extramural research and development have very elaborate patent policy statements written into the texts of the contracts or grants. The complexities of such policies are too detailed and confusing to go into in this talk, but they generally provide means for assignment of patent rights under certain conditions to the contractor or grantee rather than to the government. Such assignments carry with them the implicit or explicit authorization to reward inventors at the assignees' discretion. When the inventors are employees of grantee institutions the institutional patent policies govern; when they are employees of industrial contractors, the contractor's policies are controlling.

Thus, it is seen that the government has two policies for rewarding inventor-employees. When the employee's salary is directly paid by a government agency, a systematic mechanism is not used and little or no reward is made to the employee. However, when the employee-inventor is paid by a government granting agency indirectly through a third party, the third party's policy on rewards governs.

Industrial managements take a view similar to that taken by the government towards its directly paid employees. Generally industry

requires assignment of inventions and patent rights to the employer with no clearly stated policy governing rewards to the employee-inventor, in contrast to the general practice in academic institutions. Many large research-oriented companies do have compensation plans, but these plans are administered entirely at the discretion and under the complete control of the company management. A preliminary survey of some 140 companies made in 1971 by an ad hoc Subcommittee to Review Patent Compensation of the ACS Committee on Economic Status found a wide divergence of practices. In general, this survey indicated that the guiding principle of all the compensation plans examined was to provide incentives to inventors and not to reward them for extraordinary accomplishments. Indirect rather than direct means of compensation were used in the majority of plans. Most plans surveyed appeared to provide only token recognition and did not appear to compensate adequately the inventor who made extraordinary inventive contributions.

From the preceding discussion about the way employers look at and the means by which they exercise control over the inventive process, it seems clear that inventions and patents are perceived by both governmental and industrial employers to be essentially a means for increasing the rate of innovation. In industry successful innovations are perceived to be important as profit-enhancing developments; in government, the public benefit is the ostensible ultimate purpose. In both instances rewards to the employed inventor are perceived to be unnecessary, of little consequence or of minor significance. In academia

and with extra-mural government contracts and grants, on the other hand, monetary return to the institution or granting agency assumes a much reduced significance. Rewards to the employed inventor are recognized as a very significant and important factor perceived as fair and equitable treatment for high intellectual output.

Stimulants for Employed Inventors

Legislators in a number of countries, beginning as early as 1897 in Austria-Hungary, have felt that rewards to the employed inventors could stimulate the rate of innovation. Such stimuli were included in patent statutes in several countries in the first few decades of this century. In Germany during World War II a "Law Relating to Inventions of Employees" was passed. Its original purpose was to produce new materials for war use. After the war it was apparently thought that recovery from a distressed economy would be aided by continued encouragement of the employed inventor. In any event, the original law was revised and up-dated in 1957, 1961 and 1968. This law, is still in effect in West Germany. Experience under the German law indicates that it is workable, but the cost of administration is substantial. Neither employed inventors nor employers are completely satisfied with its results.

In the last two decades a number of other countries have passed similar or analogous laws based at least in part on the German law. According to Donald Manly in a paper given at a Industrial Research

Institute meeting in October, 1977, the total is now twenty-three countries, including both developed and developing ones.

Since no studies have been reported showing whether such laws have, indeed, enhanced the rate of innovation, Manly reported on a brief survey he had made comparing the absolute number of patents issued in West Germany with a compensation law, and in the United States where there is no corresponding law. He also analysed the growth rate in the number of patents issued in the two countries. On the basis of this study he concluded that the German law had no effect, either positive or negative, on either the absolute increase or the rate of growth of number of patents. Manly felt, therefore, that passage in the United States of a law similar to the German law would be unneeded to stimulate innovation and ineffective and costly if it were passed.

General interest in the United States regarding compensation for the employed inventor was stimulated by the introduction of a bill into the House of Representatives by Representative Moss (California) in 1970. This bill followed, generally, the format of the German law with certain modifications to make it more applicable to conditions in the United States. The proposed legislation was filed primarily at the instigation and with the help of the Coordinating Committee of the California Sections, a coalition of American Chemical Society sections and certain other professional societies. No Congressional action was taken on this bill and it expired with that session of Congress. New bills with

modifications were filed in subsequent years, the latest being HR 2101, dated January 19, 1977. HR 2101 has been referred to the House Judiciary Committee where it has had little or no support, nor has it yet been scheduled for hearings. A similar but less definitive bill, HR 4331 has been introduced into the present Congress by Representative Vento (Minnesota) at the request of a constituent who is or was an employed inventor. This bill also has not been subject to further Congressional action.

ACS Interest

In fulfilling its designated role to follow prospective legislation relating to patent matters, the ACS Committee on Patent Matters and Related Legislation (CPM&RL), together with the ACS Committee on Economic Status, began in 1970 to study the successive Moss bills. CPM&RL, the more active of the two committees, concluded that the best interests of ACS membership would be served by the Society taking an official position on the bill, especially if hearings are to be held. Early in this committee's discussions on the bill, however, it became apparent that various committee members held strongly differing opinions, not only on the merits of the provisions of the bill, but also on the merits of the principle of compensation for the employed inventor.

The question arose as to whether such differences reflected the Society membership as a whole. Since to ascertain Society membership opinion would require a costly survey, the Committee decided to sponsor

two public hearings, one at the ACS National Meeting in Chicago, August 1973, and one held in conjunction with an international meeting of patent attorneys, in San Francisco, May 1975. Transcripts of these two hearings have been published in booklet form and are available from ACS headquarters.

Based on the information developed at these hearings and from further study of the literature it seemed evident that real issues exist which need resolution, either by legal or other means. In addition, enough interest in this issue was expressed by ACS membership to warrant continuation of the study of these issues and the development of an action program which could and would be endorsed by the ACS Board of Directors.

At its meeting in April 1976 CPM&RL decided on a two pronged approach. A short-range effort was developed to try to determine whether the ACS Board of Directors and Council felt the issues needed resolving and whether Society support for a long-range study could be obtained. A longer range effort was directed toward organizing and carrying through a detailed study of the actual effects of the several existing foreign laws and of the observable effects of the compensation plans currently being used in the United States. This latter study would be done by a task force consisting of representatives from various interested ACS committees and divisions.

The short-range effort resulted in the formulation of seven resolutions expressing support by the Society of various action plans related to compensation legislation. These resolutions, all of which were passed by majority vote of CPM&RL, but each carrying strong dissention or abstention, were presented to the ACS Board of Directors in December 1976 and acted on in April 1977. Three of these resolutions were passed by the Board pending concurrence by the ACS Council, and the other four were returned to the Committee for further study. The three passed resolutions were on the Council agenda for its August, 1977, meeting, but were withdrawn by CPM&RL before voting by that body. The reason for withdrawal was that strong opposition to the resolutions had developed, and, since the study task force had been organized by this time, it was felt proper to include further study and evaluation of these three resolutions in its program.

Meanwhile, the task force, consisting of representatives from nine ACS committees or divisions, has been organized and has had two meetings. An outline of the detailed study is presently under consideration and a working meeting is contemplated for about January, 1978.

Interest of Other Organizations

Other organizations, notably the Institute of Electrical and Electronic Engineers (IEEE), have become interested in the employed inventor compensation issue and have been pressing for legislation. The IEEE committee studying the Moss bill takes exception to a number

of its provisions and has drafted an alternative bill which IEEE proposes to have introduced into Congress at the appropriate time. The ACS CPM&RL is keeping in touch with IEEE on this.

Some state legislatures have passed, or are contemplating passing, legislation providing that compensation be paid to employed inventors. This movement is quite recent and it is not possible at this time to predict how many states might consider and enact similar actions.

The Industrial Research Institute (IRI) has sent a letter to Chairman Rodino of the House Judiciary Committee taking a position against the Moss bill. IRI has also organized a study group to look further into the issue, primarily to try to devise means for obviating the need for legislation, if possible.

How Can the Issues be Resolved

Let me turn now to steps which might help to increase the satisfaction of employed inventors with reward procedures while at the same time resolve some of the "fairness" and administrative difficulties perceived by employers.

Obviously one procedure would be legislative with the methods for determining fair compensation spelled out in minute detail as with the German law.

A second procedure would be to develop an impartial counselling-mediation-conciliation service, either under government or private auspices, with strong enough support so that the decisions made by the service's board of inquiry would be respected much as if they were legal decisions.

A third procedure would be to establish guidelines for fair compensation practices for employed inventors. Monitoring of such guidelines would present a problem, of course, and their enforcement would be difficult.

Manly, in his paper, suggests that the best way to handle the situation is for all companies to treat their employees fairly, to make known the use of such fair treatment to legislators, and, if legislation seems inevitable, to work with state and federal bill drafters to provide laws which industry can live with. In addition, as mentioned previously, a thorough study of all aspects of the problem would be made under the auspices of IRI.

This program is laudable as far as it goes, but it does not contemplate or consider possibly viable alternatives to legislation. In addition, it fails to recognize adequately the need to reward the employed inventor, since, I fear, "fair" in the context used by Manly implies fairness from the employer's viewpoint, with the concept of adequate compensation to the employed inventor who makes extraordinary inventive contributions being unduly undervalued.

In a paper delivered at a symposium entitled "Legal Rights of Chemists" at the ACS meeting in April 1976, I suggested that a combination of methods might provide the necessary means for providing fair and equitable compensation to employed inventors while not requiring undue administrative cost, legislation or the setting up of excessive bureaucratic procedures. This program included the development of detailed substantive compensation guidelines for employers and employees, the development of typical standard plans for compensating employed inventors, the establishment of an office to advise employers in setting up equitable compensation plans, and the formation of a counselling-mediation-conciliation service to aid both employers and employed inventors in the resolution of issues related to the compensation issue. I also suggested that development of such a system might need to have legal backing, such as the ability to refer to a court those rare situations where irreconcilable differences might arise. These services might well be provided by a professional society such as the ACS, or a consortium of professional societies.

While these suggestions may sound elaborate and cumbersome, there seems to be no simple way to bring into balance the various interests of both the employer and the employed inventor. There is no reason not to try to do so, however, even if cost and effort seems rather large. Many companies spare no cost or effort in obtaining patent coverage of worthwhile inventions. It seems only proper and right to treat the inventors of these inventions in the same manner.

Conclusion

In this paper I have tried to show that the question of compensation for the employed inventor is a broad one, that it encompasses the twin needs of enhancing the rate of innovation and rewarding employed inventors, that great differences between individuals exist about how best to effect such compensation, that present methods for accomplishing this purpose are widely diversified and are frequently perceived by employed inventors to be inadequate, and that alternative methods to legislation can be conceived to provide some resolution of the present and anticipated problems.

To return to the title of this paper, in light of the views expressed here, I should like to add three two-letter words and a question mark. The title would then be "Legislation Is Necessary and Coming, or Is It?" Whether legislation comes, it seems to me, is up to both employers and employed inventors. But, if it does come, the lack of adequate reward procedures for employed inventors will be the primary cause. To obviate legislation it will be necessary for employers to assume the responsibility and burden for developing compensation plans acceptable to employed inventors. Until this is done widely the threat of legislation will remain.

Compensation for employed inventors

Our patent system is designed to "promote the progress of . . . the useful arts" (*1*) by encouraging disclosure of inventions to the public. As an incentive to disclosure, a right "to exclude" is given to the owner of the invention by the grant of a patent. Whether the patent system has been fulfilling the purpose of facilitating disclosure to increase the common fund of knowledge instead of fostering the withholding knowledge in the form of trade secrets is a matter of wide current interest. But this aspect of the system is outside the scope of this communication. Instead it concerns an important concomitant to the system: reward to inventors in order to encourage intellectual creation (*2*). Growing interest in whether this function is being satisfied is reflected in activities of scientific societies, and of Congress (*3*).

Many opinions have been expressed about whether the system should be modified, but such expressions for the most part were grounded on personal experiences and not from direct evaluation of inventor motivation. Why inventors invent is an interesting question but it is not covered here. Here the inquiry is whether inventors feel the system is fulfilling in the reward function, which is an important purpose of the patent system.

This paper reports results of a study done by the California Coordinating Committee of the American Chemical Society that represents more than 10,000 members of the eight sections of ACS in California. This study focused on experiences and attitudes of recent California inventors. **By-mail questionnaire, it surveyed all inventors of chemical patents who lived in California and who were issued patents in the last quarter of 1973.**

The results indicate that California inventors are relatively well paid, highly educated, and knowledgeable about patents and compensation practices from receiving many previous patents in addition to those which form the basis of this survey. Yet even these inventors are largely dissatisfied with the system of compensating employed inventors. Of those who responded, 43% expressed a lack of satisfaction with the compensation system relating to issuance of patents, even though the patent system has, as one of its purposes, rewarding inventors to encourage intellectual creation. Only 18% were "very satisfied" at the time a patent issued and the reward function would be expected to be at its maximum. One reason for the widespread dissatisfaction is that 54% of the respondents got one dollar or less in direct compensation for their inventions.



John P. Sutton, a member of the Joint Board Council Committee on Patent Matters and Related Legislation of the American Chemical Society, practices law in San Francisco. As Secretary of the Coordinating Committee of California Sections of ACS, he was instrumental in conducting the survey here described. Ohio born, Sutton received his BA from the University of Virginia and the JD from George Washington. He was admitted to the Virginia Bar in 1964, and the California Bar in 1965 and entered private practice. Previously he was an examiner in the U.S. Patent Office and Technical Advisor to the US Court of Customs and Patent Appeals.

Substantially all of the employed inventors assigned the patent to the employer. (All but 2% had signed written employment agreements requiring such assignment). Self-employed and partner inventors tended to be more satisfied than employees of corporations, probably because they have an equity interest in the ownership rights. Employees of larger corporations tended to be more satisfied than employees of smaller ones, possibly because larger corporations had more formal awards programs. Those employees who received any kind of direct recognition—e.g., money—peer recognition, commemorative notation—tended to be more satisfied with the system than those who did not. The older and the higher paid inventors also appear to have greater satisfaction from the system of employment compensation under which they work.

Because of the difficulty in finding complete addresses for inventors listed in the Official Gazette of the U.S. Patent Office, many of the 402 inventors were not sent questionnaires. A total of 248 questionnaires were mailed and 162 (66%) were returned within 6 weeks. Others came later, but were not tabulated. Since over 10% of the questionnaires mailed were undelivered, the 66% of all those mailed that were returned show a strong interest in the subject matter. A copy of the questionnaire that shows the percent response in each category is in Figure 1. Questionnaires were sent to inventor's home to avoid interfering with his work and/or any inhibition he may feel in addressing such questions while he is receiving compensation while not engaging in creative effort.

The inventors

Of the inventors, 90% were in the age group between 30 to 60, and 43% were between 40 and 50. One third were over 50, discrediting the belief in some quarters that older workers do not invent. All inventors had post high school education with 93% having earned at least one college degree; more than half had the doctorate.

Only 9% of this group had no other patents; while 36% had more than 10 other patents. The inventors in this sample have thus repeatedly demonstrated their creative abilities.

