PATENT AND TRADEMARK OFFICE NOTICES

Patent Cooperation Treaty (PCT) Information

For information concerning the PCT, including the amounts of the fees thereunder and the States that may be designated in international applications, consult the notice entitled "Update of information concerning the Patent Cooperation Treaty" appearing in the OFFICIAL GAZETTE of July 3, 1979.

Effective August 1, 1979 the international fees are increased to the following amounts:

Basic fee under PCT Rule 15.1(i) for an international application containing 30 sheets or less	$190.00
Supplemental fee to the Basic fee for each page of an international application in excess of 30 sheets	3.50
Designation fee under PCT Rule 15.1(ii)	45.00

LUTRELLE F. PARKER,
Acting Commissioner of Patents and Trademarks.

July 3, 1979.

Patent and Trademark Office Study of Court Determinations of Patent Validity/Invalidity, 1973–1977

The Patent and Trademark Office has prepared a summary of the past five years (1973–1977, inclusive) of patent litigation in the Courts of Appeals (CA), District of Courts (DCt), and Court of Claims (CtCl), including:

(1) The number and identification of cases and patents litigated; and

(2) the holdings and rate of patent validity, invalidity and infringement.

The information was extracted from the compiled notices filed in the Patent and Trademark Office by clerks of courts under the provisions of 35 U.S.C. 290, and from the reported decisions appearing in the *United States Patent Quarterly, Federal Second and Federal Supplement.*

The results of the study and of the similar study conducted for the period 1968–1972 are set forth in the accompanying table.

Court Determinations of Validity/Invalidity 1968–1972 and 1973–1977*

	1968–1972				1973–1977			
	Patents Held		Percent Invalid	Infringed	Patents Held		Percent Invalid	Infringed
	Valid	Invalid			Valid	Invalid		
Court of Appeals:								
Utility	78	173	69	64	53	137	72	51
Design	0	8	100	0	2	4	67	2
Reissue	3	9	75	3	6	13	68	6
Plant	0	0	0	0	7	0	0	7
Total	81	190	70	67	68	154	69	66
District Court:								
Utility	247	135	35	503	187	170	48	321
Design	17	9	35	45	7	15	68	34
Reissue	6	14	70	6	7	4	36	16
Plant	0	0	0	1	1	0	0	1
Total	270	158	37	555	202	189	48	372
Court of Claims:								
Utility	17	8	32	17	16	12	43	11
Design	0	0	0	0	0	0	0	0
Reissue	0	1	100	0	1	1	50	0
Plant	0	0	0	0	0	0	0	0
Total	17	9	35	17	17	13	43	11
Grand Total	368	357	49	639	287	356	55	449

*This table compares data for 1973–1977 with data for 1968–1972 which were previously published in 144 Patent, Trademark & Copyright Journal at F-1 (Sept. 13, 1973). The methodology of the two studies is the same—the validity or invalidity of a given patent has been determined by tabulating the holding of the highest court in which the litigation was conducted and such holdings were made in each five year period. Where two or more courts concurred in holding the same patent valid or invalid, that patent was counted as valid or invalid only once in each five year period. Consequently, no attempt should be made to add tabulated data for 1973–1977 to similar tabulated data for 1968–1972 to obtain overall tabulated data for 1968–1977. Inasmuch as some holdings of validity or invalidity at the District Court level in 1968–1972 were duplicated (either affirmed or reversed) at the Court of Appeals level in 1973–1977, such an attempt to add tabulated data would result in some patents being counted twice in the 10 year period.

Explanatory Remarks

In the interest of clarity and elimination of any misconception as to the meaning and interpretation of the data tabulated above, the following explanation is offered.

Number of Patents: The number of individual patents litigated during the 1973–1977 five year period, in which the suit was terminated by dismissal, consent judgment, summary judgment, or holdings of validity, invalidity, injunction, etc., was approximately 2,017 (2,025 in 1968–1972). Of those, the number of patents in which there was judgment of validity, invalidity or infringement totalled 876[1] (989 in 1968–1972)

For reference purposes, it is noted that during this five year period, the Patent and Trademark Office issued approximately 382,000 patents. The percentage of patents litigated (2,017) with respect to the total number of patents issued over this five year period is 0.53%. Further, the number of patents issued by the Patent and Trademark Office covering the time span from the earliest reported litigated patent included in this study (#2,129,332) to the latest reported litigated patent included in the study (#3,995,102) is approximately 1,865,000. The percentage of patents litigated (2,017) with respect to this number is 0.011%.

