Patents at Colleges and Universities

Guidelines
for the Development
of Policies

1985

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RELATIONS

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USE OF THE UNITED STATES patent system by colleges and universities has increased dramatically in recent years. The reasons are numerous, but much of the increased activity is due to the interest of industrial companies in commercializing inventions and discoveries emanating from the academic sector.

Patent rights are often necessary to the successful development of inventions. Those rights, which vary from country to country, are defined by the patent laws of each country.

In the United States, the patent system is based on the Constitution, and a complex legal specialty—patent law—has evolved over the years. This brochure is concerned primarily with United States patent law, and does not deal with the differences in various foreign patent systems. Nor does it deal with any more than the essential elements of the United States laws that affect the conduct of research at institutions of higher education.

An adequate policy statement and a level of understanding sufficient to handle patentable

5. To provide individual incentives to inventors in the form of personal development, professional recognition, and financial compensation.

6. To assist in the fulfillment of the terms of research grants and contracts.

7. To safeguard the intellectual property represented by worthwhile inventions.

8. To comply with applicable federal laws and regulations when the institution accepts federal funds for research.

9. To facilitate the development of collaborative research agreements and contracts with industrial sponsors.

Nature and Scope of Patents

A patent is a property right granted by a sovereign nation, which gives the holder the exclusive right to exclude others from the manufacture, use, and sale of an invention in that country for a period of years. As property, it may be sold or assigned, pledged, mortgaged, leased (licensed), willed, or donated, and be the subject of contracts and other agreements. Commercialization may be accomplished by the owner exercising the exclusive rights referred to above or by permitting others to exercise rights under the terms of one or more licenses.

Each country has its own requirements on patenting, including standards as to what is patentable, formalities for establishing a patent, the effective date and duration of the patent grant, requirements relating to the use of a patent, and annual taxes to maintain it in force.

Under United States standards of patentability, all patent applications are examined for novelty, utility, and nonobviousness. It is the applicant's responsibility to establish these elements to the satisfaction of the U.S. Patent and Trademark Office before the patent is allowed to issue. Novelty means that the invention is new; that is, it has not

patent statutes provide for a procedure wherein a third party can cause the reexamination of an issued patent based on prior art not considered in the original examination of the patent application if the Commissioner of Patents and Trademarks rules that a substantial new question of patentability exists.

The patent laws set forth those classes of inventions eligible for patenting. Those statutes provide that any inventor who "invents or discovers a new or useful process, machine, manufacture, or composition-of-matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of the law."

The scope of statutorily patentable classes of inventions has been expanded to include life forms resulting from genetic engineering. When a U.S. patent application claiming a life form is filed in the Patent and Trademark Office, it is necessary that a sample of the biological material be made available to third parties only when and if the U.S. patent issues.

The U.S. law also allows the patenting of new varieties of asexually produced plants, other than tuber-propagated plants or plants found in an uncultivated state.

Design patents, which relate to the ornamental appearance of useful articles, are also provided for in the United States, but are seldom encountered in an academic setting.

Things that cannot be patented in the United States include:

1. Theories
2. Ideas
3. Plans of action
4. Results
5. Methods of doing business
6. Discoveries of laws of nature or scientific principles

2. Administrative procedures, often spelled out in the patent policy itself, and a designated person responsible for patent matters to provide a focal point for patent information, to serve as a collection point for invention disclosures, and to assure their evaluation and appropriate processing.

3. A licensing capability to transfer patented technology to qualified manufacturers for development and marketing. This may be accomplished by an in-house patent management staff, by an institution-affiliated foundation, or by arrangements with invention management agencies. None of these three requirements need be expensive to maintain.

Elements of an Institutional Patent Policy

An institution seeking to establish or clarify its position regarding rights to and disposition of patentable inventions should develop a statement of patent policy. The statement should be broad enough to encompass all foreseeable patent situations, yet specific enough to allow administration of the policy without frequent recourse to policy deliberations by an advisory committee. The statement should briefly define the administrative structure for processing a patentable discovery and it should be directly and succinctly presented for clear understanding by lay persons. The basic purpose of a patent policy is to define the rights and obligations of both the inventor and the institution regarding patent matters. To the extent that policies on consulting deal with patents, it is advisable to take them into account when formulating a patent policy.

Some institutional patent policies are incorporated into patent manuals that provide the reader with a brief orientation on patent matters. These publications can be helpful to neophyte inventors, but they should be prepared so that the institutional policy is clearly distinguishable from general instructional materials.

2. By a state statute stipulating that inventions made in state institutions or by state employees be disposed of in a predetermined manner.

3. By a person giving his or her written assent to the stated patent policies of the institution, which policies set forth an obligation by the individual with respect to inventions.

4. By a stated patent policy containing a patent commitment that is established by the governing board and brought to the attention of individuals, but to which such persons are not required to give their personal formal assent.

5. By the presence of a policy allowing the individual to dispose of inventions as determined by the institution or to retain title, at his or her option.