These inventors appeared to receive relatively high salaries. Only 16% received an annual income below $18,000. Two thirds (65%) had an income between $18,000 and

Reprinted from CHEMICAL TECHNOLOGY, Vol. 5, February 1975, pp. 86-89
Copyright 1975 by the American Chemical Society and reprinted by permission of the copyright owner

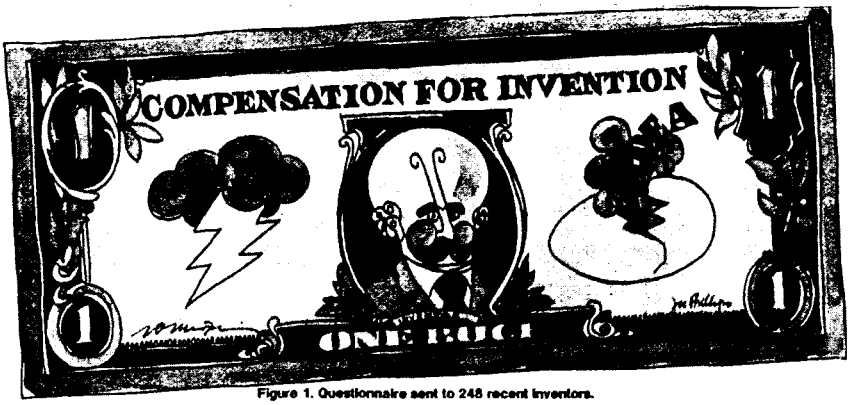


Figure 1. Questionnaire sent to 248 recent inventors. Responses, reduced to % of those responding, are also shown. (Overall response rate: 75% of those delivered)

1. If the invention was made by you as an individual or as a partner, and not as an employee, check the appropriate box and go to question 9.
   - 11 Self
   - 10 Partner

   If you made the invention as an employee of an organization, indicate the size of the organization in recent annual sales:
   - 3 Under $1 million
   - 10 Over $1 million and under $10 million
   - 14 Over $10 million and under $100 million
   - 28 Over $100 million and under $1 billion
   - 29 Over $1 billion
   - 6 (Government—freely noted by respondents—not included in printed questionnaire)
2. Did you assign this patent to your employer? Yes 93 No 3
3. Did you sign a written employment agreement requiring assignment of inventions to your employer? Yes 90 No 6
4. Many employers have more or less formal programs for compensating employed inventors, while others have no program or informal policies. What kind of program does your employer have?
   - 50 None
   - 7 Nothing written, but some inventors receive extra compensation
   - 2 Unwritten understanding that there will be compensation
   - 28 Written policy statement
   - 5 Written promise of compensation signed by employer
5. Many employers give extra compensation to employed inventors in the form of cash awards or negotiable paper, such as Savings Bonds, having a readily determined money value, while others do not provide any. For this particular invention, how much money will you receive in total, whether at the time of disclosing the invention, the time of filing the application, the time of issue of the patent or otherwise? Do not include regular salary.
   - 4 ($1.00 freely noted by respondents—not included in printed questionnaire)
   - 50 None
   - 9 Less than $50.00
   - 27 Over $50.00 but under $500.00
   - 3 Over $500.00 but under $5,000.00
   - 0 Over $5,000.00
6. Can you fairly trace any other compensation, in the form of a promotion, a raise, or a desirable change in job situation, to the issuance of this patent?
   - 2 Yes, directly related
   - 9 Yes, somewhat related
   - 12 Yes, slightly related
   - 89 No
7. Did you receive any nonmonetary recognition for this invention as a result of your employer's efforts?
   - 4 Yes, newspaper publicity
   - 22 Yes, listscompany publicity or recognition before peers
   - 10 Yes, commemorative notation (e.g., plaque; certificate; desk set)
   - 1 Yes, nonmonetary gift (e.g., watch)
   - 57 No
8. Do you believe the compensation you received for the patent, including salary, extra compensation and any other recognition, represents the fair market value of the exclusive right to the invention? Yes 36 No 53
9. Based on your experience with the value of patents, how satisfied are you with the compensation system under which you worked in making this invention?
   - 18 Very satisfied
   - 36 Somewhat satisfied
   - 28 Not at all satisfied
   - 14 Very dissatisfied
10. There are several ways to measure the value of an invention, including (1) assignor to licensee payments, (2) economic analysis of the profit attributable to the invention, and (3) estimation of the price a buyer would pay an independent owner. Whatever method you would use, what value would you place on this invention, in general terms?
    - 5 Under $1,000
    - 17 Over $1,000 but under $10,000
    - 25 Over $10,000 but under $100,000
    - 18 Over $100,000 but under $1,000,000
    - 19 Over $1,000,000
11. How many other patents name you as inventor?
    - 9 No others
    - 22 One to three others
    - 32 Four to nine others
    - 24 Ten to twenty-nine others
    - 12 Over thirty
12. What is your present annual income?
    - 4 Under $12,000
    - 12 Over $12,000 but under $17,999
    - 66 Over $18,000 but under $29,999
    - 17 Over $30,000
13. What is your age?
    - 2 Under 30
    - 24 30 to 39
    - 43 40 to 49
    - 24 50 to 59
    - 8 Over 60
14. What is your highest educational attainment?

    0 High school 15 Baccalaureat degree
    7 Some college 27 Some graduate work
    52 Doctorate degree

$29,999, and 17% received more than $30,000. While a direct comparison with all chemists salaries in published surveys is not possible, it would appear that the respondents are above average in income.

The employers

The inventors in this survey appeared to be employed, for the most part, by large corporations: 57% had sales over $100 million. Although the questionnaire failed to provide for government employees as such, 6% indicated employment by the government.

Compensation practices

Most inventors received a dollar or less in extra compensation for these patents. Only 3% of the inventors received between $500 and $5000 for the invention, and none received over $5000 for the invention just patented. On the other hand, 37% of these inventors placed values of $100,000 or more on their inventions (cf. question 10, Figure 1).

When asked if one would fairly trace a promotion, a raise, or a desirable change in job situation to the issuance of the patent, the great majority said "No." It is frequently argued that extra monetary compensation is not necessary because inventors get the raises and promotions. This study does not confirm that argument since only 19% of the respondents perceived such a relationship. Possibly the raises and promotions will come in the future and possibly the employees simply do not know that their job situations or raise is partly because of the patent. In any event, there is no strong feeling of reward for the patent issuance evident from these responses.

Inquiry was also made of nonmonetary compensation, such as newspaper publicity; intracompany publicity or recognition before peers; commemorative notations or gifts. Over half of the respondents received no form of nonmonetary recognition.

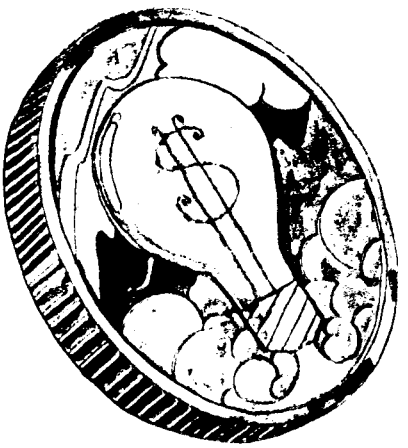
Satisfaction with the system

Question 9 asked, "Based on your experience with the value of patents, how satisfied are you with the compensation system under which you worked in making this invention?" Of respondents, 18% were "very satisfied"; 36% "somewhat satisfied"; 28% "not at all satisfied" and 14% "very dissatisfied."

Some people contend that inventors are never satisfied with the status quo, which is why they invent. But to have 42% negative reaction at the time when the reward function, and presumably the satisfaction, should be at its greatest is disheartening. Perhaps it is not surprising, since 54% of the inventors received $1.00 or less in direct compensation for their inventions.

Expressions of dissatisfaction carried beyond the response to one specific question. Respondents were encouraged to make comments and relate anecdotal experiences as well. Most comments fell into two categories: (1) those who believe only a few inventions sustain all research expenditures and that salary for all research workers is adequate without extra compensation and, (2) those who expressed bitterness at the inequity of the system. When asked about extra compensation for inventions, one respondent said: "The cheapskates might give me a dinner!" Another said: "[employer] doesn't even say thank you!"

Some comments were shocking. One said: "_____ personnel policy is disgraceful. When



they terminate a person, they give him his check and tell him to be off the premises by the end of the day." Another said, "One of my patents has already made over $10,000,000 for my company and I even spent my own money in the initial development to prove that the invention was feasible. If I had been able to file under my own name and retain full ownership for one _____ product patent, I could have already sold the licensees fees for over $1,000,000 in one year. I do disagree with most company policies on patent contracts and the initiative to keep on giving your brains to the big corporations for the privilege of having a 'good job' keeps many profit-making items hid under a bushel."

Placing a monetary value on an invention at the time of issuance of the patent is difficult at best. Moreover, the inventor is usually not in a position to best evaluate the worth of an invention, since it is an economic question, not a technical one that involves such factors as capital and risk for implementing the invention. Nevertheless, when inventors were asked to estimate the value of the invention just patented, they valued their brain children highly, with 19% placing a value on them of more than a million dollars. Only 5% valued their inventions at less than $1000. These responses are interesting not for the accuracy of valuations, but as a reflection of the seat of widespread dissatisfaction with the compensation system for employed inventors. Few inventors got "a piece of the action," and any savings, profits, or royalties are windfall for the employer to the extent they exceed salary.

Cross correlations

In cross-tabulating the responses to different questions, some interesting correlations appear. Of those who believed they received fair market value for their inventions in salary and other recognition, 91% were also satisfied with the compensation system for employed inventors.

Conversely, 71% of those who believed the invention was worth more than they received were also dissatisfied with the compensation system. Also, those who indicated that they had received the fair market value for the rights in their creation valued their inventions lower than those who felt their salaries and compensation were not equal to the fair market value.

A correlation shows up between valuation and satisfaction. The higher the value of the invention, the greater the dissatisfaction. Of those who marked "very dissatisfied," 82% valued their recently patented inventions at more than $100,000, while only 30% of the "very satisfied" respondents placed such a high value on their inventions.

Clearly employed inventors respond to either monetary or nonmonetary recognition. All of those who received more than $500 for their inventions marked one of the two "satisfied" blocks, while only 3% of the "very dissatisfied" received extra compensation as high as $50. One might thus conclude that a program of extra compensation for patented inventions in the range of $50–500 goes far to reduce the number of "very dissatisfied" employed inventors.

Even nonmonetary recognition seems to make respondents feel more satisfied with the system. Two thirds of those who received such recognition, such as newspaper or intracompany publicity, commemorative notation, or a gift, indicated satisfaction (either "very satisfied" or "somewhat satisfied"). On the other hand, 56% of those who received no nonmonetary recognition expressed dissatisfaction (eitber "not at all satisfied" or "very dissatisfied").

As might be expected, there was a correlation between satisfaction and age and income. Those who were over 50 were much more satisfied than those under 40. (None of the three under thirty respondents marked either of the "satisfied" blocks.) As to income, the higher the income, the greater the satisfaction. Only 4% of those receiving over $30,000 annually were "very dissatisfied," while two thirds in the $12,000–$18,000 category were either "not at all satisfied" or "very dissatisfied."

Those who indicated they were self-employed or partners were much more satisfied than employed inventors, presumably because they would receive equity participation in whatever fruits the invention bore.

Conclusions

This survey suggests there is widespread dissatisfaction with the system of compensating employed inventors. Inventors are a national resource whose encouragement is a Constitutionally expressed goal. The goal cannot fairly be said to have been reached if satisfaction is any reflection of encouragement of inventors. The Constitution makes no mention of employers, but only speaks of securing exclusive rights to inventors. In today's society, employers take title to the inventions of employees and yet, in many cases, give nothing in return. This imbalance can and should be corrected by institution of awards programs or extra compensation policies for employed inventors.

References

(1) The Constitution, Article I, Section 8, Clause 8.
(2) Goldstein *v.* California, 412 U.S. 546; (1973). Patents, whether federal or state, reflect "appreciation of intellectual achievements." Kewanee Oil Co. *v.* Bicron Corp., ___ U.S ___ (No. 73-187), May 13, 1974.
(3) Moss Bill HR 2370.

Author's address: Limbach, Limbach & Sutton, 3000 Ferry Building, San Francisco, Calif. 94111.

Patents

U.S. lags in patent law reform

The employed inventor in countries other than the U.S. often is given better incentives to create, plus greater statutory protection

In most major industrialized countries, an employee retains considerable rights in his or her inventions. The trend worldwide is toward legislation that limits the rights companies can extract as a condition of employment. Great Britain enacted such legislation just last year.

In a minority of industrialized countries, however, including the United States, Canada, and France, employers are free to take nearly any invention rights they desire as a condition of employment by the device of the preinvention assignment agreement. Some employers use agreements of reasonable scope; many do not. Since engineering and scientific employees as a group do not have the bargaining power necessary to affect the terms of such agreements, the public suffers because the original purpose of the patent laws is being frustrated.

A fundamental purpose of a patent law is to provide an incentive for individuals to engage in inventive activity and, once an invention is made, to encourage disclosure of the invention to the public rather than keeping it a trade secret. Through the patent system, the public benefits from inventions that might otherwise be withheld from them, or that might not be created at all. The inventor obtains a legal right to exclude others from the invention for a limited term of years, which is a valuable property right that can be licensed or sold. This legal right is granted in exchange for a full disclosure so that any other member of the public can freely use, construct, or sell the invention after the patent has expired. Accordingly, invention ownership initially resides in the inventor under the laws of the U.S. and most other countries.

As the world entered the industrial revolution, inventions began to come from individuals as part of organized research and development efforts sponsored by technologically based companies that began requiring their technical workers to sign, as a condition of employment, a "preinvention assignment agreement." Such "agreements" require employees to give to the company rights to at least certain of the inventions, even before they are made. The worker seldom has enough bargaining power to effect any change in the employer's form agreement, and the scope of inventions routinely covered by such agreements varies considerably. Where an employee is required to sign away all rights in advance, the patent laws can provide no direct incentive for the individual to invent and disclose. In that situation, the "carrot" of the patent laws has been removed by the employer as a condition for employment—contrary to the law's original intent. A company may recognize the making of valuable inventions through salary increases, promotions, or some other form of recognition. But this is at the employer's whim and is not a legal right. These rewards are often insufficient to replace the direct incentive of the patent laws and may even be nonexistent, such as where a personality or other difference exists between the inventor and his or her superiors.

Another purpose of the patent system is to encourage individuals, as well as businesses and other institutions, to invest funds in research and development that may produce inventions. The exclusive right obtained through a patent for a limited term of years is an incentive to organize and invest in R&D activities directed toward some specific goal. Because a patent represents the exclusive right to an idea, it also provides an incentive for people to invest in the idea's development, production, and marketing.

Providing an incentive for monetary investment is cited as the reason most companies routinely require their employees, as a condition of being hired, to assign away invention rights before any invention is conceived. Without such an agreement, the patent system provides considerable incentive to employed inventors; with the agreement, only the company receives an incentive for anything it covers. Fortunately, there are more than these two options, and it is possible to structure such an agreement to maximize the incentives of both the inventor and employer. One way to show this is to explore the differences between invention ownership laws and practices in the United States and those of other countries.

The case of Ivan Torr

To provide a comparison of the different laws and practices in the United States and other countries, it is helpful to have a specific situation to discuss. Let us consider Ivan Torr, an employee of the ABC Corporation, a conglomerate with a number of divisions in diversified technological areas. He is hired by a division that manufactures semiconductor elements, and is to develop specific types of circuits to be incorporated in those elements. The division is physically located away from other divisions of the company. For the purposes of our example, assume that Mr. Torr has made several inventions under different circumstances, as follows:

(A) His first invention was a new circuit approach to an existing ABC Corporation product. Mr. Torr was specifically assigned to develop a simpler, less costly circuit for the existing product and his invention resulted from that work. The employer defined the problem and provided everything Mr. Torr needed for his work.

(B) A second invention relates to an improvement in a piece of equipment used for mounting a semiconductor chip into a housing. Mr. Torr was never assigned to any project concerning manufacturing equipment. The idea occurred to him while he was discussing the matter with his friend, the plant engineer, over coffee in the company cafeteria, after several earlier discussions and inquiries. It

Gerald P. Parsons Limbach, Limbach & Sutton

0018-9200/78/0300-0060$00.75

was Mr. Torr's own initiative and curiosity that resulted in his considering the matter and making the invention.

(C) Being an innovative person, Mr Torr developed—on his own time, at home—an electronic vehicle-theft alarm system. The basis of this third invention was an improved electronic circuit. The vehicle alarm was prompted by his own experience with vehicle theft. Another division of the ABC Corporation sells vehicle alarms but Mr. Torr had no contact with anyone within that division and the division for which he works is unrelated to the company's vehicle-alarm products. None of his employer's facilities or equipment were used by Mr. Torr in making the invention, and he wishes to start a business based upon it.

(D) Mr. Torr also devised an improved electronic circuit for a swimming-pool alarm—on his own, and without any involvement or assistance from the ABC Corporation. No part of the company deals in swimming-pool alarms, or in the type of circuit that Mr. Torr developed.

The ownership rights to each of these inventions depends, in the United States and many other countries, on the specific terms of the employment agreement that Mr. Torr signed with the ABC Corporation. The laws of many nations restrict the permissible scope of such agreements and thus preserve the rights of an employee who does not have the bargaining power to negotiate them. Other nations have a body of law that determines *all* the rights in such inventions; in those countries preinvention assignment agreements are unenforceable and of no effect. Each country strikes a somewhat different balance between the invention rights of employees and employers to maximize the incentives provided to each group by the patent laws. The United States has yet to consider this question seriously.

West Germany

Since 1957, West Germany has had a comprehensive law on the rights of employees and employers in employees' inventions—a complete system for determination of rights. Any employment contracts to the contrary are unenforceable. The West German law grants ownership of an employee's invention to the employer if the invention either has "arisen out of the employee's duties" or is based upon the general knowledge and experience of the company and its staff. Complete rights in all other inventions made during employment belong to the employee, subject to his or her duty to report them to the company and offer it at least nonexclusive rights on reasonable terms before exploiting the invention in any other manner. Thus, if Mr. Torr in our hypothetical example were a West German, he would retain full title to inventions C and D, subject to the requirement that he report them and offer rights under them to his employer before exploiting them himself. The ABC Corporation would have the full title to inventions A and B.