Patents Held Valid or Invalid: Methods of calculation of validity data vary. For instance, the data may be (a) inclusive of each individual court holding of validity or invalidity, (b) limited to holdings within each of the judicial circuits, (c) restricted to a single holding representing the final adjudication of the patent's validity, or (d) directed only to the decisions of the appellate courts.

[1] Excluded from that number are: (1) awards of priority for or against patentees in interference proceedings; (2) nine patents in which invalidity was predicated on collateral estoppel (*Blonder-Tongue Laboratories, Inc. v. Univ. of Illinois Foundation,* 402 U.S. 313 (1971)) resulting from an adjudication of invalidity occurring prior to January 1, 1973; (3) reported holdings of validity (three) or invalidity (one) rendered by state courts; and (4) holdings of validity (four) by the International Trade Commission.

In this study, the validity or invalidity of a given patent has been determined by tabulating the result of decision of the highest court in which the litigation was conducted and such holdings were made. Where two or more courts concurred in holding the same patent valid or invalid, that patent was counted as valid or invalid only once. In the rare instances where conflicting decisions on validity by coordinate tribunals have occurred, the patent was counted as invalid. It was noted that many court opinions and § 290 notices did not print out whether all, or only some, of the claims of a patent were held valid or invalid. Where it was observed that the court held only some claims of a given patent invalid and made no explicit findings of validity with respect to the remaining claims, the patent was counted as invalid, notwithstanding the presumption of validity accorded the remaining claims by 35 U.S.C. 282 and with full recognition that the resultant statistics would be biased unfavorably toward invalidity as a result. Where a court did explicitly hold some claims valid and other claims invalid, the patent was counted as valid, inasmuch as the patent remains in force with valid claims therein. A consent judgment of validity or invalidity, where denominated as such in the § 290 notice, was counted as a holding of validity or invalidity.[2] However, infringement and injunction holdings, without any mention of validity, were *not* presumed or counted as holdings of validity.

[2] The number of consent judgments of validity totalled approximately 50, and there was one consent judgment of invalidity.

Rate of Patent Invalidity: The term "rate of patent invalidity" appears to have no recognized definite meaning. Such rate may be calculated as a percentage of total patents litigated or only as a percentage of those litigated patents having a holding of validity or invalidity. The latter base has been employed in this study.

It is to be stressed that there is no evident link between the characteristics of the litigated patents which caused them to be litigated and the characteristics of the remaining unlitigated patents which would justify the conclusion that the rate of invalidity noted above can be extrapolated to, or is in any way representative of, the total patent universe.

Infringement: Instances of infringement are not always indicated in the report of the courts' decisions. Often there is no explicit holding that a claim is infringed, although such conclusion would be implicit because the court enjoined the defendant from making, using or selling certain devices. Accordingly, in the absence of any countervailing information, an injunction has been counted as a holding of infringement for statistical purposes. The number of individual patents held to be infringed totalled approximately 449, compared to 540 in the period of 1968–1972.[3]

[3] For the period 1968–1972, the infringement tabulations appearing in the table correspond to holdings of infringement, i.e., many patents were held—and counted—as infringed more than once. In contrast, for the period 1973–1977, a given individual patent held infringed more than once was counted as infringed only once.

Discussion

The Patent and Trademark Office views this study as far more comprehensive and accurate than studies heretofore undertaken which have examined merely, for the most part, reported decisions of the Courts of Appeals. Those previous studies are included as a bibliography to this study.

It is to be noted that the percentage of litigated patents held invalid by the Courts of Appeals (69%) in the five year period 1973–1977 covered by this study corresponds closely to the invalidity percentages found by the other authors and studies mentioned in the bibliography for the period 1940–1972, including the 70% rate found by the previous PTO study for the period 1968–1972. However, the inclusion in this study of unappealed and unreported judgments of the District Courts to obtain a resultant total rate of patent invalidity of approximately 55% places the entire litigated patent validity/invalidity picture in better perspective.

Nevertheless, certain inadequacies in the information available from the 35 U.S.C. 290 notices could result in potentially erroneous statistics even in this study. In that connection, it was found that the notices submitted under 35 U.S.C. 290 had the following defects :

(1) Notices of decisions rendered were not filed in *every* case ; [4]

[4] On many occasions, the existence and result of District Court litigation conducted in 1973–1977 was discovered only on reading a later-reported appellate court decision and opinion.

