

August 23, 1994

RESEARCH POLICY SERIES  
POLICY AND PROCEDURE FOR PATENTS AND INVENTIONS  
AT  
MISSISSIPPI STATE UNIVERSITY

I. INTRODUCTION

The development, dissemination and transfer of new knowledge historically has been the responsibility of universities mostly through teaching and publications. More recently, universities have also awakened to the importance of technology-based research and development to their overall mission. Implicit in this awareness is the understanding that universities have the responsibility not only to bring new knowledge into use by the public, but also that such knowledge or technology sometimes has commercial value and should be treated as a financial asset to be used, conserved or applied in such a way as to generate appropriate financial return to the university, the inventor and, when applicable, the licensee of the technology. These funds which accrue to the University will be used for further development of the intellectual property and research capability at Mississippi State University and such other uses as determined by the President of the University. At Mississippi State University, priority will be put on placing such technology in Mississippi with Mississippi firms.

The University will pursue patent protection of inventions for the purpose of making the invention(s) available to the public. MSU shall retain ownership of such patents that arise out of research sponsored by public or private sources. MSU will grant rights to such invention(s) only after terms of compensation and use have been determined. Subject to conditions of contractual obligations under which the intellectual property was developed, only under extraordinary circumstances shall royalty-free, whether exclusive or non-exclusive, licenses be granted and only by approval of the President.

The objectives of this policy, then, are:

- To develop a framework for encouraging research, scholarship and a spirit of entrepreneurship within the University;
- To provide incentives and assistance to inventors to develop and commercialize technology for the benefit of the University, the inventor and the public;
- To safeguard innovative technology from unauthorized use; and

- To provide a framework to determine the commercial value of new technologies, bring them to public use, and provide for the equitable distribution of income, including royalties, to the University, the inventor and other applicable parties.

## II. DEFINITION AND EXPLANATION OF TERMS USED IN THIS POLICY

- A. **Intellectual Property** is defined as any technical innovation, invention, trademark, discovery, or know-how, as well as writings and other information in various forms including computer software. It may be the product of a single inventor or a group of inventors who have collaborated on a project. The principal rights governing ownership and disposition of technology are known as "intellectual property" rights, which are derived primarily from legislation granting patent, copyright, trademark and integrated circuit mask work protection. This policy covers only tangible innovations, inventions and know-how; writings are covered in a separate University policy.
- B. **Invention**, for the purposes of this policy, refers to any item that reasonably appears to qualify for protection under United States patent law or other protective statutes, whether or not actually patentable, or which appears to be commercially licensable.
- C. **Patents** are issued by the United States Patent and Trademark Office and are grants that give an inventor the right to exclude from all other claimants the right to manufacture, fabricate, use or sell an invention within the United States, its territories and possessions, usually for a period of 17 years from the date of the patent issue. This 17-year period is exclusive of certain regulatory delays such as those sometimes imposed by the Food and Drug Administration. To be considered patentable, an invention must be useful, non-obvious, and new. A patent can be issued for a process, machine, article of manufacture, composition of matter (most often a chemical), or new life form, including any new, useful and non-obvious modification or improvement of prior technology. A "utility" or "use" patent can be issued for a new use of an existing composition of matter, and a "design" patent may be obtained for any new, original and non-obvious ornamental design for an article of manufacture. "Design" patents are issued for 14 years. A grace period of up to 12 months from the first oral or written public disclosure of an invention is allowed prior to filling a patent application in the United States.
- D. **Foreign Patents.** Patenting procedures in foreign countries vary considerably in administrative content, the length of patent grants and in the definition of what is eligible to be patented. Although grace periods

for oral or written public disclosures are allowed in the United States, this is not the case in foreign countries. In most foreign countries, an invention is not patentable unless the patent application is filed prior to any public disclosure (written or oral), in the U.S. or abroad. Inventors who contemplate both foreign and domestic patents should contact the University Patent Officer for further information.