The West German company's title is subject, however, to the condition that it pay the employee extra compensation—over and above regular salary and benefits—that is related to the value of the invention. Mr. Torr would thus be entitled to some reward if the ABC Corporation did claim its title to inventions A and B. The amount he gets is a portion of the invention's value as determined by agreement between him and the company under guidelines set forth by the West German Labor Minister. If the two cannot agree, either one may ask an arbitration board within the West German Patent Office to set an amount.

The factors to be taken into consideration include the value of the invention, the relative contributions of both employee and employer in defining the problem that the invention solves and in setting a direction to its solution, the solution itself, and the duties and position of the employee when the invention was made. If the factors tip heavily in favor of an employer's predominant participation, the employee receives very little extra. This would be the case with invention A. However, an employee whose own initiative and skills are primarily responsible gets a larger proportion of the invention's value. This is the case with invention B.

The West German system preserves the individual employee's incentives by giving him or her title to inventions unrelated to the job and providing a bonus for any inventions to which the company takes title. Both the worker and the company directly participate in the patent system.

Great Britain

In 1977, Great Britain enacted a new patent law that includes provisions dealing with employee inventions. The British, like the West Germans, set rights between an employer and an employee and established the employee's right to compensation. These rights cannot be taken away by an agreement with the employer. Employer rights are quite similar in both countries.

A company obtains rights to an employee's invention during the term of employment if either of two criteria occurs: (1) when the invention is made in the course of normal or specifically assigned duties, if it might reasonably be foreseen to result from carrying out those duties; or (2) when the inventor has a special obligation of trust to the company, such as where he or she is also a corporate officer. Other inventions during the term of employment remain the property of the inventor. In our example, only A would belong to the employer under the new British law; ownership of inventions C and D would remain with the employee. The ownership of B would probably remain with the employee, but there is room for argument.

Where the employer claims title, as for invention A in our hypothetical example, the British inventor is entitled to compensation if a patent has been granted to an employer and the invention is of outstanding benefit to the company. In determining the share of the outstanding value of the invention that rightfully belongs to the employee, the factors used are similar to those summarized as part of the West German law.

Sweden

Since 1949, Sweden has had a comprehensive law that sets forth limited circumstances under which the employer has rights to employee inventions and provides for reasonable compensation to be paid for any employee invention to which the employer takes title. This right to compensation cannot be taken away by the employer through agreement or otherwise.

The main consideration in fixing the amount of compensation is the degree to which the employment contributed to the employee's having conceived the idea. For inventions resulting from the research or inventive work for which an employee was hired, and for inventions that include the solution to a problem that was closely defined by the employer, extra compensation above normal salary and benefits is specified by the law to be very little, if

anything, unless the value of the invention to the employer is extraordinarily high. For inventions further removed from the specific duties of the employment, the amount of compensation becomes significant. A board is established by the law to issue advisory opinions in disputes about the amount of compensation due for any particular invention. The Swedish courts are empowered to make final decisions in such disputes.

Most technical employees in Sweden are governed by an agreement between the Swedish Employers' Confederation and the associations for clerical and technical employees. They are either covered directly by this agreement or by others patterned closely after it. Such agreements provide that an invention within the scope of normal or special duties of the employee is the property of the company; this would include invention A. A second category of inventions under the agreement are those that fall within the business of the company, but outside the normal or special duties of the employee. The employer has a right to acquire title to those if certain notification procedures are followed (inventions B and C). The agreement specifies that all other inventions remain the property of the employee (invention D). The primary difference between the Swedish patent law and those of West Germany and Great Britain, is that only in Sweden does invention C belong to the employer.

The collective agreement specifies, as it must under Swedish law, that for any invention to which the employer takes title, the employee receives extra compensation in an amount determined by taking into account the value of the invention, the employee's salary and benefits, and the contribution he or she made to the invention. Mr. Torr is not likely to receive any bonus for invention A because it is so clearly related to his employment duties. He would be entitled to something extra for B, and considerable compensation for invention C, which is unrelated to his job.

Denmark, Finland, and Norway

The other Scandinavian countries—Denmark, Finland, and Norway—have followed Sweden's lead and have established similarly comprehensive laws on employee invention rights. Preinvention assignment agreements are permitted if reasonable in scope, but they cannot take away the right of the employee to extra compensation for inventions. The amount of reward depends mainly on the value of the invention and how closely it is related to employment duties.

Japan

In Japan, the preinvention assignment agreement is widely used, but the Japanese patent law severely restricts its scope. Only inventions that result from a worker's duties and that are also related to company business may be acquired by the employer by prior agreement. The employee retains title to any other inventions. Therefore, assuming that Mr. Torr is working in Japan under an agreement giving his company the maximum rights under the law, invention A could be acquired by the ABC Corporation under an appropriate agreement. Although there is some question, B probably could not be acquired by a Japanese employer, and C and D certainly could not.

Japanese law also provides for "a reasonable amount of compensation" for any invention obtained by the employer under a contract from the employee. In practice, the amount of extra compensation is not very large, but it must be remembered that the employer can take title only to those inventions that result from duties that the employee was hired or assigned to perform. All remaining inventions belong to the employee, so the question of adequate compensation by the company does not, of course, arise. The employee can exploit these inventions by dealing with the company or any other party.

Switzerland

The Swiss Code of Obligations provides that inventions made in the course of carrying out an employee's duties are the property of the employer. A preinvention assignment agreement is allowed to give the employer a right in other inventions that the employee may make during the period of employment, but if the employer takes title to these, the law compels some special compensation. The amount of reward is determined by the circumstances of the invention—its value, the contribution made by the employer and other personnel, the effort of the employee, and the employee's position within the company.

In our hypothetical situation, the ABC Corporation would own invention A, and may own B as well. Inventions C and D may be acquired by the corporation under an agreement, provided that an additional bonus is paid. This is less favorable to the employee than either British or German law, but still superior to U.S. practice because compensation is guaranteed for any inventions that are not related to the job.

Austria

Only preinvention assignment agreements concerning the following classes of invention are valid and enforceable under Austrian law:

1. An invention arising from the assigned duties of the employee.
2. An invention that has been substantially facilitated by the use of the experience or resources of the employer.
3. An invention resulting from a stimulus to the employee as the result of his or her employment.

Mr. Torr thus could be required to assign inventions A and B, but the employer is prohibited by statute from taking title to inventions C and D.

Austrian law further provides that, for those inventions to which the employer does take title, extra compensation is to be paid to the employee. However, if the employee is hired for inventive activities and if a particular work assignment leads to the invention, extra compensation over and above the salary and regular benefits provided by the employer is unlikely. Therefore, extra compensation would likely not be due Mr. Torr for the making of invention A since it arose out of a specific work assignment. Some extra compensation should be due for the making of invention B, to which his own initiative and curiosity principally contributed.

Italy

Italian law fixes the rights of the employer and employee in employee inventions, and the worker's rights cannot be diminished by agreement. The law provides that if inventive activity in some field is expected as an object of the employment, inventions that result are the property of the employer. Contrary to the assumption behind the laws in most countries, in Italy such inventions are held to be originally owned by the employer, rather than being initially owned by the employee and assigned to the employer. For this class of inventions, no extra compen-

IEEE on the employed-inventor question

In 1966, the IEEE Board of Directors adopted the following policy statement 7110, which is still in effect: "In order to promote the progress of electrical arts and sciences, it is institute policy to encourage the establishment of appropriate incentive systems for the development and disclosure of inventions. Implementation of this policy may include such actions as, but not limited to, improving laws that provide better residual rights for employed engineer inventors, and disseminating more equitable standard patent pre-assignment agreements."

In furtherance of that policy, a task force on the rights of the employed inventor was established. In 1976 and 1977, this task force drafted legislation that it proposed be introduced in Congress, to restrict the scope of enforceable preinvention assignment agreements. Employers would still be able to draft employment agreements to meet their particular needs so long as the agreements satisfied certain minimum requirements. This is to be compared with existing laws in some other countries, such as Great Britain and West Germany, that completely replace the employment agreement with a statutorily imposed division of invention rights.

The minimum requirements for an employment agreement to be enforceable under the task-force bill include the following provisions:

1. Inventions that neither result from the employee peforming his or her duties, nor are based on the employer's data or information, are to be owned by the employee. This would restore the incentive of the patent system to individuals for inventions not related to the employment.

2. All other inventions may be acquired by the employer in advance of the inventions being made, provided that the agreement gives the employee-inventor the right to compensation in proportion to the value of the invention, in addition to regular salary and benefits. Details of how much compensation would be paid and its method of computation would be left to the employment agreement. The bill sets a lower threshold invention value of $50 000, below which special compensation need not be paid by the employer. It is the goal of the bill to provide small-percentage employee rewards only for extraordinarily valuable inventions, thus minimizing the administrative burden on employers.

3. Inventions first conceived after the termination of employment cannot be acquired in advance by the employer.

4. If an employer does not utilize an invention to which he takes title, or does not patent or publish the invention within a reasonable time, rights must revert to the employee. This is to encourage use or disclosure of all inventions, for the public benefit.

All provisions of the task force bill are designed to further the public policy of the patent laws; namely, to encourage the making, disclosure, and utilization of inventions. It does this by balancing the relative rights of employers and employees to maximize potential patent law incentives.

Gerald Persons, Chairman
1977 Task Force on Patent Rights of Employed Inventors

sation is provided.

Another class of inventions specified by the statute is those relating to the business of the employer but not falling into the preceding class. The employee originally owns these inventions but the employer has an option to acquire them. The statute provides for extra compensation when that occurs. All other inventions belong to the employee.

In our example, Mr. Torr would own invention D, and the employer would have original ownership of inventions A and B. There would be little or no right of compensation for these. For invention C, ownership would initially reside in the inventor, but the company would have an option to acquire all rights and pay an adequate amount in addition to salary and regular benefits.

The Netherlands

Holland's law provides that if an employee is hired to make inventions of a certain type, the employer is entitled to patent all the employee's inventions of that type. The statute does not prohibit reasonable agreements to assign other inventions to the company. Extra compensation must be paid for all inventions acquired if the employee's salary cannot be deemed adequate in light of the value of the invention to the employer. This right to compensation cannot be taken away by contract.

United States law

If Mr. Torr has no preinvention agreement and is subject to United States common law, invention A belongs to his employer because it resulted from specific work assignments, which the company supported him in doing. In that case, he would have no right to further compensation, and could not even use the invention himself without permission from the company. This is consistent with the result in most other countries.

In many states, invention B would likely belong to Mr. Torr in the absence of an employment agreement. The courts of some other states would award entire title to B to the company on the ground that Mr. Torr was hired to invent and B was a reasonably forseeable consequence that was covered by his salary. The ABC Corporation would have a nonexclusive, fully paid-up license to the invention under a "shop right" doctrine, since Mr. Torr made the invention as part of the company's work operation. But because he was not specifically assigned to do work that led to the invention, and because the invention in fact resulted from his own curiosity and the exercise of his own initiative, the rest of the ownership rights in the invention belong to Mr. Torr. If the ABC Corporation wanted to obtain exclusive rights, it would have to purchase them from him.

Concerning inventions C and D, there is little question that Mr. Torr would be the owner of all the rights, unless there were a contract saying otherwise, because they have no relation to his employment. (This is consistent with general European practice.) But since Mr. Torr did sign an invention agreement, the ownership of these particular inventions will be governed exclusively by its terms. (Such an agreement would be of no effect in most European countries.) An overly broad agreement may be ruled unenforceable on grounds that it is unconscionable, anticompetitive, preempted by the patent laws, or denies an individual the right to be fully engaged in his or her profession. But these defenses are beyond the scope of this article since they are not of general applicability.

Some form agreements utilized by certain companies in the United States require that *any* invention made by its

employees during the term of employment become the property of the company. Under this type of agreement, Mr. Torr would be obligated to assign all four of his inventions to the ABC Corporation. Such an agreement is the least reasonable of those used in the United States. What legitimate claim could ABC possibly have in Mr. Torr's vehicle alarm or swimming-pool alarm?

By using such a broad agreement, a company actually discourages its inventive employees from engaging in their own private investigations outside of their work assignments. This is certainly contrary to the first purpose of the patent laws discussed at the beginning of this article—namely, to encourage individual inventive activity and the disclosure of inventions once they are made. The agreement is also anticompetitive in that it would prevent Mr. Torr from starting a business exploiting invention C or D. The public may never see the inventions if ABC chooses not to exploit them.

Another type of agreement that is widely used in the United States is one that requires assignment of all inventions resulting from the duties that might, from time to time, be given to the employee, and any invention that relates to the business of the company. This certainly sounds more reasonable than the "all inventions" type of agreement, but such terms can be very broad when the employer is involved in a wide variety of technological fields.

In our example, the ABC Corporation would be entitled to full right and title in inventions A, B, and C under the terms of such an agreement, and Mr. Torr would only retain ownership of invention D. Invention C would belong to the company merely because it has a far-flung division involved with the technology of vehicle alarms.

The main justification asserted by firms requiring the "related to the business of the company" provision is that it encourages cross-fertilization among divisions of the company. Even though a particular employee is not assigned to a given remote division, that employee may come in contact with its personnel in the course of his or her work, and may conceive inventions as a result of what is learned. It is suggested here that a more reasonable provision is one that would give the company title to all inventions based on data or information from the company. That would protect investment without unnecessarily removing the patent system's incentive from the individual. Mr. Torr's invention C was not based on such information, even though related to the company's business, so it is difficult to see why the company should have title to it.

A few companies—a minority so far—use an agreement that limits an employee's obligation to the assignment of those inventions resulting directly from the work assigned to that employee. Under such a pact, Mr. Torr would clearly have title to inventions C and D: the company would clearly have title to invention A; and the ownership of invention B would depend on the exact language of the agreement. Such an agreement is all that a company requires in order to protect its interests, except perhaps for a right to inventions that are based upon data or information that it has developed, particularly trade-secret information.

The company supposedly has organized an R&D effort for inventions resulting from the duties of employees, and has invested in facilities, equipment, materials, and people directed toward that goal. What our hypothetical inventor, Ivan Torr, does at home concerning vehicle alarms and swimming-pool alarms is not the result of any contribution or support by the corporation. The company does not need to have title to these inventions in order to be encouraged to invest in R&D in new semiconductor circuits. It has already hired Mr. Torr for that purpose. If assignment agreements were to be so restricted, the patent laws would then return to providing the individual incentive that they once did without detracting from the incentive necessary for companies to invest in research and development.

A few employers, particularly university research institutions, provide for bonuses to inventors in amounts related to the value of their inventions. Such compensation restores the patent system so that it provides a direct incentive to the employee-inventor, even where the employer legitimately takes title to the work produced. A modest reward related to the value of the small percentage of inventions that are extraordinarily valuable cannot act to discourage employers from investing in R&D activities. Each of the non-U.S. countries discussed above provide for such a bonus.

Federal legislation has been proposed in the United States from time to time to correct this patent situation, but no serious action has ever been taken with respect to any of the bills. H.R. 2101, introduced by Representative John Moss (D.-Calif.), has been pending in various forms since 1971, and hearings are yet to be held. The bill is substantially a copy of the invention-rights provision of the West German law. Another bill, introduced in 1977 by Representative Bruce Vento (D.-Minn.), is H.R. 4331, which limits enforceability of overly broad provisions. H.R. 8596, introduced in 1977 by Representative Ray Thornton (D.-Ark.), pertains principally to rights in inventions developed by private companies under contract with the United States Government, but also contains provisions that secure certain rights for Federal employee-inventors in their inventions. It even provides for compensation under certain circumstances.

A law enacted by the state of Minnesota in 1977 renders preinvention assignment agreements unenforceable and void to the extent that they attempt to obligate an employee to sign away independently made inventions that have no relation to his or her duties. A similar attempt to pass legislation in California failed in 1966 but has been revised in a different form through two 1978 bills, A.B. 2256 and A.B. 2257, introduced by Assemblyman Terry Goggin.