To allow an institution conducting federally sponsored research to fulfill its contractual obligations, it is essential that every person engaged in such research, or using federal funds, execute a valid, written, binding commitment to assign inventions to the institution or the government.

Rights of the Parties. The policy should specify the rights that the institution, the inventor, and sometimes outside sponsors have in an invention. The institution usually receives an irrevocable assignment of title to the patent application together with a commitment by the inventor to cooperate in executing legal documents, reviewing patent prosecution papers, and, in some cases, assisting in the development or marketing of the patent. The inventor is entitled to receive from the institution a clear statement of his or her rights and share of income and the institution's plans for bringing the invention into public use. Sponsors' interests in these situations are usually represented by the institution based on the terms of the research agreement. Sponsor equities in patents must be scrupulously observed by the institution to permit it to perform and maintain its contractual obligations.

Income-Sharing Arrangement. Educational institutions that accept assignment of inventions and

In a large institution, it is advisable to have at least a full-time patent administrator. In a smaller institution, this individual may come from one of the science or engineering departments and spend only a few hours a month on duties related to patents. Regardless of the size of the patent operation, there should be at least one person who understands the essential requirements for handling inventions and serves as a campus focal point for all patent-related activities.

The licensing of patentable inventions typically occurs in one of three ways: in-house, by an institution-affiliated foundation, or by a patent management organization.

In-house. In this case, the institution controls and performs the invention evaluation that precedes the decision to seek a patent, to file a patent application, and to license. This option is initially more costly because it requires an early outlay for patent application costs and the overhead costs of patent administrative services. However, if sizable royalties are earned, this approach may be the most advantageous overall.

Institution-affiliated foundation. This option can have the advantages of better availability of funds to carry on the development of inventions (a speculative activity) and greater freedom to employ commercial methods to develop and promote the uses of inventions. Assuming equal capabilities to develop inventions, the presence of a foundation may result in less income for the institution because of the foundation's expectation of sharing income. If the foundation's board consists primarily of representatives from the institution, then no less income will flow eventually to the inventor.

Both the in-house management and the institution-affiliated foundation management of patents allow the inventor to work closely with the unit promoting the invention. The inventor's ready assistance and background often are crucial to getting the invention covered by a patent and "off the ground" as a commercial success.

fully aware of the situation and the reason for a particular institutional policy, the chances are improved that they will support the administration's efforts to negotiate acceptable arrangements.

When a research sponsor finds the institutional patent policy acceptable, there is normally little delay in accepting funding. Where there is a policy conflict, months of negotiation may be required. Since changes take place in government regulations and in the policies of private sponsors, staff members in the office of research administration should monitor the incoming grants and contracts to insure that no changes have been made in the patent requirements and other terms and conditions. If there are changes, the office responsible for patent matters should be alerted to interpret these alterations with regard to the institution's own policy and, if necessary, assist research administrators in preparing and presenting the necessary arguments to the sponsor to effect a modification of the terms of the contract.

Federal policy. There was a major change in federal patent law with the enactment of P.L. 96-517 in 1980. This change was designed to enable institutions and small businesses to more easily retain title to inventions made under a federal grant or contract. The law took precedence over approximately 26 different agency policies.

Testimony in the Congressional Record showed that less than four percent of federally owned and managed inventions were commercialized. Data obtained after enactment and implementation of P.L. 96-517 indicated that about one-third of inventions in which institutions elected to retain title were commercialized.

P.L. 96-517, enacted by Congress and signed by President Carter on December 12, 1980, came into effect on July 1, 1981. Implemented by OMB Circular A-124, it provides for title retention by nonprofit institutions and small businesses for inventions arising under funding agreements with any federal agency except the Tennessee Valley

Both P.L. 96-517 and P.L. 98-620 are codified at 35 USC 200-212.

Patent License Agreements

A patent owner, having the right to exclude others from practicing the patented invention, may also give permission to others to infringe. This is normally done by a contract, usually referred to as a license. (While a license may also arise from the conduct of the patentee, this publication is concerned only with those licenses established by contract.) Licensing restrictions imposed on federally funded inventions are found at 35 USC 202.

A license agreement is the usual method by which a patented invention developed in an educational institution is put into public use. Such an agreement sets forth the understanding of the parties and covers the following points, among others:

1. The term of the license, which is often until the end of the life of the patent, but may be shorter.

2. The territory of the license, which may vary from a single country (typically the United States) to worldwide, depending on the extent of patent coverage.

3. A license grant, which may be either exclusive, nonexclusive, limited by field of use, limited in time, or in some other way. It is usually necessary to grant an exclusive license where large expenditures of time and money must be made by the licensee in order to get the invention into the market, such as in the case of a new drug.

4. An exclusive license typically requires payment of a license issue fee or some other initial consideration by the licensee. The amount of the fee will vary, depending on the value of the invention being licensed.