(2) When filed, the notices were not necessarily submitted promptly ; and

(3) The data in the notices were incomplete, and, in many instances, incorrect. For example, mere notations of dismissal, which were often indiscriminately employed in the § 290 notices, were found to stand for holdings of validity or invalidity upon comparison with any reported decisions corresponding to those § 290 notices.

A particularly serious problem appears to have developed with respect to 35 U.S.C. 290 notices filed by clerks of the U.S. Circuit Courts of Appeals. Few notices of decision rendered in the Circuit Courts have been received by the Patent and Trademark Office and published in the Official Gazette in the period 1973–1977. Only the 6th Circuit Court of Appeals and, to a lesser degree, the 1st Circuit Court of Appeals, have more or less consistently filed such notices with the Office. That factor, coupled with an increasing tendency by the Federal Courts in general since 1973 to decide litigation accompanied by an unpublished opinion,[5] gives reason for concern with respect to the completeness and accuracy of the data tabulations which have been gathered largely from reported decisions of the Courts of Appeals.

[5] For example, the published decision and opinion of the District Court in *Azoplate Corp.* v. *Silverlith, Inc.*, 367 F. Supp. 711, 180 USPQ 616 (D.Del. 1973) (concerning which the Office received notice under § 290) was affirmed, 506 F. 2d 1050, 184 USPQ 577 (3rd Cir. 1974) without published opinion and without apparent notice to the Office of the Circuit Court's decision. For purposes of this study, no attempt was made to "Shepardize" reported or unreported District Court decisions involving nearly 400 patents to determine whether a Circuit Court decision in the same case appears in a table of unpublished decisions and opinions.

Additionally, it may be noted that a summary limited to a "five year" period involves certain factors that give an incorrect impression. Thus, aside from the obvious effects of subsequent appeals, a dismissal in one suit (within the five year period) subsequent to, or prior to, a final adjudication of the same patent's validity, or invalidity, in another suit (outside the five year period) has significance different from that of a dismissal in the absence of any other decision. In other words, the complete history of the patent is necessary to a proper appreciation of the patent's validity or invalidity.

Bibliography

(1) Baum, "The Federal Courts and Patent Validity : An Analysis of the Record," 56 JPOS 758 (December 1974).

(2) Bjorge and Beha, "Patent Validity/Invalidity Study," Policy Planning Staff Project 73–2, Patent and Trademark Office, U.S. Dept. of Commerce, April 3, 1974.

(3) Chognard, "Patent Litigation and Validity," 41 JPOS 291 (1959).

(4) Dearborn et al., *Encylopedia of Patent Practice and Invention Management* (Calvert), page 22, et seq. examined 734 adjudicated patents in the circuit courts from 1953–63.

(5) Federico, "Adjudicated Patents 1948–54," 38 JPOS 233, 244, reported on adjudications from 1925–54.

(6) Gausewitz, "Brief in Support of Proposed Amendment to Section 103, Title 35, Patents, U.S. Code," 51 JPOS 290 (May 1969).

(7) Horn et al., "The Federal Courts' View of Patents—A Different View," 55 JPOS 134 (March 1973) studied 597 adjudicated patents from January 1961 through December 1970.

(8) Koenig, dissertation submitted in partial fulfillment of requirements for S. J. D. degree, New York University Law School, December 1971. She studied adjudications of 854 patents from 1953–67.

(9) Koenig, *Patent Invalidity: A Statistical and Substantive Analysis, C.* Boardman Co., Ltd. : New York, 1974).

(10) Moxon, "Patent Invalidity Study," unpublished, January 17, 1973, examined 284 adjudicated patents in the period 1967–71.

(11) Senate Report No. 167, 90th Congress, 1st Session examined validity of 46 patents before *Graham* v. *John Deere*, 383 U.S. 1 (1966) and 38 patents subsequent to *Graham*.

(12) Tegtmeyer, "For Greater Patent Validity," American University Law Review, Vol. 19, No. 1 (December 1969) studied 869 adjudicated patents from 1953–68.

(13) U.S. Patent Office, *Further Studies on Patent Validity/Invalidity on a Circuit-by-Circuit Basis*, 1968–1972, 165 Patent, Trademark & Copyright J. at D–1 (Feb. 14, 1974).