It is hoped that more employers will restrict the scope of their preinvention assignment agreements to those inventions they actually need to maintain an incentive to invest. But since there seems to be little movement in this direction, further legislation is expected. ◆

Gerald P. Parsons (M) is a partner in the law firm Limbach, Limbach & Sutton in San Francisco, Calif. Mr. Parsons was graduated from Oregon State University with a bachelor-of-science degree in electrical engineering, and has been elected to membership in Eta Kappa Nu, Tau Beta Pi and Phi Kappa Phi. He also was graduated from the University of San Francisco with the J.D. degree. He is a member of the California and Pennsylvania bars and has been admitted to practice before numerous Federal courts as well as the Patent and Trademark Office. Mr. Parsons has been active on patent committees within IEEE.

45-024 O - 85 - 30

JOURNAL
of the
PATENT OFFICE SOCIETY

Published monthly by members of the Patent Office Society

MILTON WEISSMAN, *Editor-in-Chief*
PETER D. ROSENBERG, *Associate Editor*
STEVEN E. LIPMAN, *Associate Editor*
J. ROBERT LARGEN, *Business Manager*
NANCY HENDERSON, *Assistant Business Manager*
L. VLACHOS, *Subscription Manager*
HERBERT T. CARTER, *Advertising Manager*

BOARD OF DIRECTORS

LEON E. ZITVER, (Ch.) THOMAS H. WEBB WILLIAM WAINER

BOARD OF DIRECTORS

A medium of expression for the exchange of thought in the fields of Patents, Trademarks and Copyrights; a forum for the presentation and discussion of legal and technical subjects relating to the useful arts; a periodical for the dissemination of knowledge of the functional attributes of the patent, trademark, and copyright laws, in order to effect a more uniform practice thereof and through which all interested in the development and appreciation thereof may work to a common end.

Vol. 56 **July 1974** **No. 7**

Publication of signed articles in this JOURNAL is not to be understood as an adoption by the Patent Office Society of the views expressed therein.

Office of Publication, 104 Academy Ave., Federalsburg, Md.
Entered as second class matter, February 12, 1932, at the post office at Federalsburg, Md., under the act of March 3, 1879.

© 1974 by the Patent Office Society

CONTENTS

Common Burdens Of Woe ---------- 411
—*C. W. Smith*

Foreign Patent Applications Claiming Priority Based On A U.S. Application: Are They "Prior Art" Under 35 U.S.C. 102(g)? ------ 422
—*Dennis L. Albrecht*

Privilege And Corporate Patent Solicitation ---- 439
—*Bernd W. Sandt*

Reflections On Some Pending Patent Legislation (Part III) ---------- 462
—*L. James Harris*

Commentaria ---------- 472

THE PATENT OFFICE SOCIETY ANNOUNCES
THE THIRD ANNUAL
JOSEPH ROSSMAN MEMORIAL AWARD

FOR THE BEST ARTICLE PUBLISHED IN THE JOURNAL BETWEEN JULY 1974 AND JUNE 1975 ON A TOPIC OF IMPORTANCE TO THE PATENT SYSTEM

Amount of Award: Five hundred dollars.

Eligibility: All articles appearing in the Journal of the Patent Office Society during the period beginning with the issue of July 1974 and ending with the issue of June 1975 automatically will receive consideration for the award. All authors are eligible without regard to membership in the Patent Office Society or employment by the Patent Office.

Procedure: The selection will be made by a panel of three judges. The award will be presented in the fall of 1975. In addition to the monetary award, an appropriate certificate will be presented.

The Joseph Rossman Memorial Award was founded in honor of Dr. Joseph Rossman, 1899-1972, former Editor-in-Chief and frequent contributor to the Journal. The award is given annually and is supported by the Patent Office Society and by friends of Dr. Rossman and the Society. Any inquiries concerning the award should be addressed to the President of the Patent Office Society, Box 2089, Eads Station, Arlington, Virginia 22202.

*Neal Orkin**

THE LEGAL RIGHTS OF THE EMPLOYED INVENTOR: NEW APPROACHES TO OLD PROBLEMS (PART I)

Introduction

Throughout the history of the United States, the courts have consistently expanded the rights of the individual—with one possible exception—the rights of the employed inventor.[1] Most American employed inventors must, as a condition of employment, assign their patent rights to their employers upon commencement of employment. Absent a statutory remedy such as exists in most European countries,[2] the American employed inventor presently has no administrative or judicial remedy to obtain compensation beyond his salary for his labors; in most cases, his only additional compensation is a possible token grant from his employer.

It is the purpose of this paper to present four different approaches to employed inventor rights in the United States: (1) the status or common law approach which exists in the absence of a contract of assignment between employee and employer; (2) the contractual approach in which the employee assigns future patent rights to his employer through a contractual agreement; (3) the legislative approach in which employees are granted compensation through statutorily decreed schemes; and (4) a constitutional approach to employed

* Student, Temple Univ. School of Law, Operations Research Analyst, Naval Air Development Center, Warminister, Pennsylvania.

[1] Courts have to some extent expanded employed inventor rights, but only in areas in which agreements such as trailer clause contracts have been used to hinder the individual from freely making a living or changing employers. Courts have largely ignored other public policy arguments. See for example Guth V. Minnesota Mining & Mfg. Co., 72 F.2d 385, (1934), in which the court invalidated portions of an agreement in which the provisions were limitless in the extent of time and subject matter; however, the court upheld the other portions of the contract which required the employee to assign to his employer patents produced in the course of employment.

[2] See Section III, infra.

inventor rights which includes a discussion of the constitutionality of proposed legislation and an attempt at formulating a new judicial remedy in favor of the employed inventor based wholly on constitutional law.

I. Status Approach [3]

The basic status approach, in the absence of any express or implied contract, stemmed from the master-servant relationship. The doctrine is based on court-made rules of law which examine the relationship between employer and employee.

If an employee was specifically hired to invent or whose assigned duty was to devote his efforts to a particular problem in the course of his employment, the employee is bound to assign the resulting invention to his employer.[4] However, where the employee is not hired to invent, or where an invention is conceived independently of the employee's job, such as at home or in non-job related areas, the employer is not entitled to an assignment of the patent.[5] If the invention results from both employer and employee contribution, such as the use of employer's facilities, then the patent belongs to the employee subject to a "shop right" in the employer.[6] The shop right consists of a non-exclusive, non-assignable, royalty-free license to the employer to use the invention for the life of the patent.[7] Since there exists three determinations for invention ownership,

[3] I have decided to title this portion of the paper as "Status Approach" while many other authors use the term "common law" (See Neumeyer, note 7, infra.). I have done this in order to combine both the status and contractual approaches later in the paper into "federal common law" and have therefore attempted to clarify the issues by not utilizing a double reference to "common law" (see Section IV, infra.).

[4] Standard Parts v. Peck, 264 U.S. 52 (1924); Hebbard v. American Zinc, Lead and Smelting Co., 161 F.2d 339 (1947).

[5] Dovel v. Sloss-Sheffield Steel & Iron Co., 139 F.2d 36 (1943); Deforest v. Owens, 49 F.2d 826 (1931); Howard v. Howe, 61 F.2d 577 (1932).

[6] U.S. v. Dubilier Condenser Corp., 289 U.S. 178 (1933); Toner v. Sobelman, 86 F. Supp. 369 (1949).

[7] For a more detailed discussion of the Common Law Doctrine, see: Neumeyer, "The Employed Inventor in the United States", MIT Press, 1971, p. 41-43.

(employer ownership, employee ownership, and employee ownership subject to an employer shop right), the common law could be quite arbitrarily applied. The shop right, for instance, remains the same, no matter how minimal the employer's contribution may be.[8]

II. Contractual Approach (Employee Assignment Agreements)

Without an express or implied agreement concerning employee patent rights, the employee was free to license his invention to his employer's competitors, creating a most unpleasant situation for the employer.[9] For this reason, and the relative ease of administration, the trend has been to move from a status relationship to a contractual one. Thus, the status approach to patent rights has for most purposes been displaced by express agreements between employer and employee which require the employee to assign to the employer patents produced in the course of employment.

Three different groups of employers will be examined regarding their patent policies with regard to their employees: industry, government, and universities.

A. Industry

As employers, American corporations usually demand of its employees the following requirements:[10] (1)

[8] So long as the court determines that employer contribution was sufficient warrant him a license to utilize the invention—no matter how slight his contribution had been—the employee is bound to grant him that license. Sufficiency of employer contribution for a shop right varies with the jurisdiction involved.

[9] In effect, the employee would be serving two masters: his employer and the employer's competitor to whom the invention was licensed.

[10] For typical employee agreements see Neumeyer, Note 7, supra pp. 157-159.

The General Electric Company agreement (Form FN-348-C (3-69 Rev.) is also typical of corporate contracts; portions of this agreement are as follows:

To General Electric Company:

In consideration of my employment in any capacity with the General Electric Company and of the salary or wages paid for my services in the course of such employment, I agree

(A) to communicate to the Company promptly and fully and to assign to the Company all inventions or significant technical or business innovations developed or conceived solely by me or jointly

assignment of all patent rights in consideration of the the employee's employment; (2) prompt and full disclosure of all inventive ideas; (3) assistance of the employer in preparation of all necessary paperwork; and (4) maintenance of adequate records. Although most corporations demand that only technical employees sign these agreements, certain corporate employees have extended their assignment-agreements to include such employees as janitors and secretaries.[11]

This factor manifests the great extent to which some American corporations have gone to protect their interests. It is questionable whether a court would uphold an agreement extended to such an employee if his invention were not within the realm of the company's business; such agreement would probably be unconscionable as contrary to public policy.[12]

Employment is adequate consideration to support the contract; therefore the employee has no legal basis to an award other than salary.[13] Awards, if any,

---

with others from the time of entering the Company's employ until any termination of my employment, (1) which are along the lines of the business, work or investigations of the Company or of its subsidiaries or affiliate companies, or (2) which result from or are suggested by any work which I may do for or on behalf of the Company;

(B) to execute all necessary papers and otherwise to assist the Company and its nominees during and subsequent to such employment in every proper way (entirely at its or their expense) to obtain for its or their own benefit patents, copyrights, or other legal protection for such inventions or innovations or for publications pertaining to them, in any and all countries, said inventions and innovations to be the exclusive property of the Company or its nominees, whether or not patented or copyrighted;

(C) to make and maintain adequate and current written records of all such inventions or innovations in the form of notes, sketches, drawings or reports relating thereto, which records shall be and remain the property of and available to the Company at all times.

[11] Rines, "A Plea for a Proper Balance of Proprietary Rights", IEEE Spectrum, April 1970, p. 43.

[12] Although the Guth case cited in note 1 supra did not rule on this point, it is probably a good reference for demonstrating that the court would read such restrictions very narrowly by upholding the portions of the contract that were not restrictive or inequitable while striking out those provisions that the court deemed unconscionable.

[13] "Employment" or "the continuation of employment" has been upheld as adequate consideration to create a legally binding contract: see Buckingham Products Co. vs. McAleer Mfg. Company, 108 F.2d

may vary from nothing from Bell Telephone Laboratories to sizable grants from IBM.[14] Some employers, such as AT&T, regard monetary awards to individuals as contrary to promoting teamwork and cooperative spirit.[15] However, there seems to be evidence contrary this opinion, as most patents are credited to individual effort.[16]

B. United States Government

Most United States Government agencies are governed by the patent policies of Executive Order 10096 of 1950,[17] and the Kennedy Memorandum of October 10, 1963.[18] Executive Order 10096 allows discretion on the part of the agencies and in general, follows the common law doctrine, except that the "shop right" inventions are deemed to belong to the government. Awards for civil service inventors are provided for in the Government Employees' Incentive Awards Act of 1954 (public Law 763, 83rd Congress 2nd session).[19]

---

192 (1940); Hebbard vs. American Zinc, Lead & Smelting Co., 161 F.2d 339 (1947). Courts usually assume equal bargaining power between employer and employee: see Bonsack Machine Co. vs. Hulse, 57 F.519 (1893), rejecting public policy arguments.

[14] See generally Neumeyer, note 7 at 87-88. Also provided with the G.E. argeement is a Form entitled "Reasons for the Employee Confidential and Proprietary Information Agreement", which reads in part:

While the Company holds out no promise of additional compensation for assignment of inventions or for other specific innovative contributions (the awards given in connection with the filing of patent applications being considered token payments only), it is Company practice to recognize all service of whatever nature by proper adjustment of the salaries of employees, by advancement in opportunity, by assignment of added responsibility, and otherwise. Innovative ability in general is recognized just as selling ability, executive ability, and other valuable capabilities are recognized.

[15] Siegel, "The Employee Inventor—An Economist's View", 47 Journal of the Patent Office Society (JPOS) at 498 (1965).

[16] Id, p. 498.

[17] 3 C.F.R. 292 (1949-1953 Comp.); "Providing for a Uniform Patent Policy for the Government with Respect to Inventions made by Government Employees and for the Administration of Such Policy".

[18] 3 C.F.R. 238 (SUPP. 1963). "Presidential Memorandum and Statement of Government Patent Policy."

[19] For case studies of government employer patent policies see generally Neumeyer, Note 7 supra at 207-423.

Government contractor rights are set out in the Kennedy Memorandum. Under this document, ownership of inventions made under federal contracts is divided into two groups: (1) the government retains title to the invention, or (2) the contractor maintains rights to the invention subject to a government "shop right".[20] Corporations with both governmental and commercial divisions are apt to either transfer any new concepts from the governmental to the commercial department or to disregard them.[21]

C. University

University patent policies, in general, tend to be more liberal than that of industry. They may range from total non-interference with employee inventor rights (Harvard University) to the granting of worthwhile percentage bonuses to creative employees after compulsory assignment.[22] However, government contracts with universities usually require that university employee invention rights be reserved to the government, creating minimum latitude for significant individual

[20] See Neumeyer, Note 7 supra at 245-246. "Contractor" is defined in the Kennedy Memorandum as "any individual, partnership, public or private corporation, association, institution or other entity which is a party to the contract" (Sec. 4(c)). Contractor employees are not a party to the contract and are, therefore, subject to the contractor's own patent policy. Thus, the Kennedy Memorandum has had little effect upon contractor employees' patent rights.

[21] See Rines note 14 supra at p. 45. Rines reports that one company's NASA operations produced four inventions in a five-year program, while the corresponding commercial department filed 30 to 50 applications per year in the same five year period. See also Sanders, "Government Versus Industry Financed R&D", 10 Patent, Trademark and Copyright J. of Research and Education, 51 (1966), for the disparity between government and company funds necessary for patent output. Approximately 10 times as much government funding compared with industry funding is necessary for patent output.

[22] See generally Neumeyer note 7 supra at 425-495. See also the Rutgers Camden Law School Bulletin, 1973, p.42, which requires all Rutgers Law Students to submit to the university's patent policy, which in turn requires all Rutgers graduate and undergraduate students to assign to the university all patents emanating from university connected research as a condition of enrollment. In return the student receives 15 percent of any gross income received from the patent.

university patent policy at institutions with large federal research contracts.[23]

III. Legislative Approach

Certain European Countries[24] and Japan have decided that employees are entitled to compensation beyond salary for their inventions and have, therefore, granted them remuneration through statutory remedies. Three areas of inventive activity are generally covered: (1) Service inventions are those made by the employee both within the scope of his employment and within the field of business activity of the employer; (2) dependent inventions are inventions made by an employee outside the scope of employment, but within the field of the employer's business activity; and (3) free inventions are those made by an employee outside the scope of his employment and outside the field of business activity of the employer.

Service and dependent inventions would usually belong to the employer subject to employee compensation, while free inventions would belong to the employee.[25] These statutes usually balance the invention's value and the employee's contribution to determine compensation; Appendix A, Table I presents a matrix of international employed inventor rights, showing the applicable statute, how compensation is determined, and the rights of the employee in Free Inventions.

Two statutes of interest are those of West Germany and the U.S.S.R. Nazi Germany adopted an extensive patent compensation statute in 1936; the present West German law of July 25, 1957, incorporates the basic features of the previous legislation.[26]

---

[23] Neumeyer, note 7 supra at 488.

[24] Italy, Netherlands, Austria, Sweden, W. Germany, Switzerland.

[25] Free Inventions under some statutes can be acquired by the employer through a negotiation or a compensation agreement. See Table I, infra.

[26] All information on the West German Statute was gathered from Calvert, "Encyclopedia of Patent Practice and Invention Management," Reinhold, 1964, PP. 233, 238-242; and Schmied-Kowarzik, "Employee Inventions Under German Law" 54 JPOS 807 (1972).

Service inventions, as defined within the statute, are those that have arisen out of an employee's duties at this place of employment or are based on the practice or activities carried on at his place of employment. Other inventions are free inventions. The German Law includes dependent inventions with free inventions. Service inventions may be claimed by the employer in whole or in part; the employer must be offered a non-exclusive license in dependent inventions. Reasonable compensation must be paid to the employee in either situation.