5. Earned royalty rates depend on a variety of factors such as the value of the invention, the degree of development of the invention, and whether the license is exclusive or nonexclusive.

and about which an institution is unsure of the commercial prospects. For example, in the case of genetically engineered life forms, it is sometimes possible for an investigator to publish freely, yet retain the genetically engineered life form per se as a trade secret. Thus the life form, even though unpatented, may itself be licensed to third parties having an obligation not to make it available to others.

In the course of evaluating an unpublished invention, it is often worthwhile to determine if the invention has commercial merit by disclosing it to prospective licensees. In order to protect the institution's rights in the invention as well as foreign patent rights, disclosure of such unpublished inventions to third parties should be made only after the third party has signed a suitable secrecy agreement. By determining whether or not there is commercial interest in an invention, the institution can make a decision as to whether or not the expense of filing a patent application can be justified. In fact, it is often the case that a commercial organization will be sufficiently interested in such an invention that it will underwrite patent expenses in return for the right to obtain a license to the invention.

Invention Disclosures

An invention disclosure in this context is a complete description of an invention written by the inventor to report an invention to the institution or a sponsor. Along with the original laboratory notebooks and records, it is one of the most important documents in an institutional patent program, and the original must be retained by the institution. The invention disclosure is based on the information contained in laboratory notebooks. (See Appendix A, "Guidelines for Keeping Laboratory Records.")

It is customary for the office responsible for patents to provide a disclosure form or set of guidelines for preparing disclosures. Whichever is used, completeness is more important than format. The invention disclosure should be couched in good

development. (A typical set of instructions for preparing invention disclosures appears as Appendix B.)

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Goldscheider, Robert, *Eckstrom's Licensing in Foreign and Domestic Operations: Forms,* Clark Boardman Company, Ltd., New York, 1978–79 (revised annually).

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Appendix A

Guidelines for Keeping Laboratory Records

1. Legibly enter in ink concurrent with your daily work a complete and accurate record of your research activities and sign and date each page.

2. Whenever possible, preface each series of pages with a brief heading of the most generic nature of the work performed (that is, statement of problem) rather than what you expect or hope will be the results achieved. Avoid gratuitous conclusions.

3. Similarly, when an experiment or run is completed and it represents the reduction to practice of only one or more species, include a paragraph setting forth still other species and parameters of variables stating the reasons you expect them to be effective in order to later provide a valid basis for a generic claim. This is conveniently included under a "Modifications and Extensions" heading and need not include complete data at that time.

4. Faithfully have your work corroborated by having your notebooks witnessed by dated signature of an associate (not a coworker or one who collaborates in your research area and who could be or is a joint inventor). Notation of witness should appear after the last line of your experiment and not necessarily only at the bottom of every page. If necessary or desirable, explain in detail the work performed.

5. Prior to destroying any samples, run sheets, or records of any kind, check with the director to make certain they are of no value to any project member.

6. Clear all proposed publications (including abstracts) with the director in order to most fully protect and preserve property rights in research.

7. Record your observation of physical results even if not fully appreciated or understood at that time.

which the invention pertains. The basis for this requirement is that an accurate description will permit a future patent application to be properly classified in the Patent and Trademark Office, and therefore it is helpful if the inventor can accurately categorize the invention within the field of his or her endeavor.

D. *Description of the Prior Art.* A statement of the prior art known to the applicant should be set forth. This will include a description of the various existing devices or processes and their shortcomings that are remedied by the present invention. If published material such as scientific papers, patents, or commercial literature relating to or describing the prior art is known to exist, it should be cited (or supplied, if available).

E. *Summary of the Invention.* In this section describe in detail:

1. How the invention is designed. Where alternative designs are available, describe these and select the preferred embodiment. To clarify, attach and refer to descriptive drawings, flow charts, circuit diagrams, etc.