(14) U.S. Patent Office, *Patent Office Study of Court Determinations of Validity/Invalidity*, 1968–1972, 144 Patent, Trademark & Copyright J. at F–1 (Sept. 13, 1973).

See also Howard T. Markey, "The Status of the U.S. Patent System-Sans Myth, Sans Fiction," 59 JPOS 164 (March 1977), who summarizes the results found by some of the above authors or studies, and includes additional bibliography.

Additional Information

For additional information concerning the Patent and Trademark Office's 1973–1977 study, contact Mr. Gerald H. Bjorge, 703–557–3534.

Date: Nov. 1, 1979.

LUTRELLE F. PARKER,
Acting Commissioner of Patents and Trademarks.

REISSUE APPLICATIONS FILED

Notice under 37 CFR 1.11(b). The reissue applications listed below are open to inspection by the general public in the indicated Examining Groups and copies may be obtained by paying the fee therefor (37 CFR 1.21(b)).

Re. 29,786, Re. S.N. 062,573, Filed Jul. 31, 1979, Cl. 334/86, COMBINED 82-POSITION UHF AND VHF TELEVISION TUNER WITH MEMORY FINE TUNING, Morton L. Weigel, Owner of Record: *Sarkes Tarzian, Inc., Bloomington, Ind.,* Attorney or Agent: Richard D. Mason, et al., Ex. Gp.: 256

3,062,536, Re. S.N. 066,883, Filed Aug. 16, 1979, Cl. 271/195, SHEET STRIPPING APPARATUS, John Rutkus, Jr., et al., Owner of Record: *Haloid Xerox Inc., Rochester, N.Y.,* Attorney or Agent: Harvey M. Brownrout, et al., Ex. Gp.: 313

3,347,691, Re. S.N. 066,884, Filed Aug. 16, 1979, Cl. 427/20, XEROGRAPHIC DEVELOPMENT, James M. Lyles, Owner of Record: *Xerox Corporation, Rochester, N.Y.,* Attorney or Agent: Harvey M. Brownrout, et al., Ex. Gp.: 162

3,378,276, Re. S.N. 056,181, Filed Jul. 10, 1979, Cl. 280/43.23, HYDRAULICALLY OPERATED DEMOUNTABLE RUNNING GEAR WITH DIAGONAL RAMS, George M. Fulmer, Owner of Record: *Geichner Mobile Systems, a division of The Union Corporation, Verona, Pa.,* Attorney or Agent: Martin Fleit, et al., Ex. Gp.: 316

3,578,827, Re. S.N. 069,319, Filed Aug. 24, 1979, Cl. 308/5, ARRANGEMENT FOR PROVIDING PRECISE MOVEMENT, Joseph E. Smith, Owner of Record: *Excellon Industries, Torrance, Calif.,* Attorney or Agent: Richard F. Carr, et al., Ex. Gp.: 243

3,601,379, Re. S.N. 069,189, Filed Aug. 23, 1979, Cl. 266/192, COOLING STRUCTURE FOR A METALLURGICAL FURNACE, Karl-Heinz Langlity, et al., Owner of Record: *Demag Aktiengesellschaft, Duisburg, Germany,* Attorney or Agent: David Toren, et al., Ex. Gp.: 111

3,755,715, Re. S.N. 058,011, Filed Jul. 16, 1979, Cl. 361/120, LINE PROTECTOR HAVING ARRESTER AND FAIL-SAFE CIRCUIT BYPASSING THE ARRESTER, Milton A. Klayum, et al., Owner of Record: *Reliable Electric Company, Franklin Park, Ill.,* Attorney or Agent: Richard R. Trexler, et al., Ex. Gp.: 212

3,756,212, Re. S.N. 932,453, Filed Aug. 10, 1978, Cl. 123/148 E, ARRANGEMENTS FOR ELECTRONICALLY DETERMINING AND ADJUSTING THE IGNITION TIME OF AN INTERNAL COMBUSTION ENGINE, Gunter Schirmer, et al., Owner of Record: *Robert Bosch G.m.b.H., Stuttgart, Germany,* Attorney or Agent: Michael J. Striker, et al., Ex. Gp.: 340