The computation of employee compensation is determined as per directives issued July 20, 1959:

Compensation=Invention Value x Share Factor in %
Invention Value=Base x License Rate in %

The Invention Value may be determined by either license analogy, actual profit, or by estimate.[27] The Share Factor is determined by asking the employee questions which are included in the invention disclosure. Three elements are included in the Share Factor:

a. A Factor of from 1 to 6 is allotted to the assignment of the task, ranging from a specific assignment with a suggested solution to complete originality.
b. The extent of the employer's aid in development of the invention is also weighted from 1 to 6.
c. Duties and position of the employee are rated from 1 to 8:

Employee	Classification Factor
Unskilled workers, laborers, jobtrained workers, apprentices	8
Skilled workers, foreman, laboratory help, mechanics, draftsmen, assistant to master craftsman	7

[27] For detailed discussion see Schmied-Kowarzik, note 25 supra, at 815-816.

Master craftsman, senior master craftsman, plant technician, chemical technician	6
Engineers in production departments	5
Designers (in the Technical Engineering Dept.), engineers (in the Testing Lab.)	4.5
Supervisors in the production departments, engineers and designers in development departments	4
Department and plant managers in production departments, supervisors and project managers in development departments, engineers and chemists in research departments, patent engineers	3
Department managers in development departments, supervisors in research departments	2
Research manager, technical manager of entire plant	1

The sum of a + b + c may range from 3 to 20 and is noted in the upper line of the Table below. The lower line represents the Share Factor as a percentage amount corresponding to a value of a + b + c:

a + b + c=	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	(20)
Share Factor=	2	4	7	10	13	15	18	21	25	32	39	47	55	63	73	81	90	(100)

"Author's Certificates" are issued in the U.S.S.R. to acknowledge the inventor's contribution.[28] These entitle the inventor to compensation based on the savings or earnings achieved by use of the invention and are calculated on a percentage based on the highest savings during a five year period. Other privileges such as income tax exemptions on the earnings and better living quarters are available to the inventor. The Soviet Government assumes a complete monopoly of all inventions.

The "Regulation on Compensation for Discoveries, Inventions, and Innovation Proposals" requires remuneration to the employee as follows:

AMOUNT OF ANNUAL SAVINGS (in rubles) UP TO 100	COMPENSATION FOR INVENTION 25% of the saving but not less than 20 rubles	COMPENSATION FOR INNOVATION PROPOSALS 13.75% of the saving, but not less than 10 rubles
100-500	15% plus 10 rubles	7% plus 10 rubles
500-1,000	12% plus 25 rubles	5% plus 20 rubles
1,000-5,000	10% plus 45 rubles	2.75% plus 45 rubles
5,000-10,000	6% plus 250 rubles	2% plus 85 rubles
10,000-25,000	5% plus 350 rubles	1.75% plus 110 rubles
25,000-50,000	4% plus 600 rubles	1.25% plus 235 rubles
50,000-100,000	3% plus 1,100 rubles	1% plus 360 rubles
Over 100,000	2% plus 2,100 rubles but not more than 20,000 rubles	0.5% plus 860 rubles, but not more than 5,000 rubles

The first attempt in the United States to pass legislation guaranteeing employee inventor rights occurred with H.R. 4932 of the 88th Congress, 1st Session introduced by Congressman George Brown of California.[29] The legislation was designed to amend title III of the Labor Management Relations Act, 1947 (29 U.S.C. 185-187) with the following section:[30]

"RESTRICTIONS ON PATENT ASSIGNMENT"

"SEC. 306. It shall be unlawful for an employer to require as a condition of employment that any prospective employee of his or any of his employees agree to assign any patent or patentable invention to the employer or to maintain or enforce any agreement with any of his employees to assign any patent or patentable invention to the employer where such agreement was a condition of employment."

There is no doubt that this bill was a one-sided attempt to ensure the employee inventor his rights; not only would it disregard the employer's contribution—possibly creating a great shrinkage in research and development expenditures by industry—but it would throw any employer-employee disputes into the mire the common law.

[28] "Soviet Law on Inventions and Patents", 43 JPOS 5, (1961). The Soviet law was approved on April 24, 1959, and became effective on May 1, 1959.

[29] Reintroduced as H.R. 5918 of the 89th Congress, 1st Session.

[30] For a discussion of its constitutionality see Section IV, A, infra.

Any rights granted the employee would have to be decided on a case-by-case basis, unreasonably burdening the courts.

A more balanced approach was suggested by Representative Moss of California in his attempt to amend title 35 United States Code.[31] The legislation proposed to balance employer and employee rights, similar to the West German statute. Service invention in the statute is defined as an invention made by the employee at any time during his period of employment which either:[32] (a) has grown out of the type of work performed by the employee or (b) is definitely based on experiences gained during his employment or on operations carried out by the employer.[33]

Under S412, the employer may claim an employee's service invention and may take all rights to such invention subject to employee compensation. Insofar as employee compensation is concerned the statute attempted to determine Compensation by weighing both the employee's duties and position against the quantum of employer contribution in the invention.[34] The employer's rights were also protected as to the employee's use of free inventions, which under the common law could be licensed to an employer's competition. The employee was required to offer the invention to his employer; if the employer did not accept within two months, the employee was free to utilize the invention without restriction.[35] Should there be a dispute between the

[31] H.R. 15512 of the 91st Congress, 1st Session, reintroduced as H.R. 1483 of the 92nd Congress, 1st Session.

[32] S.402 "Definitions".

[33] The term "definitely based on experiences gained during his employment" could be quite subjective. It should be the employer's burden to prove such facts should the issue arise in reference to a seasoned employee whose experience may be quite specialized and may include varied employers.

[34] S.414 "Compensation for Service Inventions". Guidelines for the determination of compensation were to be issued by the Secretary of Labor under S.439 at a later date. Hopefully, they would have reflected the attempt for exactness that the West German guidelines seek.

[35] S.431 "Free Inventions; notice; duty of making an offer".

employer and employee, the bill proposed an arbitration board to dispose of such matters.[36] The arbitration board was to comprise three members from the Patent Office, one member selected by the employee from a labor or professional group, and one member chosen by the employer from the national or regional organization which represents the employer's interests. Thus the statute strove for a true equitable balance between employer and employee.

At present if an employer decides not to patent an employee's invention or not to exploit the invention after it is patented, the employee has no recourse to require the employer to do so.[37] The Moss bill attempted to reconcile this problem, at least for the situation in which the employer refused to apply for a patent on the employee's invention. The statute would have required an employer to apply for a patent on a service invention within six months following a declaration of a claim to the invention. If he failed to do so, the invention would become a free invention.[38]

In order for the Moss bill to have provided a viable solution to the employer-employee patent rights' problem it would have required good faith on the part of both the employer and employee. Thus if either party had disputed the compensation agreement based on petty arguments, the burden on the arbitration board would have produced an administrative nightmare.[39] Another advantage seen in the fruits of the statute might have been a decision on the part of industry not to apply for patents that it did not feel were potentially profitable. Those patents not considered profitable may have comprised those that quite possibly might have been held invalid by a court because of their similarity to other

[36] S.437 "Arbitration".

[37] See note 10, supra: (B) . . . said inventions and innovations to be the exclusive property of the Company or its nominees, whether or not patented or copyrighted;

[38] S.421 "Patent Application".

[39] This problem could have been solved in part by precise guidelines as in note 33 supra.

patents, or those that constituted such a substantial amount of employee contribution that the employer would not gain by patenting them. Thus the workload of the courts may well have been reduced and the employee would have benefited. Hopefully, corporate research and development expenditures would not have diminished, as a potential new source of employee ideas would have arisen because of the incentives. One may only speculate as to probable effects of the statute.

Representative Moss' proposed solution appears to be the most sensible approach yet to employer-employee invention rights in the United States. Unfortunately no hearings were held on the bill.

Presently in the 1st Session of the 93rd Congress, two bills have been proposed to grant the employee limited rights to his inventions:[40]

S 263. Rights of employee-inventors guaranteed

> Subject to other provisions of Federal law, no direct or indirect assignment by an inventor to his employer, or to a person designated thereby, of the subject matter of an application for patent or patents developed in the course of his employment, shall be valid unless the employer agrees to pay the employee, in addition to his regular salary or compensation for services, a minimum of 2 percent of the profit or savings to the employer, attributable to such subject matter. The Commissioner shall by regulation establish procedures and methods, including accounting procedures for carrying out the provisions of this session. No assignment, or other disposition by the employee of such right to additional payment, shall be valid, unless there is equitable and adequate consideration therefore.

The bill attempts to create a statutory minimum of two percent of the profits to be retained by the inventor, while it allows potentially higher compensation to be

[40] S.1321 by Senator Hart and H.R. 7111 by Congressman Owens, amending 35 U.S.C.

bargained for on an individual basis. In doing so, it retains the contractual approach which is both easily administered and enforceable. However, since most corporate employers presently grant much less than two percent of the profits to the employee,[41] the hoped for bargaining between employer and employee seems unrealistic. Moreover, when compared with the foreign statutes the two percent figure seems quite arbitrary; for instance, under the West German statute if the invention results from total employer contribution, the employee would be entitled to much less than two percent, and conversely for total employee contribution.

Additionally, as the bill in nows worded, there exists the possibility that the employer could cease payment of royalties to an employee who had either resigned or had his employment terminated by the employer. This matter would eventually be determined by either the Patent Commissioner or the courts. Ultimate determination in favor of the employer could lead to a return of an employer—dominated system, negating any real gains the employee would have won under the statute.[42]

One important issue yet to be resolved is whether Congress intended that when an employer refused to agree to pay an employee the two percent minimum, the employee in a suit could gain only the two percent or the entire patent rights subject only to an employer shop right.[43] This point could only be determined by the Supreme Court.

---

[41] See generally Neumeyer note 7 at 87-155.

[42] See the Hearings before the Subcommittee on Patents, Trademarks, & Copyrights of the Committee on the Judiciary U.S. Senate, 93rd Congress, 1st Session Pursuant to S. Res. 56 on S.1321, Sept. 11, 12, and 14, 1973, pp. 42, 137, 150, 363, 407, 583, 606, 620-622, 626. Most of the negative comments concerning Section 263 of the bill were concerned with the difficulty of establishing workable procedures concerning accounting methods and rewarding the actual inventors. One comment on p. 626 noted that the employer could maintain the invention as a trade secret and therefore circumvent any compensation due the inventor. See also S436 of the Moss bill which granted compensation to the employee for the life of the patent.

[43] The original assignment agreement having been declared invalid by the court the court must then determine whether it must grant the inventor only the two percent or the entire patent rights.

Appendix A, Table II is a matrix of many of the issues presented by proposed congressional legislation in the area of employee rights.

(To be concluded)

*Joseph H. Golant**

ARE TRADE SECRETS FOR REAL?

A few months ago, the United States Supreme Court [in *Kewanee Oil Co. v. Bicron Corp. et al*, 42 LW 4631 (1974)] handed down a decision upholding the right to enact state trade secret laws. Though the Supreme Court reversed the Court of Appeals for the Sixth Circuit, the decision is not terribly noteworthy. The decision which caused so much trepidation occurred more than a year before when, on May 10, 1973, the Sixth Circuit Court of Appeals found that the trade secret laws of Ohio were preempted by operation of the Federal Patent Law.[1] The Supreme Court granted certiorari on October 9, 1973[2] and then went on to reverse the Sixth Circuit. The apparent import of the Supreme Court decision is that things stay pretty much the way they were prior to the tumult created by the Sixth Circuit.

Background

The case was brought by Kewanee Oil Co. (hereinafter referred to as KEWANEE) against six former employees and Bicron Corp., a corporation formed by four of the former employees (hereinafter collectively referred to as BICRON). The suit demanded damages and injunctive relief against the use by Bicron of trade secrets discovered by Kewanee. The trade secrets dealt with the manufacture of synthetic crystals; these crystals are described as sodium iodide thallium activated scintillation crystals which are used in radiation detectors employed in several fields, such as surveys searching for uranium and oil, clinical measurements of radio-

* Harris, Kern, Wallen and Tinsley, Los Angeles, California. Also Instructor in Patent, Trademark and Copyright Law at the University Of Southern California Law School.

Copyright © 1974 by Joseph H. Golant

[1] *Kewanee Oil Co.* v. *Bicron Corp. et al*, 478 F.2d 1074 (CA 6, 1973).

[2] *Kewanee Oil Co.* v. *Bicron Corp. et al*, 414 U.S. 818 (1973).

INFORMATION FOR ADVERTISERS

Line Ads	**per line**	**$ 2.20**
Minimum Charge		**$ 4.40**
One Quarter Page Display Space		**$ 40.00**
One Half Page Display Space		**$ 60.00**
Three Quarters Page Display Space		**$ 80.00**
Full Page Display Space		**$100.00**

The Journal is a non-profit magazine and has only a limited space for advertising. Copy should be received by the 1st of the preceding month, in order to appear in the subsequent month's issue. No discounts or commissions on rates are offered. Receipt of copy will not be acknowledged unless accompanied by stamped self-addressed envelope or postcard.

Bona fide answers in envelopes no larger than 4x9 inches will be forwarded by first class mail (air mail overseas) to box number advertisers. Place advertisement box number on outside of mailing envelope and mail to address below. Brochures will not be forwarded.

Checks and money orders should be made payable to the Patent Office Society.

Copy for advertisements, replies to box advertisers and payments for advertisements should be sent to:

BOX 685, ADVERTISING MANAGER
Washington, D. C. 20044

INFORMATION FOR SUBSCRIBERS

Subscription—One Year-U.S. & Canada	$6.00
Subscription—One Year-Foreign	$7.00

Direct address changes and subscriptions to

BOX 685, SUBSCRIPTION MANAGER
Washington, D. C. 20044

New subscriptions received before the 5th of the month will start in the month received. Others will start the month following receipt unless a later starting date is requested.

Direct back copy orders to the BUSINESS MANAGER. Cost per copy is $1.00, postage prepaid.

As a convenience to subscribers all address stencils have been dated as to MONTH of expiration.

INFORMATION FOR AUTHORS

The Editors welcome the submission of articles consistent with the Journal's stated objectives.

Receipt of manuscripts will be acknowledged and authors will be further advised as to whether or not their papers are acceptable for publication. Upon publication authors will be sent four complimentary copies of the issue in which their article appears. All articles published will be automatically considered for the Rossman Award.

All manuscripts must be typewritten, double-spaced and should preferably be submitted in duplicate. Manuscripts cannot be returned.

Printer's deadline do not permit forwarding of galley proofs to authors for their corrections. Proof-reading is a responsibility of The Journal.

JOURNAL

of the

PATENT OFFICE SOCIETY

Published monthly by members of the Patent Office Society

MILTON WEISSMAN, *Editor-in-Chief*
PETER D. ROSENBERG, *Associate Editor*
STEVEN E. LIPMAN, *Associate Editor*
J. ROBERT LARGEN, *Business Manager*
NANCY HENDERSON, *Assistant Business Manager*
L. VLACHOS, *Subscription Manager*
HERBERT T. CARTER, *Advertising Manager*

BOARD OF DIRECTORS

LEON ZITVER, (Ch.) THOMAS H. WEBB WILLIAM WAYNER

A medium of expression for the exchange of thought in the fields of Patents, Trademarks and Copyrights; a forum for the presentation and discussion of legal and technical subjects relating to the useful arts; a periodical for the dissemination of knowledge of the functional attributes of the patent, trademark, and copyright laws, in order to effect a more uniform practice thereof and through which all interested in the development and appreciation thereof may work to a common end.

Vol. 56 **November 1974** **No. 11**

Publication of signed articles in this JOURNAL is not to be understood as an adoption by the Patent Office Society of the views expressed therein.
Office of Publication, 104 Academy Ave., Federalsburg, Md.
Entered as second class matter, February 12, 1932, at the post office at Federalsburg, Md., under the act of March 3, 1879.
© 1974 by the Patent Office Society

CONTENTS

The Meaning Of Accident 687
—*B. C. Reid*

A Proposed Compromise To The "Prior Art" Controversy Surrounding In Re Hellsund And In Re Bass 699
—*Harris A. Pitlick*

The Legal Rights Of The Employed Inventor: New Approaches To Old Problems (Part II - Conclusion) 719
—*Neal Orkin*

A Glance At The Law And Practise In The Matter Of Working Of Patents In All Iberoamerican Countries (Part I) 746
—*Enrique Jiminéz Batalla*

B. C. Reid *

THE MEANING OF ACCIDENT

FOREWORD:

This frail barque of a paper is launched with some hesitation on its journey across the Atlantic Ocean. The foreign lawyer who presumes to opine on the mysteries of the United States patent law is to be regarded at best as being fearless, at worst merely foolish. Insofar as he may be wrong, the domestic patent lawyer will have the self-satisfaction of noting his errors; but insofar as he may be right, he will perhaps have made some slight contribution to the development of United States patent jurisprudence.