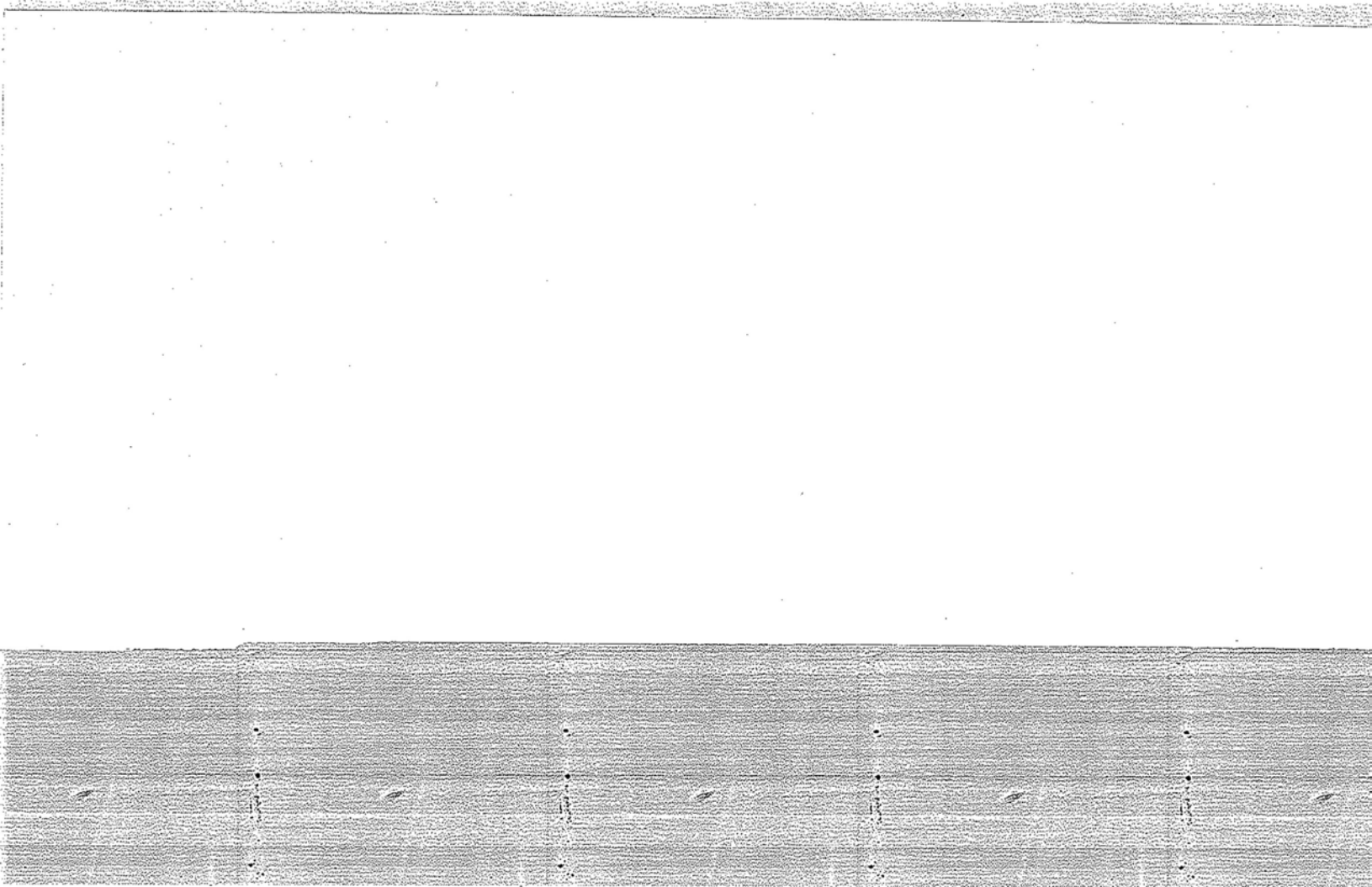
2. Ranges of operating conditions, such as time, temperature, or pressure, where these are relevant to the invention. Preferably these should be in terms of broad ranges of conditions and narrower optimum or preferred ranges. Where materials may be varied, sufficient specific materials should be enumerated to illustrate the range of usable materials. A sufficient number of specific working examples should be set forth to illustrate the variations in conditions and materials.