3,869,182, Re. S.N. 068,780, Filed Aug. 22, 1979, Cl. 308/187.2, BALL BEARING, Nils Bertil Glifberg, Owner of Record: *Svenska Sockerfabriks Aktiebolaget, Malmo, Sweden,* Attorney or Agent: Joseph A. DeGrandi, et al., Ex. Gp.: 243

3,903,665, Re. S.N. 957,516, Filed Nov. 3, 1978, Cl. 52/171, HEAT ENERGY TRANSMISSION CONTROL PANEL, David C. Harrison, Owner of Record: *Inventor,* Attorney or Agent: George M. Schwab, Ex. Gp.: 350

3,915,501, Re. S.N. 070,934, Filed Aug. 29, 1979, Cl. 299/67, MOUNTING ARRANGEMENT FOR IMPACT ROCK-BREAKER, Delwin E. Cobb, et al., Owner of Record: *Caterpillar Tractor Co., Peoria, Ill.,* Attorney or Agent: Ralph E. Walters, et al., Ex. Gp.: 354

3,936,566, Re. S.N. 070,711, Filed Aug. 29, 1979, Cl. 428/323, PRESSURE SENSITIVE RECORD MATERIAL EMPLOYING DIARYL ALKANE SOLVENTS, Atsushi Sato, et al., Owner of Record: *Nippon Petrochemicals Co., Ltd., Tokyo, Japan,* Attorney or Agent: Arnold B. Christen, et al., Ex. Gp.: 164

3,937,865, Re. S.N. 969,363, Filed Dec. 14, 1978, Cl. 428/413, REINFORCED PLASTICS CARRIER FOR PRINTED CIRCUITS, Hendrik Jongetjes, Owner of Record: *Papierfabrieken Van Gelder Zonen N.V., Amsterdam, Netherlands,* Attorney or Agent: John P. Snyder, et al., Ex. Gp.: 160

4,030,213, Re. S.N. 067,362, Filed Aug. 17, 1979, Cl. 36/30 R, SPORTING SHOE, Alexander C. Daswick, Owner of Record: *Inventor,* Attorney or Agent: Vernon D. Beehler, et al., Ex. Gp.: 353

4,033,846, Re. S.N. 053,530, Filed Jun. 28, 1979, Cl. 204/247, APPARATUS FOR GAS COLLECTION IN ALUMINIUM SMELTING FURNACES, Arne Engesland, Owner of Record: *Lista OG Mosjoen Aluminiumverk, Elkem Aluminum A/S & Co., Oslo, Norway,* Attorney or Agent: William D. Lucas, et al., Ex. Gp.: 114

4,047,607, Re. S.N. 070,457, Filed Aug. 28, 1979, Cl. 400/208, ARTICULATED RIBBON-GUIDING STRUCTURE, Frederick P. Willcox, Owner of Record: *Inventor,* Attorney or Agent: William D. Hall, et al., Ex. Gp.: 337

4,049,962, Re. S.N. 069,235, Filed Aug. 23, 1979, Cl. 250/202, LINE EDGE FOLLOWER, George H. Kallen, Owner of Record: *Union Carbide Corporation, New York, N.Y.,* Attorney or Agent: Harrie M. Humphreys, et al., Ex. Gp.: 252

4,057,977, Re. S.N. 085,436, Filed Oct. 25, 1979, Cl. 62/324, REVERSE CYCLE HEAT PUMP CIRCUIT, Leo B. Chambless, Owner of Record: *General Electric Company, Louisville, Ky.,* Attorney or Agent: Frederick P. Weidner, et al., Ex. Gp.: 344

4,066,659, Re. S.N. 065,873, Filed Aug. 13, 1979, Cl. 260/326.13 F, METHOD OF PREPARATION OF 3-(3-CARBOXY-4-HYDROXYPHENYL)-4,5-DIHYDRO-2-PHENYLBENZ (E)INDOLE AND VALUABLE INTERMEDIATES RELATED THERETO, Richard C. Effland, Owner of Record: *American Hoechst Corporation, Bridgewater, N.J.,* Attorney or Agent: Henry W. Koster, Ex. Gp.: 122

4,075,341, Re. S.N. 032,205, Filed Apr. 23, 1979, Cl. 424/258, 2-SUBSTITUTED PHENYL-5-TRIAZOIS [5,1-A] ISOQUINOLINE COMPOUNDS, Amedeo Omodei-Sale, et