In this paper, I deal with the question of accidental prior use, specifically, with the doctrine that accidental prior use does not anticipate. My theme is that the doctrine really bears in the United States a somewhat different complexion compared to that conventionally attributed to it in much of the case-law and legal literature. I should explain that my interest in the doctrine arises from the recent House of Lords decision over here in the United Kingdom in *Bristol Myers Co. (Johnson's) Application.*[1] Prior user had been alleged by the opponent; in reply the applicants asserted that the use was accidental. British jurisprudence on the subject of accidental prior use being sparse, the parties canvassed extensively the United States jurisprudence for assistance.

THE TILGHMAN LINE OF AUTHORITY:

In Deller's Walker on Patents (2nd Edition) the doctrine is defined generally as being:

Novelty is not negatived by any prior accidental occurrence or production, the character and function of which was not recog-

* Barrister-At-Law, Middle Temple, London, England.

[1] 1974 Fleet St. Patent Law Reports 43; 1974 2 W.L.R. 79; 1974 1 A.E.R. 333.

claimer or because a Rule 131 affidavit removed a pertinent reference and which would be invalidated by *Bass,* only those which issued on equivalent inventions would now be invalidated.

It might be argued that the proposed compromise is not much better than the actual *Bass* holding in the large corporation-group effort situation. Thus it is much more likely that equivalent inventions rather than only obvious inventions will result in a substantial number of cases due to the nature of the group effort, i.e., various parts of a group will each be working on related facets of a particular subject matter. Be that as it may, if each part of the group independently produces equivalent inventions, it would be inequitable to allow the common assignee to obtain patents on all of them whereas, if there had been no common assignee, only the first inventor would have been entitled to a patent. On the other hand, if there is no independence among the common-assignee co-workers, and all participants cannot be joined as co-inventors, then the additional problem of derivation[47] is presented, a topic beyond the scope of this paper. The only other solution to the assignee would be to allow for assignee filing of patent applications, a suggestion fraught with constitutional problems.[48] It is submitted that with the proposed compromise herein, however, the common assignee does not come off that badly because it can still rely on the doctrine of equivalents[49] to protect itself from infringing equivalent inventions so that in this sense, its patent protection would indeed extend to all obviously equivalent inventions.

[47] This problem pertains to 35 U.S.C. 102(f). See, for example, Examiner-in-Chief Federico in *Ex parte Thelin,* 152 U.S.P.Q. 624, 625 (1966) and *Ex parte Stalego,* 154 U.S.P.Q. 52, 53 (1966).

[48] See, for example, Sears, *The Continuation-In-Part Practice—Should It Be Abolished?,* 55 J.P.O.S. 542, 561 (1973).

[49] See Note 46, supra for a discussion of the doctrine of equivalents.

Neal Orkin *

THE LEGAL RIGHTS OF THE EMPLOYED INVENTOR: NEW APPROACHES TO OLD PROBLEMS (PART II - CONCLUSION)

IV. A Constitutional Approach To Employed Inventor Rights

A. *Proposed Legislation*

Although Congressman Brown's proposed legislation would have to some extent disregarded the employer's contribution to any invention, it is unlikely that it would have been deemed unconstitutional. The employer would still have been protected by status or the common law; depending upon the circumstances he would be able to obtain either an assignment of all rights to the patent or at least a shop right. There would probably have been few instances in which the employee would obtain full rights to the invention.[44] Furthermore, the legislation was proposed pursuant to Congress' interstate commerce power (Article I, S8, C1.3);[45] this power afforded to Congress by the Constitution is a plenary power and in recent years the Supreme Court has upheld all types of legislation that may in the minutest way affect interstate commerce.[46] Basically the only restraints on this power are those found within the Constitution itself.[47] Congress also had the power to enact this statute pur-

* Student, Temple Univ. School of Law, Operations Research Analyst, Naval Air Development Center, Warminster, Pennsylvania.

[44] It is difficult to conceive a situation in which an employee could design and test an invention with the complex equipment that only his employer could furnish for his doing so. Only very simple inventions would not fall into this category.

[45] "Congress shall have power . . . to regulate commerce with foreign nations, and among the several states, and with the Indian tribes."

[46] Congress has consistently sought to protect certain groups of individuals through this power. See Heart of Atlanta Motel, Inc. V. U.S., 379 U.S. 241 (1964), upholding the Civil Rights Act of 1964.

[47] Wickard V. Filburn, 317 U.S. 111 (1942).

suant to the patent clause of the Constitution (Article I, S8 C1.8) under which the other statutes were proposed.[48] The question then arises whether the legislation could also have sustained a constitutional challenge had it been enacted pursuant to the patent power.

The basic issue therefore is whether the patent power is as extensive as the interstate commerce power; if it is then there is no problem in finding the statute constitutional. The patent power is the only one of the Article I congressional powers with a limitation written into the Constitution; this power is limited to the promotion of the progress of useful arts.[49] It is not sufficient then that Congress has acted reasonably,[50] but in addition Congress must have sought to promote the progress of useful arts when exercising this power.[51]

The only means to challenge the statute would be for a corporation to argue that Congress had exceeded its limitation by creating a situation in which advances in useful arts would be completely stifled by a lack of incentive for corporate research expenditures. This argument would seem to imply that the preexisting corporate employee assignment agreements has advanced the useful arts. However, there appears to be some evidence to the contrary.[52]

Although, the power to grant some type of protection to the invention itself belongs exclusively to the federal government,[53] there is no reason why the states could

[48] Congress shall have power . . . to promote the progress of science and useful arts by securing for limited times to authors and inventors, the exclusive right to their respective writings and discoveries.

[49] Grahm v. John Deere Co. of Kansas City, Mo., 383 U.S. 1 (1966).

[50] McCullock v. Maryland, 4 Wheat. 316 (1819).

[51] Little recent litigation exists on the actual extent of Congress' power. What has been written is basically judicial gloss referenced in other types of actions arising under the patent laws. But see The Trademark Cases, 100 U.S. 82 (1879), in which the Supreme Court invalidated a congressional attempt to enact trademark legislation under the patent power.

[52] See Sections IV, B, 1&2 for discussion of the effects of these contracts upon employee incentive.

[53] Sears Roebuck v. Stiffel, 376 U.S. 225 (1964). The only power left to the states under local unfair competition laws was that area in which one party was "palming off" or passing its product off to the public as another's.

not protect employee inventor rights. In the absence of any federal regulatory scheme to the contrary, states could enact legislation similar to any of the proposed congressional statutes discussed in Section III. Even a law similar to Representative Brown's bill making illegal any contract of assignment as a condition of employment would be a constitutional exercise of the state police power.[54]

In light of the fact that Congress would most likely enact a bill similar to the middle position taken by the Hart-Owens bill, state legislatures should consider statutes to supplement this type of legislation. Since it is implicit within the Hart-Owens bill that employers and employees bargain for more than two percent of the invention's profits, state legislation could create arbitration boards similar to the Moss bill to guarantee greater than two percent compensation if it were warranted. No federal preemption problems seem apparent, since Congress seems to have intended that the two percent figure be only a minimum, implicity leaving higher compensation to either bargaining or state legislation.[55]

State legislation would, however, produce no panacea to the problems of employee compensation. With its lack of uniformity and potential conflict of law issues, state laws would create only a limited answer to the questions of employed inventor compensation.

B. Constitutional Judicial Remedy

Some of the status and contractual holdings on employee patent rights, discussed in Sections I and II supra, are what may be termed "federal common law"; i.e., the Supreme Court and the inferior federal courts have created a body of law which does not necessarily

[54] The concept of substantive due process in which a state could not restrict freedom of contract has virtually been abandoned by the Supreme Court; there now exists a presumption in favor of the propriety of state legislation passed under the police power.

[55] A means to ensure that no preemption problems occur would be to include within the Hart-Owens bill a statment to the effect that the states may pass legislation in harmony with the statute.

"arise under the Constitution and laws of the United States",[56] but is only tangentially related to constitutional law. So long as the case is heard before the federal court on an issue which does arise under either the Constitution or a law of Congress,[57] a collateral issue such as a shop right or a contention that the contract is invalid for inadequate consideration will be decided by the court in accordance with its own rule making policies—federal common law. Although the federal courts make no specific reference to federal common law in their decisions on these matters, federal common law manifests itself within the court's dictum. For example, in Guth v. Minnesota Mining and Mfg. Company, one of the issues to be determined was whether portions of a contract may be void while other provisions may be held valid. After citing various different state and federal court decisions on the matter, the court finally concludes:[58]

> The decisions are many on the subject. The statement appearing in Page on Contracts, Sec. 788, we, think, expresses the consensus of opinion and correctly states the rule of law which we must apply.

Therefore, it seems evident that the court takes liberty in finding, at its own discretion, the rule of law to be utilized. It is, therefore, making federal common law.[59]

---

[56] U. S. Constitution, Article III, Section II.

[57] Both under the status and contractual approaches, the questions of federal versus state jurisdiction depends upon whether the issue involves merely the specific performance of a contract to assign a patent which is not a case arising under the laws of the United States (Pliable Shoe Co. v. Bryant, 81 F. 521, 1897: By-Products Recovery Co. v. Mabee, 288 F. 401, 1923) or whether the suit may include other issues such as infringement and patent validity, whereupon a federal court would have jurisdiction under 28 U.S.C. 1338 (Crown Die, etc. Co. v. Nye, etc. Machine Works, 261 U.S. 24, 1923).

[58] 72 F.2d 385, 388 (1934).

[59] See also U.S. v. Dubilier Condenser Corp., 289 U. S. 178, (1933), in which the U. S. Government asked the court to infer a federal common law right for it to appropriate one of its employee's patents in the absence of any contract of assignment. See also Wright, "The Law of Federal Courts", West Publishing Co., 1970 pp. 247-253. Note also that, in a federal diversity or a state court action, the various shadings of state status and contractual law must be applied. These are quite similar to the federal common law.

Federal common law is basically a body of law that implements the federal Constitution and statutes and is conditioned by them.[60] Therefore, if there exists a dormant right within the Constitution itself for an employee to obtain remuneration from the profits of his invention, the federal common law would be displaced by such a right.

An action based directly on the patent clause of the Constitution may provide some insight to such a right. For instance, two allegations founded on the patent clause are possible: (1) Patent rights are so exclusive in the inventor that they are not assignable to an employer as a condition of employment, and (2) Not only does Congress have power to "promote the progress of useful arts",[61] but also the patent system's purpose is to "promote the progress of useful arts." This system is so vastly controlled by these employee assignment agreements that they are such an integral part of the patent system and they too should "promote the progress of useful arts."

In order to determine the validity of these allegations, a legislative history of the patent clause of the Constitution was analyzed. In addition, judicial decisions construing the clause were scrutinized to shed some light on the issues.

The original draft of the Constitution contained no patent provision. Both James Madison of Virginia and Charles Pinckney of South Carolina are credited with suggestions for the incorporation of a patent clause in the second draft of the Constitution.[62] Madison's suggestions were that Congress shall have power:

To secure to literary authors, their copyrights for a limited time. To *secure* to inventors of useful machines and implements, the benefits, therefore, for a limited time.

[60] D'Oench, Duhme & Co. v. Federal Deposit Insurance Corporation, 315 U. S. 447 (1942) (Jackson, J. concurring).

[61] U. S. Constitution, Article I, Section 8, Clause 8.

[62] Fenning, "Origin of Patent and Copyright Clause of the Constitution", 11 JPOS 438 at 441 (1936): Ramsey, "The Historical Background of Patents", 28 JPOS 6 at 13 (1936).

Pinckney's suggestion was that Congress shall have power:

To grant patents for useful inventions; *to secure* to authors *exclusive rights* for a certain time.

The present constitutional patent clause was adopted unanimously without debate by the Committee on Detail but it is unknown through what individual it originated. The clause finally adopted states in Articles I, § 8, Clause 8:

Congress shall have power . . . to promote the progress of science and useful arts by *securing*, for limited times to authors and inventors, the *exclusive right* to their respective writings and discoveries.

The first issue to be examined is the extent of the term "exclusive right" in the clause. Does this term create a form of inalienable property interest that would set it apart from other property rights, perhaps invalidating a pre-employment assignment to an employer?[63] Some insight to an answer may be seen in the colonial definition of this term's useage with the word "securing" in the clause. Each of Madison and Pinckney's proposals also contains the term "secure" used with the term "rights". Colonial writings usually associated the word "secure" with the word "rights".[64]

Moreover, the same type of language concerning exclusivity of *individual* patent rights appears in the only reference to patents in the Federalist:[65]

The utility of this power will scarcely be questioned. The copyright of authors has been solemnly adjudged in Great Britain to be a right at Common Law. The *right* to useful inventions seems with equal reason to belong to the *inventors*. The public good fully coincides in both cases with the *claims of individuals*.

[63] This would be somewhat akin to a "natural" right in the inventor to possess the rights to an invention.

[64] Ramsey, note 62 supra at 15. The Declaration of Independence uses "secure" with "inalienable rights", and the Preamble to the Constitution mentions "secure the blessings of liberty to ourselves and to our posterity."

[65] The Federalist, No. XLIII (Lodge's ed. 1888) 267.

The states cannot separately make effectual provision for either of the cases, and most of them have anticipated the decision of this point by laws passed at the instance of Congress.

However, there appears an obstacle to this argument in a resolution to the Congress by Madison on May 2, 1783:[66]

> . . . such copy or *exclusive right* of printing, publishing and vending the same, to be *secured* to the original authors, or publishers, their executors, administrators, and *assigns* by such laws and under such restrictions as to the several States may seem proper.

Madison mentions that the "exclusive rights" may also be enjoyed by the author's "assigns". Although Madison could hardly have foreseen the extent of corporate and government patent assignments, his recognition of exclusive rights in the assignee possibly precludes, from an historical standpoint, the argument that patent or copyright rights are so exclusive that they are not assignable to an employer. Additionally, there is no other evidence to indicate that patent rights are any different from any other form of property-all of which should be alienable in a free society.[67] The only natural right to an invention is that right to make it or sell it and the right to exclude others from the rights to the article must be granted by legislation.[68] The grant of a limited monopoly in patent rights lies exclusively with legislation; the government grants this limited monopoly in consideration of the inventor's public disclosure.[69] Therefore, the first allegation that patent rights are so exclusive in the inventor or akin to "natural" rights seems without basis.

In order to advance the second allegation, a recent in-

---

[66] Fenning, note 62 at 443. Madison refers to copyrights here, which were more prevalent than patents during the colonial era.

[67] 35 U. S. C. 261 provides that patents shall have the attributes of personal property.

[68] In re Brosnahan, 18 F.62 (1883).

[69] J. L. Clark Mfg. Co. v. American Can Co. 256 F. Supp. 719 (1966).

terpretation of this clause by the Supreme Court stated: [70]

> Innovation, advancement, and things which add to the sum of useful knowledge are inherent requisites in a patent system which by constitutional command must "promote the Progress of . . . useful arts." This is the *standard* expressed in the Constitution and it may not be ignored.

This seems to indicate that not only does Congress have power to "promote the Progress of . . . useful Arts" but that this is the stated purpose of the patent system. If it could then be shown that the patent system is so controlled by these employee patent assignment contracts which stifle innovation, these agreements may therefore be unconstitutional.[71]

Other interpretations of the patent clause have provided a basis that "individual reward" is a necessity for promoting the progress of useful arts:

> Patents for inventions are now treated as a just reward to ingenious men, and as highly beneficial to the public, not only by holding out suitable encouragements to genius and talents and enterprise; but as ultimately securing to the whole community great advantages from the free communication of secrets, and processes, and machinery, which may be most important to all the great interests of society, to agriculture, to commerce, and to manufacturers as well as to the cause of science and art.[72]

> The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors in "Science and useful Arts." Sacrificial days devoted to such creative activities deserve rewards commensurate with the services rendered.[73]

---

[70] Graham v. John Deere Co. of Kansas City, Mo., 383 U. S. 1, 6 (1966).

[71] See the data in Appendix A, Table III. If the patents granted to foreign corporations are excluded, the percent granted to U.S. Corporations and the U.S. Government exceeds 70 per cent of the new total.