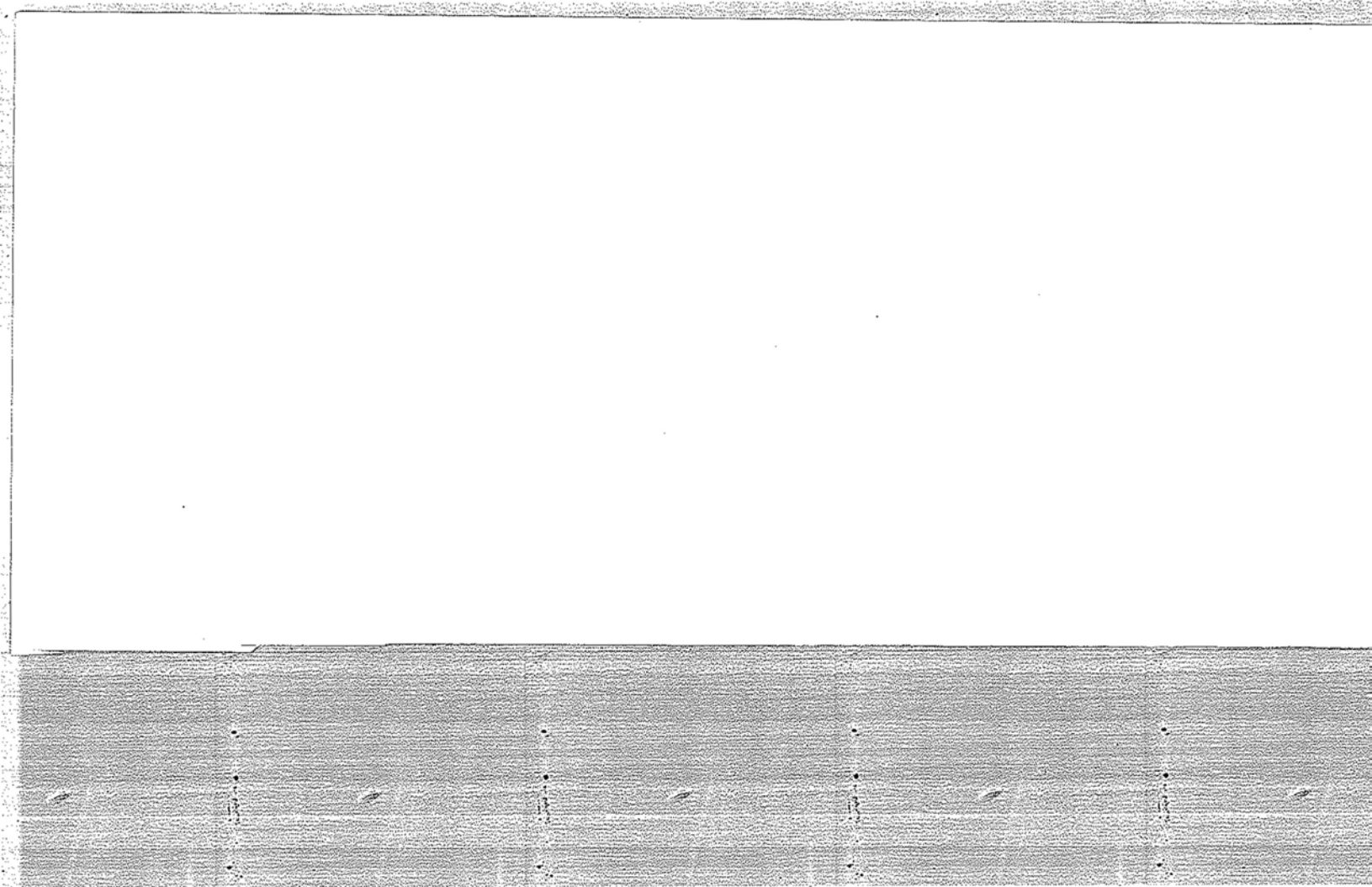
3. How the invention operates to produce a result or results not achieved in the prior art.

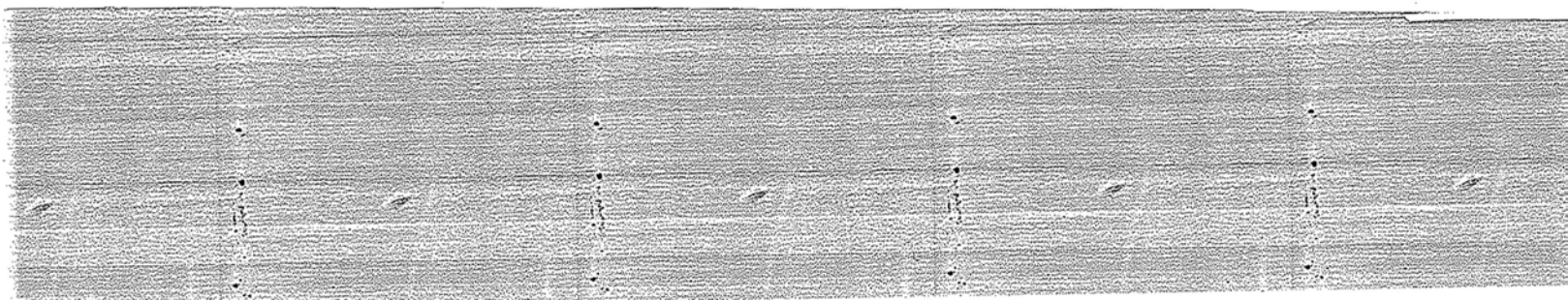
4. The new concept that has been invented: describe succinctly.

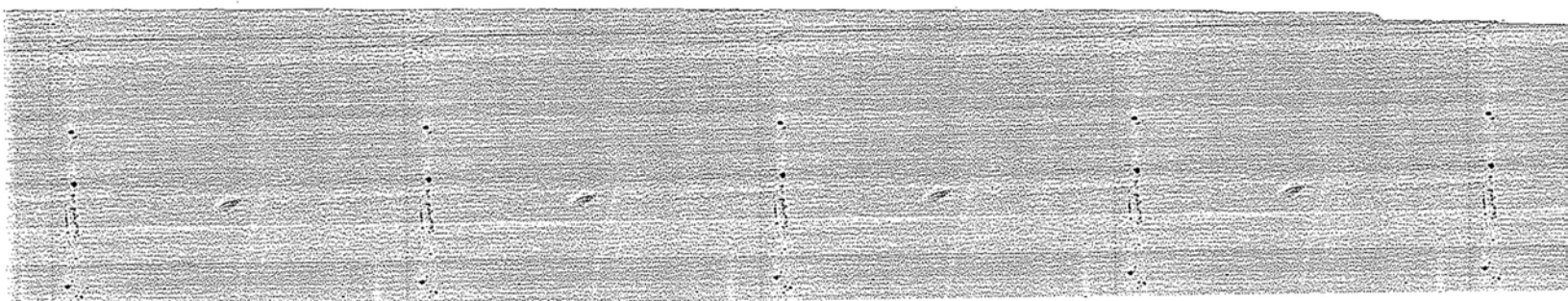
5. All advantages such as efficiencies, cost benefits, etc. produced by these new results.