[72] Blanchard v. Sprague, 3 Fed. Cas. 1518, 650 (1839).

[73] Mazer v. Stein, 347 U. S. 201, 219 (1954).

In addition to the vast quantities of evidence necessary to prove that the agreements do not promote the progress of useful arts, other obstacles to such a suit are evident. While an aggrieved employee inventor might seek a recovery of 70 per cent of his invention's profits,[74] Congress might take either of two directions: (1) Remain silent on employee assignment agreements, thus allowing their validity as it does now; or (2) enact a statute similar to the Hart-Owens bill (discussed supra in Section III) which provides a minimum amount of 2 per cent of the invention's profits to be retained by the employee. In both of the above cases Congress is sanctioning some form of contract between employer and employee. This is the means by which Congress has sought to promote the progress of useful arts and even though it might not be the optimum method by which to do so, it is sufficient if it be reasonable.[75] Therefore, it seems apparent that such a suit should fail before a court.

In spite of the obstacles I have compiled data concerning the American employed inventor that I should like to present as a plea for some type of legislative reform.

1. Qualitative & Quantitative Analyses

Notwithstanding the relatively limited data concerning the lack of incentives that employee assignment agreements exhibit,[76] I have attempted to compile and collate all available evidence that these contracts are not the

[74] Two possible remedies exist: (1) an equitable remedy based on the amount of employer and employee contribution, and (2) a reversion to the status remedies discussed in Section I supra. The equitable remedy would be difficult to administer, as the court would be required to fashion guidelines for similar cases.

[75] McCullock v. Maryland, 4 Wheat. 316 (1819); Graham v. John Deere Co. of Kansas City, Mo., 383 U. S. 1, 6 (1966): "Within the limits of the constitutional grant, the Congress may, of course, implement the stated purpose of the Framers by selecting the policy which in its judgment best effectuates the constitutional aim. This is but a corollary to the grant to Congress of any Article I power."

[76] Neumeyer, note 7 at 46.

best means to promote the progress of useful arts. To this end, I shall commence with a comparison of patent production in a statutory country with that of the United States. Appendix A, Figures I and II present a comparison of the number of patent applications and grants to citizens of the United States and Japan.[77] From the two figures it appears that a marked increase in patenting activity occurred after the enactment of the compensation statute in Japan. Since there is some question whether the increase could be attributed to both vast economic growth and employee compensation, I shall restrict further analysis to American data.

The two basic factors that are thought to influence patent output in the United States are: (1) Research and Development expenditures; and (2) employee compensation. Data from the U. S. Patent Office and the National Science Foundation were analyzed to determine patent output in the United States as a function of research and development funding and employee production. Shown in Appendix A, Table III are the statistics of corporate and government patent ownership for the years 1950 to 1972.[78]

The number of U. S. patents issued to foreign corporations has increased radically at the expense of individual ownership (both foreign and domestic individual, presumably). It should be noted, however, that [illegible] the patents granted to foreign corporations [illegible] ably subject to employee compensation.

Appendix A, Figure III represents U. S. [illegible] ductivity as a function of total research [illegible] ment expenditures. It was compiled [illegible] number of patents applied for [illegible] by R&D funds [illegible]

per year to 1971 dollars, and multiplying by the percent of patents issued to both U. S. corporations and the U. S. Government. A two-year lag between application and issue was assumed. It was also presumed that the same percentage of corporate and government ownership applied to applications. The three percent annual dollar escalation factor is two to three percent low for the later years; this has a tendency to increase the graph in the more recent years. The graph represents a definite downward trend for patent activity related to R&D expenditures and should be even lower for the last five years.

Appendix A, Figure IV presents patent output as a function of employed inventor productivity. It was prepared by taking the total patents applied for, and granted, dividing by the estimated number of employed engineers and scientists in the U. S.,[80] and multiplying by the percent of patents issued to U. S. corporations and the U. S. government. Again, a two year lag between application and issue was assumed. Both Figures III and IV presume that R&D funding and employee productivity were directly related to corporate and government patent ownership. Again, a definite downward trend is indicated. Both these figures seem to indicate [illegible] possibility that patent productivity in the [illegible] may not be operating at maximum effi-

Perhaps one means of comparing American and foreign technology would be to examine the extent of foreign patenting activity within the United States. Appendix A, Figure V presents the percentage of U. S. patents granted to foreigners for the years 1963-1972.[82] Within ten years this percentage has nearly doubled. Approximately one-half of these foreign patent grants were issued to West Germany and Japan—the two major statutory countries.[83] As noted within the report, only those inventions that are significant and potentially profitable would be patented in the United States by foreigners.[84] In 27 of 94 significant technological categories the total foreign share (including both statutory and non-statutory countries) was greater than or equal to 50 percent of all U. S. patents issued for the years 1970-1972.[85]

Other statistical data quantifying the status of the American employed inventor is at best sketchy and at present perhaps inadequate to provide a more definitive view of his stature.[86]

2 Psychological Analysis of Employed Inventors

The major question that must be addressed is whether statutorily created awards, such as provided in the Moss and Hart-Owens bills, will create sufficient incentives for employees, and employers to further stimulate creative

---

patent activity than smaller ones; these were the very corporations that, at this period in time, would have had the strictest employee patent assignment policy. He offers no statistics to correlate the downward trend with employee assignment agreements.

[82] Early Warning Report of the Office of Technology Assessment and Forecast U. S. Dept. of Commerce December, 1973, Figure 1, P.3; the increase was from 17 to 31 percent.

[83] Id., Figure 2, p.4. Both of these countries are being granted patents on increasing annual rate.

[84] Id., Appendix A, p.A-1 and p.1. the report contains data in those technology areas found to be exhibiting, or expected to develop, significant activity.

[85] Id., Table 1, pp.6-7.

[86] See Miessner, "Today's Inventor—A Study in Frustration", American Engineer 33, no. 4 (April 1963), p.39; Sanders "American Inventiveness v. Foreign Inventiveness", 5 Patent Trademark, and Copyright J. of Research and Education p. 127 (1961); Lassagne "The Rights of Employed Inventors", 51 A.B.A. Journal 835 (1965).

endeavors. Insofar as the Moss bill is concerned, this issue has previously been discussed at length, with the conclusion that present employer attitudes would prevent the Moss bill from being effective as a stimulus for invention.[87] I should like to present an analysis similar to Mr. Harter's, but I shall take issue with many of the arguments he furnishes.

Invention involves two basic elements: (1) capacity to invent and (2) motivation to use this capacity.[88] The issue that statutes would address would be the motivational aspect of inventive activity; therefore it is this component that will be analyzed further.

Mr. Mosel asserts that employee inventors are engaged in activity that requires them to behave in "unlovable" ways, but he does not provide an explanation for this assertion.[89] Some insight to an answer is suggested by Benjamin F. Miessner:

> Generally long established industry wants no revolutionary "breakthrough" inventions. It prefers peace to technical progress which obsoletes old products, methods, or facilities. It likes little, easily digested improvements on what it already has and knows insideout, never radical changes. Like old dogs, it wants to learn no new tricks, whereby newly imported experts guide its destiny.[90]

The employee inventor must convince his employer that his idea is in line with the present and future goals of the corporation in order for his idea to be accepted.[91] However, for the employee to persuade his employer that this is so or that the invention is worthwhile, he must act in ways that may be unpopular with the organization. At present the most likely award for the employee's exhortations to management is the token reward for his

---

[87] Harter, "Statutorily Decreed Awards for Employed Inventors: Will They Spur Advancement of the Useful Art?", 15 Patent, Trademark and Copyright J. of Research and Education (Idea). 575, 1972.
[88] Mosel, "The Employee Inventor, A Psychologist's View," 47 JPOS 507 at 508 (1965).
[89] Id., p. 508.
[90] Note 79 supra, p. 40.
[91] Harter, Note 80 supra at 585.

patent; even if management decides against the idea, it is still corporate property.[92]

Mosel next asserts:

> . . . it is really management's behavior toward inventors which carries the real reward. It is not management's words. There frequently develops a discrepancy between what management's words prescribe for people to do and what its own behavior in fact makes it worthwhile for them to do.[93]

He notes that very often a discrepancy develops between management's action and words. Furthermore, because of the legal nature of assignment agreements, rewards, if any, are made available to all members of an inventing organization; therefore, any rewards made available to inventors are not differentially awarded on the basis of inventing.[94] Management's behavior vis-a-vis a reward system does not have to take the form of a monetary award, for non-economic motives to stimulate invention include the ego motive which stems from the desire to achieve and maintain a sense of personal importance; the security motive; and curiosity, creativity, and the desire for new experiences.[95] Since the Moss bill, and subsequently the Hart-Owens bill, address only the monetary reward for employee inventors, Mr. Harter questions whether these awards would stimulate inventive activity.[96] One of his arguments is the fact that the Moss bill's reward structure would most likely have been modeled after the West German statute which would provide the lowest amount of monetary compensation to the highest paid employees and to those most likely to have invented anyway.[97] Furthermore, he urges that the Moss reward system could probably have stimulated

---

[92] See note 37 supra.
[93] Note 88 supra at 509.
[94] Id., at p. 509.
[95] Likert, "The Use of Organizational Theory in Increasing Productivity in the Business Firm", Michigan Business Papers No. 39, 1964, p. 48. See also Rossman, "Rewards and Incentives to Employee-Inventors, "7PTC J. Res.&Ed. (Idea), at 448, (1963).
[96] Harter, note 87 supra at 584, 587.
[97] Id., p. 587, see also Section III supra.

creativity outside the employee's assigned duties with the minutest amount of company resources in order to maximize the reward.[98] As a counterargument, he notes that it might be highly desirable to stimulate inventive activity outside of the present corporate activity,[99] but this is unlikely as he asserts that after the invention may have become "free" the independent inventor may not have had the resources to exploit it.[100]

The one basic issue that Mr. Harter did not discuss, which is probably the greatest impediment to inventive activity in the corporation, is the level-off of salary for the experienced technical employee.[101] As the difference between starting salaries and those for experienced personnel shrink, so does the morale of the seasoned employee whose relative immobility has continually increased with the years. No longer is he able to seek out a more equitable patent assignment agreement as courts so readily assume. Employee inventors are most likely to invent when between the ages of 25 and 40;[102] salary curves for these technical personnel usually level off between the ages of 30 to 35. Therefore, it seems as if industry, by not offering incentives beyond salary to employees, is stifling corporate patent output. Remember, that it is management's behavior that is the real reward; if the employee envisions his salary leveling off he will not be stimulated to invent.

The only mention of this issue by Mr. Harter is a quote from Mr. Jacob Rabinow:

> . . . I have always believed that an inventor is important to our society and I take great pride in being known as an inventor, but I do not believe he should be treated differently from the rest of the human race. I think inventors should get all they can in a competitive society, such as ours. And if all they can get is a good salary, then, that is all they deserve.[103]

---

[98] Id., p. 587.
[99] Id., p. 587.
[100] Id. p. 588 and note 84 supra.
[101] Siegel, note 15 supra at 499.
[102] Sanders, "How Many Patentees?", 47 JPOS 501 at 505, (1965).
[103] Rabinow, "The Employee Inventor, An Inventor's View," 47 JPOS 469, at 473, (1965).

Mr. Rabinow, who is a company president in addition to being an "inventor", assumes equal bargaining power between employer and employee, but this does not exist because of the inventor's increasing immobility to change employers as he gets older. Mr. Harter notes further that management's behavior may take the form of recognition, responsibility, salary, job status, etc.[104] These elements are "possible" future rewards, not existing concrete "carrots" that may lead the employee to inventive creativity. Therefore, some questions exist as to their true value as management behavioral incentives.

Mr. Harter asserts that management might not be responsive to invest research and development monies under the Moss bill.[105] Although there is merit to his arguments, he doesn't bring out the fact that compensation schemes are providing viable solutions to West German and Japanese corporations as evidenced by the vast patenting activity in these countries. The only factor contra is the possibility that German or Japanese employees may not want to jeopardize their positions by bringing their disputes to arbitration; therefore Mr. Harter surmises that statutory compensation may be minimal despite the precise guidelines.[106] He offers no concrete data to support this premise. If this is true, then this would present a sound argument for enactment of the Hart-Owens bill, as this would provide a definite amount of two percent of the profits to the employee rather than an arbitrary reward that the employee would be wary of disputing.

Surveys of employed engineers tend to bear out the prior contentions that corporate patenting activity is presently being stiffled:[107]

1 About 85 percent of all employed engineers interviewed in a wide variety of companies felt that the

[104] Harter, note 87 supra at 593.
[105] Id., pp. 590-594.
[106] Id., p. 594.
[107] Rines, note 11 supra at 45.

patent system held no particular meaning for them as individuals.

2 About 92 percent considered that there was no difference in reward from their employers for invention, as distinguished from good engineering.

3 About 45 percent of the engineers employed by companies doing work for the government felt that there was no sense in taking the risk of fostering radically new ideas because the government contracts would not give their employers sufficient patent advantage.

4. Some 84 percent of the engineers admitted that they were not enthusiastic, and although they had ideas that could benefit their employers, there was no incentive to "fight city hall" and to embark on the risky and unpopular role of fighting to force adoption of significantly new concepts or to expand the scope of their employer's field of operations.

In summary, no statute that erodes the employer's present dominance would be satisfactory to corporate interests. In light of this fact the Hart-Owens bill Section 263 should be enacted with the following additional provisions: (1) a provision that the employee retain remuneration for the life of the patent; (2) a provision that the procedures provided by the Patent Commissioner reward others besides the inventor who have made significant contributions to the patent, the others being granted shares of the patentee's two percent compensation; (3) a clause in the bill allowing states to enact harmonious legislation; and (4) a requirement that the employees retain compensation even if the invention is maintained as a trade secret.

Conclusions

The American public has two choices: (a) it can maintain status quo, or (b) it can seek legislation that will grant compensation to the employed inventor. If it selects the first choice, it allows the employer to maintain the dominance that has prevailed throughout his rela-

tionship with his employees. It grants him the capacity to contract with his workers and to police this relationship as he sees fit. This is not to say that the contractual method is not a viable solution to the problem of compensation, for with its relative ease of administration and enforceability, corporations could readily create remuneration standards that would equitably reflect the employee's contribution to the invention. However, to permit the employer this leverage in this relationship has not yet fashioned the stimulus for invention that public policy demands.

The legislative approach presents a sounder solution. It offers the employee a reward for his intellectual creativity; it allows uniformity; and it offers the security to an employee in that he may transfer employers without having to feel apprehensive about any new patent policy. The problem in enacting truly plenary legislation such as the Moss bill was perhaps best stated by Judge Frank in Pickard v. United Aircraft Corp.:

> The controversy between the defenders and assailants of out patent system may be about a false issue—the stimulus to invention. The real issue may be the stimulus to investment. On that assumption a statutory revision of our patent system should not be too drastic. We should not throw out the baby with the bathwater.[108]

In light of the nature of the problems in the passage of such plenary legislation, Congress should enact Section 263 of the Hart-Owens bill. Although it does not encompass the wide latitude that foreign statutes embrace, it is a beginning; and what the American employed inventor needs most today is a beginning. No longer is it justified to claim that employers furnish their employees with the security of employment or the training and equipment necessary for invention as a rationale to obtain patent assignments. The public interest must demand more of its patent system's productivity; it must seek a partial return to the employed inventor of that "exclusive right" that the constitutional framers sought.

[108] 128 F.2d 632, 643 (1942).

November, 1974, Vol. 56, No. 11

APPENDIX A

TABLE I: INTERNATIONAL EMPLOYED INVENTOR RIGHTS

TABLE II: U.S. EMPLOYER INVENTOR RIGHTS—LEGISLATIVE MATRIX

TABLE III: PER CENT OF U.S. PATENTS ISSUED TO CORPORATIONS, INDIVIDUALS, AND U.S. GOVERNMENT

FIG. I: NUMBER OF PATENTS APPLIED FOR BY CITIZENS OF U.S. AND JAPAN

FIG. II: NUMEER OF PATENTS ISSUED TO CITIZENS OF U.S. AND JAPAN

FIG. III: NUMBER OF PATENTS IN U.S.A. PER MILLIONS OF R&D DOLLARS

FIG. IV: NUMBER OF PATENTS PER 100 EMPLOYED AMERICAN INVENTORS

FIG. V: % OF U.S. PATENTS ISSUED TO FOREIGNERS

TABLE I

INTERNATIONAL EMPLOYED INVENTOR RIGHTS†

	U.S.A.	NETHERLANDS	AUSTRIA	JAPAN	SWEDEN	WEST GERMANY	GREAT BRITIAN	CANADA
Statute	NO (Common Law & Contracts)	YES, Netherlands Patent Act of 1957	YES, Austrian Patent Act of 1950	YES, New Patents Act of 1960	YES, Act of June 18, 1949	YES, German Law of July 25, 1957	NO (Common Law & Contracts)	NO (Common Law & Contracts)
Determination of Compensation	Within Employee Agreement	Value of Invention and circumstances	only important inventions need be compensated	Profits & Employer contribution considered	Value of inventions and importance of employment	(See equation in text)	Within Employee Agreement	Within Employee Agreement
Free Invention	Employee* ownership	Employee ownership but can be acquired by employer through compensation agreement or negotiation.	Employee ownership	Employee ownership but can be acquired by employer through negotiation	Employee ownership but can be acquired by employer through negotiation or compensation agreement	(See Text)	Employee ownership but can be obtained by employer through negotiation	Employee ownership but can be obtained by negotiation

* This presumes that an employer attempt to enforce a contract covering these inventions would be unconscionable.