F. *Utility of the Invention.* Indicate briefly and in general terms, particularly for chemical cases.









Where the utility is evident from the earlier sections, this section may be omitted.

G. *Publication of the Invention.* List (and append, if possible) all publications in which the invention was described or occasions on which it was described orally to others; for example, at symposiums.

H. *Budget Numbers Used to Defray Research Costs.* List all budget numbers, including federal grant or contract, Hatch Act, McIntyre-Stennis, Animal Health and Disease Act, or Colleges of 1890 and Tuskegee Institute Act, all administered by USDA, used to defray any research costs that are invention-related.

I. *Signatures, Witnesses, and Dating.* Each inventor should sign the disclosure before a witness who understands the invention. The witness should also sign. Each set of signatures (inventor and witness) should be dated.

8. Use the last four to five pages for an index, as desired.

9. Start a new page for each new experiment and draw a continuous diagonal line through unused portions of pages remaining at the close of an experiment.

10. Avoid erasures, but where necessary cross out with a single line.

Appendix B

Guidelines for Preparing an Invention Disclosure

The following guidelines illustrate the preferred layout and content for invention disclosures. A disclosure is a description of the invention. Completeness is very important in preparing the disclosure so that it can serve as a basis for a worthwhile patent search and for preparing the patent application. To be complete, the disclosure should include all the pertinent experimental data available, both pro and con, which has a bearing on the inventive concept. (The data, if voluminous, may be attached as an appendix.) It is also important that the inventor have considered the various alternative ways of constructing (in the case of apparatus) or performing (in the case of a process) the invention. This is something a potential infringer would do, and having the alternative embodiments on hand permits the preparation of a patent application that is broad in scope. The inventor should, however, specify which embodiment is preferred.

The Disclosure

The disclosure should contain the following elements:

A. *A Title.* The ideal title is brief but comprehensive, technically accurate, and descriptive.

B. *An Abstract of the Invention to Be Disclosed.* (of about 100 words).

C. *Statement of the Background of the Invention.* The disclosure should state the field of art to

The following topics typically are found in institutional patent policies:

1. Preamble
2. Applicability of the policy
3. Establishment of the inventor commitment
4. Rights of the parties
5. Income-sharing arrangement
6. Administrative arrangements

Preamble. Although optional, this section is recommended. It should relate the basic purposes of the institution, its obligations to the public, and the scholarly aims of its faculty to the institution's interest in patents and ways in which patents serve these ends. The preamble should be kept short and to the point and establish a sound foundation for what is to follow.

Applicability of the Policy. This section defines research situations, sources of funds, all categories of persons who may invent (that is, faculty, staff, and students), activities in which such persons are engaged, and any combinations of these elements that would bring an inventor into the scope of, or exempt him or her from, provisions of the policy. Educational institutions do not usually lay claim to all inventive concepts generated by their employees or students. Rather, they limit themselves to those that arise as a result of employment relationships or use by the researcher of institutional resources, facilities, or funds.

Establishment of the Inventor Commitment. Once an institution determines the criteria for applying the policy to individuals, its personnel may be required to dispose of inventions as determined by the institution in one of several ways (listed in generally decreasing order of enforceability):

1. By a formal written inventor agreement to assign. This is a legally enforceable contractual commitment by a person to dispose of inventions as determined by the institution.

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technical language rather than in legalistic style. If the invention becomes the basis for a patent application, a patent attorney describes the invention in language acceptable to the Patent and Trademark Office.

The invention disclosure is valuable in several ways. Writing the disclosure helps the inventor to mentally clarify the inventive concept and, if the concept has not yet been reduced to practice, to better organize his or her thoughts concerning it. A good disclosure is essential for the technical evaluation of the invention, for an accurate assessment of its commercial feasibility, for a determination of its patentability, and for reporting the invention to others.

The invention disclosure may later be used as the basis for preparation of the patent application. Well-prepared disclosures readily transmit the patentable idea to the patent attorney and aid in preparing an application that precisely describes the invention. The less attorney time required for this, the lower the cost to the institution. Finally, when witnessed laboratory records bearing earlier dates are not available, the invention disclosure can serve as proof of the date of conception, or at least of the earliest recording of the invention. It thus may be an important document in any controversy over which of two parties first made an invention.

Disclosures of inventions are required under the terms of federal research agreements and must be sufficiently complete and of a quality that will allow the federal agency to evaluate and prepare a patent application in the event that the institution does not elect to retain title. A complete and accurate invention disclosure is extremely important to outside patent management organizations because they often are not located in close proximity to the inventor. These organizations must, therefore, rely heavily on the inventor's written description to assess the worth of the invention and to determine any interest in accepting it and in carrying it forward to patenting and commercial

patents from inventors customarily share royalty income with them. The inventors' share generally ranges from 15% to 50% of net income, although there are a few policies that authorize income outside this range. Some institutions use sliding scales of income-sharing, with a greater percentage going to the inventor from the early receipts and the rate of sharing declining as the amount of royalties increases.

Most royalty-sharing arrangements are predetermined, that is, the inventor cannot negotiate a higher rate of sharing than stipulated in the institutional policy. Predetermined sharing rates have the advantage that it is unnecessary to pass judgment on the relative worth of each invention. They are easier to administer and usually reward the inventor equitably because a valuable invention's true merit is reflected in the greater total royalty revenues it generates, a portion of which inures to the benefit of the inventor. Where several individuals collaborate on a patentable invention, the inventors' income share is divided among them.

Administration and Licensing of Inventions

The provisions of the institutional patent policy usually determine the make-up of the policy board and the administrative organization for patents.

Patent policies usually specify that patent activities be placed under the administrative cognizance of an institutional patent committee appointed by the governing board, the president, or the faculty senate, with a majority of the individuals on the committee representing scientific or technical disciplines. It is not uncommon for a dean, a vice president, or even the president to serve as chairman. This committee often has the responsibility for recommending or establishing patent policy, adjudicating disputes, determining which inventions shall be the subject of patent applications, and overseeing the administration of patent matters in the institution.

A patent management organization. Patent development and marketing by one of these organizations has some distinct advantages: use of a patent development organization permits an institution to be active in patenting and licensing patent inventions through an agent with minimum financial outlay and may allow considerable legal, marketing, and patent management expertise to be tapped at no immediate cost to the institution. The chief disadvantage in this arrangement is, of course, that a substantial portion of any royalties earned is retained by the patent management group as compensation for services.

These three routes of invention development need not be mutually exclusive. Many institutions use more than one, depending on the type of invention reported and the location of the various capabilities needed to develop it.

It is essential for an institution (or anyone) involved with patents to have available the services of a patent attorney or agent. Because of the diversity of complex inventions generated in colleges and universities, it is important that the patent attorney prosecuting the patent application be competent in the area of technology to which the invention relates.

Patents and Sponsored Research

The patent policy of the institution may be an important consideration at the time a research proposal is submitted to a potential sponsor. It is important for administrators and the faculty performing such research to be aware of any sponsor patent policies that may conflict with the institution's patent policy. If this information is known in advance, the faculty member will be able to determine the institution's position with regard to the submission of proposals that are likely to produce policy conflicts. When there is a conflict it may be possible to negotiate the differences, thereby asssuring the availability of research funds. If the faculty is made

Authority. Institutions are required to have written agreements with their employees (except clerical and nontechnical employees) to assure compliance with their obligations to the federal government pursuant to P.L. 96-517. Many of the provisions of P.L. 96-517 are similar to those previously used in Institutional Patent Agreements with federal agencies. Some licensing restrictions and conditions are specified.

An institution must report inventions made under federal grants and contracts to the applicable federal agency within 60 days. The contractor or grantee then has a stipulated time within which to elect to take title to a reported invention. The government retains certain march-in rights to inventions not brought to commercialization after several years. For example, under P.L. 96-517, a university could grant an exclusive license to a large business under U.S. patent rights for only a limited period of time.

P.L. 98-620, signed into law on November 9, 1984, removed a number of constraints present in P.L. 96-517. Most notably, P.L. 98-620 (a) removed the limitation on the period of exclusivity that can be granted to large business firms under a license for U.S. patent rights; (b) granted nonprofit operators of government-owned contractor-operated facilities (GOCOs) the right to elect title to inventions made while operating such facilities; (c) expanded the definition of "invention" to include any novel variety of plant that is or may be protectable under the Plant Variety Protection Act; (d) assured that the reporting provisions of OMB Circular A-124 would be continued; and (e) assured that inventions arising under scholarships and other educational awards would be free of any federal government claim to title.

Regulations implementing P.L. 98-620 have been issued as 37 CFR Chapter IV, Part 401, and these regulations replace OMB Circular A-124 for inventions arising after November 8, 1984.

Generally, they are based on sales of the patented item and fall within a range for a given type of product. There is no "normal" earned royalty rate, however; each situation requires its own negotiation.

6. As a means of assuring diligent development, an exclusive license should provide for payment of minimum annual royalties after a given period of time. Failure to meet a minimum annual royalty payment would give the licensor the right to convert the exclusive license to nonexclusive or to terminate the license altogether.

7. An exclusive license should contain diligence milestones to be met by the licensee for developing and marketing the invention. Failure of the licensee to meet the milestones should give the licensor the right to terminate the license.