† See generally Calvert, "Encyclopedia of Patent Practice and Invention Management", Reinhold, 1964, pp. 233-242.

TABLE II

U.S. EMPLOYER INVENTOR RIGHTS
LEGISLATIVE MATRIX

	BROWN BILL H.R. 4932 of the 88th Congress, 1st Session	MOSS BILL H.R. 15512 of the 91st Congress, 1st Session	HART BILL S.1321 & 263 of the 93rd Congress, 1st Session
Does statute allow for employer-employee contracts?	No - reverts to status cases	Yes - only if adequate compensation is due employee	Yes - only for greater than 2% of invention's profits
Does statute require employer to patent invention?	Yes - employee could obtain invention's rights through court enforced assignment and therefore obtain his own patent	Yes - §421	No - employer could maintain invention as trade secret and circumvent compensation
Does statute allow employee compensation for the life of the patent?	Yes - reversion to status cases	Yes - §436	No - must be determined by courts
Does statute allow for complementary state legislation?	No	No - Federal regulatory scheme would preempt state legislation	Yes - subject to 2% minimum compensation

TABLE III

YEAR	TOTAL PATENTS ISSUED	PERCENT ISSUED TO CORPORATIONS U. S.	PERCENT ISSUED TO CORPORATIONS FOREIGN	PERCENT ISSUED TO INDIVIDUALS	PERCENT ISSUED TO U. S. GOV'T
1950	45,040	50.6	3.9	44.1	1.5
1951	44,326	50.3	4.9	43.3	1.5
1952	43,616	51.2	4.7	42.5	1.6
1953	40,468	52.5	5.7	40.2	1.6
1954	33,809	54.2	6.8	37.1	2.0
1955	30,432	52.9	5.7	39.2	2.3
1956	46,817	54.5	7.9	35.6	2.1
1957	42,744	54.4	7.9	35.5	2.3
1958	48,330	56.1	8.8	32.5	2.6
1959	52,408	57.0	9.7	30.6	2.7
1960	47,170	60.0	9.9	27.7	2.6
1961	48,368	58.6	10.7	27.7	3.0
1962	55,691	58.5	11.5	27.8	2.3
1963	45,681	58.5	12.0	27.5	2.2
1964	47,376	58.8	12.4	26.3	2.5
1965	62,857	59.1	12.9	25.5	2.5
1966	68,406	60.9	13.5	23.4	2.2
1967	65,652	58.4	15.1	23.8	2.7
1968	59,102	59.0	15.5	23.0	2.5
1969	67,557	57.5	18.0	21.9	2.6
1970	64,427	57.3	19.1	20.9	2.7
1971	78,316	54.9	20.5	22.1	2.5
1972	74,808	52.0	22.3	23.5	2.2

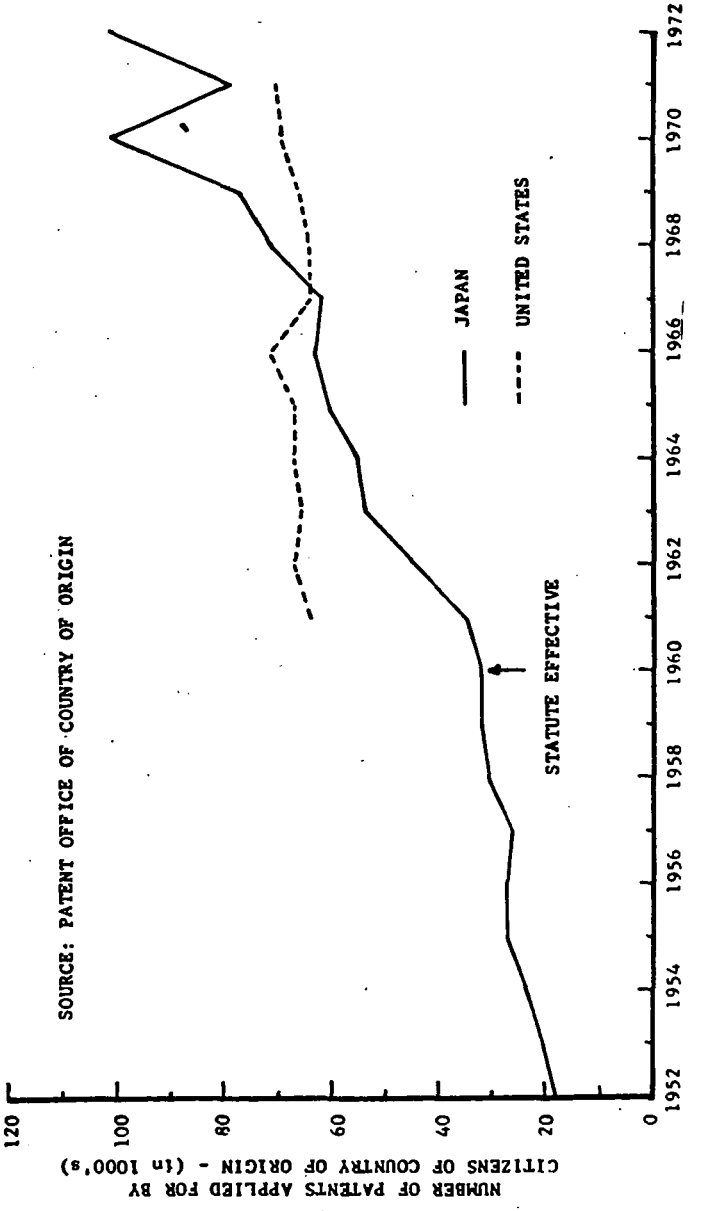


FIGURE I

SOURCE: PATENT OFFICE OF COUNTRY OF ORIGIN

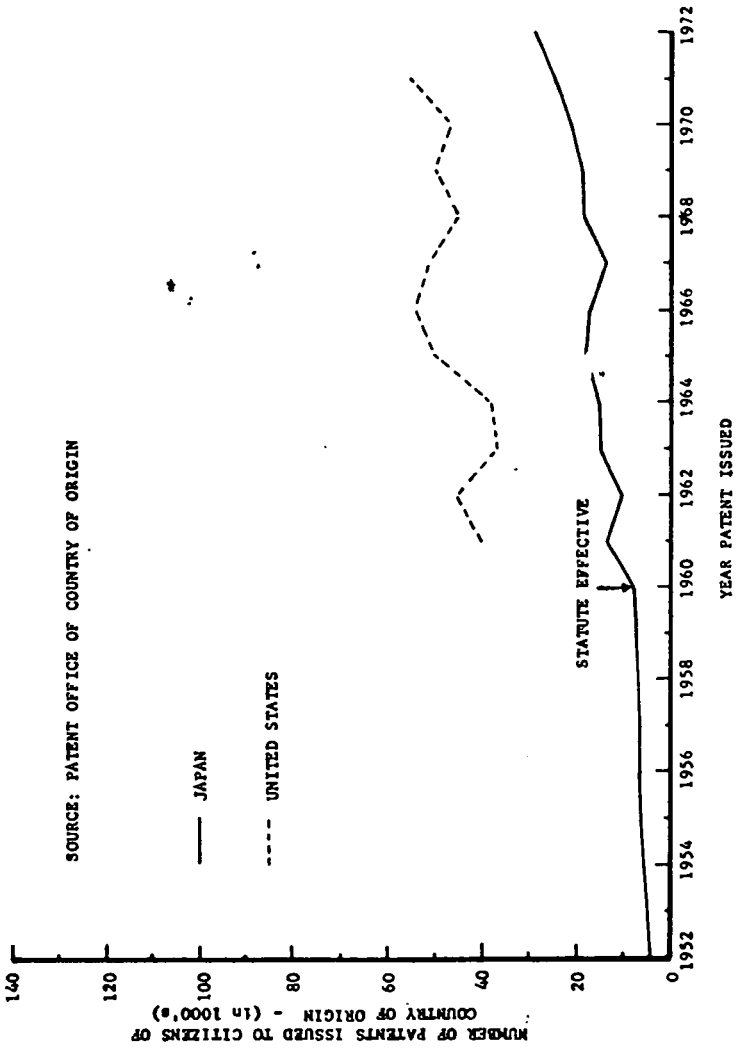

NUMBER OF PATENTS ISSUED TO CITIZENS OF COUNTRY OF ORIGIN - (In 1000's)
140
120
100
80
60
40
20
0
1952
1954
1956
1958
1960
1962
1964
1966
1968
1970
1972
YEAR PATENT ISSUED
STATUTE EFFECTIVE
JAPAN
UNITED STATES
SOURCE: PATENT OFFICE OF COUNTRY OF ORIGIN

FIGURE II

FIGURE III

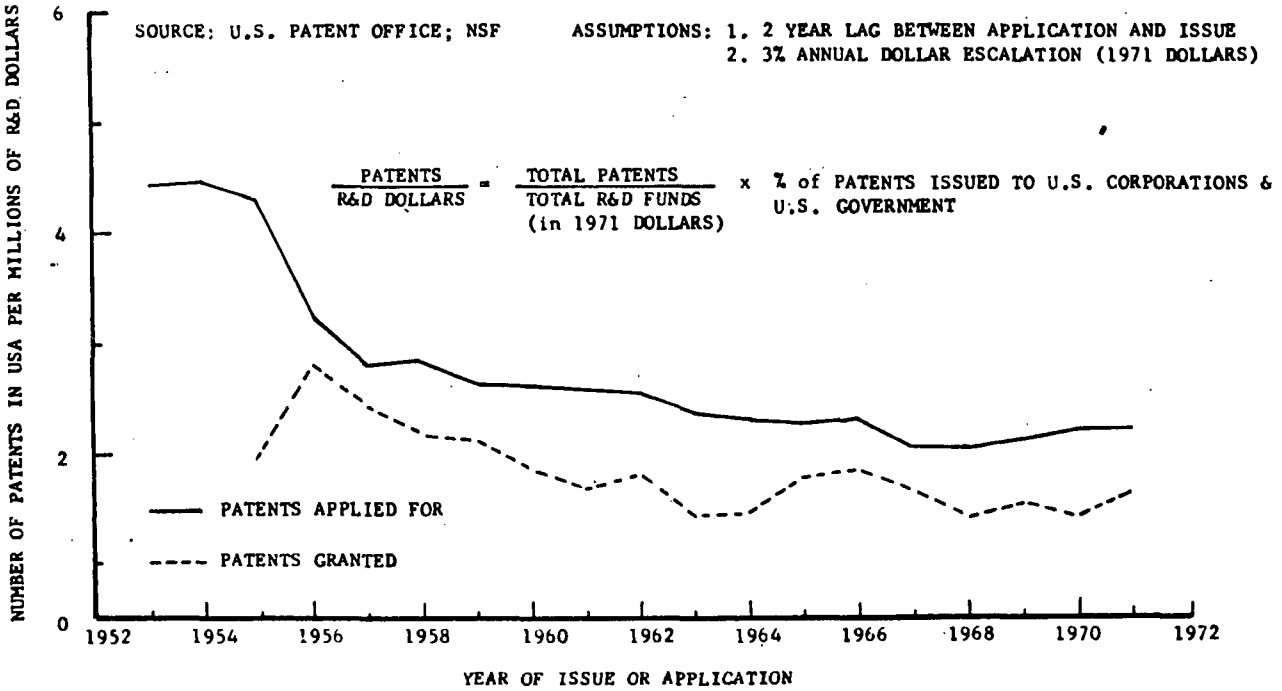
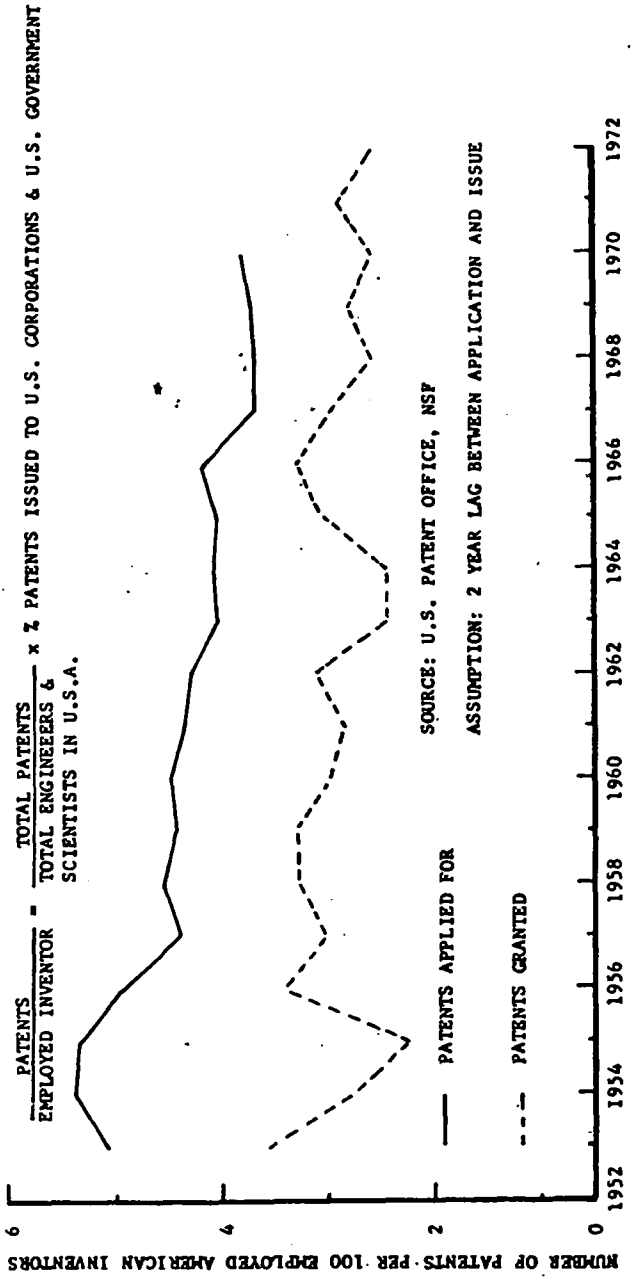

SOURCE: U.S. PATENT OFFICE; NSF
ASSUMPTIONS: 1. 2 YEAR LAG BETWEEN APPLICATION AND ISSUE
2. 3% ANNUAL DOLLAR ESCALATION (1971 DOLLARS)
PATENTS / R&D DOLLARS = TOTAL PATENTS / TOTAL R&D FUNDS (in 1971 DOLLARS) x % of PATENTS ISSUED TO U.S. CORPORATIONS & U.S. GOVERNMENT
NUMBER OF PATENTS IN USA PER MILLIONS OF R&D DOLLARS
0
2
4
6
1952
1954
1956
1958
1960
1962
1964
1966
1968
1970
1972
PATENTS APPLIED FOR
PATENTS GRANTED
YEAR OF ISSUE OR APPLICATION

FIGURE IV


PATENTS / EMPLOYED INVENTOR = TOTAL PATENTS / TOTAL ENGINEERS & SCIENTISTS IN U.S.A. x % PATENTS ISSUED TO U.S. CORPORATIONS & U.S. GOVERNMENT
NUMBER OF PATENTS PER 100 EMPLOYED AMERICAN INVENTORS
0
2
4
6
1952
1954
1956
1958
1960
1962
1964
1966
1968
1970
1972
YEAR OF ISSUE OR APPLICATION
PATENTS APPLIED FOR
PATENTS GRANTED
SOURCE: U.S. PATENT OFFICE, NSF
ASSUMPTION: 2 YEAR LAG BETWEEN APPLICATION AND ISSUE

November, 1974, Vol. 56, No. 11

FIGURE V