8. In an exclusive license, the institution should always retain an irrevocable, royalty-free license to practice the invention for its own research purposes. If federal funding were involved, a license to the government should be recognized in the agreement, and the constraints of 37 CFR 401 included.

9. All license agreements should provide for the licensee to indemnify the institution, particularly for product liability. In the case of licensees with limited assets, there should be proof of adequate insurance, with the institution named as co-insured.

Transfer of Technology Outside the Patenting Process

It is normal for educational institutions to provide considerable public utilization of their faculty's scientific findings aside from patents. Typically, this is accomplished by the publication in appropriate journals of information describing advances which in themselves are not patentable, but which in the aggregate are important contributions to the advancement of a given technology.

More complete concepts and technologies are often developed that may or may not be patentable,

7. Things immoral or injurious to health and the good of society
8. Works eligible for protection under the copyright laws

Patents and Publication

Patents and publications are closely related; publications can prohibit patenting under some circumstances. A patent is a specialized form of publication which describes an invention to the world at large in return for a limited period during which others can be excluded from using the invention. However, care must be taken against premature disclosure of an invention (by publication in a scientific or technical journal or by public use) in order to avoid placing the invention in the public domain and thus losing the right to obtain a patent.

In the United States a patent may be obtained if a patent application is filed within one year after the invention is disclosed through publication, sale, or public use. In many foreign countries a patent cannot be obtained if there has been any disclosure, even oral, of the invention to the public prior to the filing of a patent application. However, under an international convention, a patent application in the United States generally will preserve for one year the right to file patent applications abroad even though there has been publication of the invention after the filing of the U.S. patent application but before the foreign patent application is filed.

Dealing With Patentable Discoveries

In order to deal with discoveries that may have patentable significance, an institution should have the following:

1. A formal patent policy approved by the governing board, which defines the rights and obligations of the institution, the inventor, and, when applicable, a sponsor.

been previously publicly used, sold, or described in printed form. Utility means that the invention has a use and is not just a subject for additional research. In regard to the third requirement, the invention must be nonobvious at the time of invention to a person having ordinary skill in the art to which it pertains.

The duration of U.S. patents (other than those covering designs) is 17 years from the date of issue; they are not renewable. The life of drug patents may be extended a few years under certain limited conditions. The duration of most foreign patents is 20 years from the filing date. Maintenance fees in the United States on a patent issuing on an application filed on or after December 12, 1980, are now due 3½, 7½, and 11½ years after such patent issues, while maintenance fees in foreign countries are usually due on an annual basis and may be due while the patent application is pending.

Many of the statutory fees imposed by the Patent and Trademark Office may be reduced by half in the case of applications and patents assigned to "small entities," i.e., small businesses and nonprofit organizations such as colleges and universities. In order to establish small entity status, it is necessary for the assignee of the invention to file a statement in the Patent and Trademark Office. Statement forms are available from that office or from the patent attorney or agent filing the application.

It is the responsibility of a patent owner to police the patent against infringers. If a patent owner intends to keep a patent in force, he or she is obliged to defend the validity of the patent if it is attacked. Every patent granted by the Patent and Trademark Office is only prima facie evidence of the exclusive right it purports to establish. The presumption of validity that attaches to a patent may be subsequently invalidated in a federal court proceeding by third parties formally charged with infringement if they present satisfactory proof that the patent should not have been issued. Also, the

discoveries in the proper manner can readily be established at any institution, regardless of size. The possession of this understanding can allow for the dissemination of important and valuable research findings by publication, by patenting, or by both, in a manner likely to produce the greatest benefit for the institution, the discoverer, and the public. This publication presents information about the administration of patentable discoveries; it does not deal with the question of rights in data or copyrights.

The guidelines in this document are intended to assist administrators in developing a policy and in determining the level of activity best suited to the invention and patent needs of their institutions. While inventions as assets may not result in substantial income to the institution, each institution should and can (and without excessive cost) acquire the capability of using the patent system to bring into public use any commercially valuable discovery made in its laboratories.

Patent Program Objectives

Colleges and universities establish patent programs and policies for a variety of reasons, usually to achieve one or more of the following objectives:

1. To facilitate the transfer of technology and the utilization of findings of scientific research in order to provide maximum benefit to the public therefrom.

2. To encourage research, scholarship, and a spirit of inquiry, thereby generating new knowledge.

3. To provide machinery by which the significance of discoveries may be determined so that the commercially meritorious may be brought to the point of public utilization.

4. To assist in an equitable disposition of interests in inventions among the inventor, the institution, and, when applicable, a sponsor.

Council on Governmental Relations

These guidelines, which are designed to aid institutions in formulating patent policies, were prepared by the Patents, Copyrights, and Rights in Data Committee of the Council on Governmental Relations. This booklet does not purport to be a manual of university patent administration nor does it cover the evaluation and marketing of new technology in any detail.

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