- E. **Tangible Research Property** refers to products that can be distinguished from ideas or processes that do not generate a physical artifact. Examples of such property would include prototypes and drawings from engineering and design work, circuit chips, biological organisms and other products which can be handled and transported. A special form of tangible research property is computer software. A characteristic of tangible research property is that it may be distributed without obtaining intellectual property protection (patents or copyrights) by the use of formal contracts, user licenses, or other contractual agreements.
- F. **Non-patented Technology (Know-how)** refers to unique processes or techniques that are utilized in the development of or in procedures followed in the course of research or in the use of an invention. Examples of know-how include a specialized technique of mounting difficult to handle specimens on a microscope slide for study, an innovative technique in distilling a chemical compound for use in a research project, or the creative use of film, lighting and developing processes that captures photographic images on film. The key to determining whether a process falls under this definition is whether the end result could be obtained in a satisfactory manner without the knowledge and correct application of this specialized process. In some cases the know-how that accompanies a patented technology may be more valuable than the patent itself.
- G. **Trade Secret** refers to almost any secret that is used in business or in research surrounding the development of a tangible product that will give the owner of the secret an edge over competitors. It is also used in software development. Trade secrets are under the protection of state laws; there are no federal trade secret laws. Each individual having access to the secret information must be bound by a contractual agreement called a nondisclosure or confidentiality agreement. Failure on the part of one or more individuals to adhere to the nondisclosure agreement results in violation of the state law, and will nullify the protection of the trade secret.
- H. **Royalties** are a form of income received as a result of a license granted to a company or other entity to develop, manufacture or otherwise use or produce the invention for sale or distribution. The royalty rate, usually a percentage of sales of the invention, is negotiated as part of the license

agreement between the University and the licensee. This agreement is a binding contract. Distribution of royalty payments among/between inventors will be determined by the University prior to patent filing.

- I. **Other Income** refers to any other form of income that may be derived as a result of the development and distribution of a patented product or other invention.
- J. **Substantial Use of University Resources**, within the context of this policy, occurs when an invention results from use of Mississippi State University facilities, equipment, supplies, personnel or other resources.
- K. **University Personnel** includes all faculty, staff, and graduate students with full or part-time status, and any other employee, agent or Fellow of the University, during the course of employment. For the purposes of this policy, the term "employee" will be synonymous with "University personnel."
- L. **General Scope of Assigned Duties** is defined in Section IV.A.
- M. **Licensure** is a right granted which gives permission to utilize and/or commercialize the invention. It may be non-exclusive (right granted to more than one entity) or exclusive.
- N. **University Expenses** refer to expenses incurred by the University in the research, development, testing, and prototyping of intellectual property.
- O. **Patent Expenses** refer to expenses relating to the protection, patenting, licensing, and marketing and any future maintenance of intellectual property.

### III. WHO IS COVERED BY THIS POLICY

- A. All University personnel are covered by this policy.
- B. Graduate students are covered by this policy and must disclose any intellectual property developed in the course of their degree program. Determination of inventorship and participation in the royalty income shall be determined by a committee consisting of representatives of the Patent Committee, the Graduate Office and the originating department or unit. Specific procedures for reviewing graduate student interest will be developed by the Graduate School and Office of Research.

- C. University personnel who perform routine, assigned tasks in support of research programs shall not be eligible to receive royalties. However, it is expected that University personnel who, because of their professional experience, expertise, or other special knowledge, make significant contributions to an invention, shall receive royalties proportional to the level of their contributions to development of the invention.

#### IV. WHAT IS COVERED BY THIS POLICY

##### A. Inventions Resulting from University-Sponsored Research

The University has ownership of any invention developed in the course of the assigned duties of all University personnel. Each employee agrees to disclose to the University any intellectual property developed and to pursue protection and exploitation of such property as shall be determined by the University. Any invention not so disclosed by an employee while employed by the University is presumed to have been made within the scope of University employment.

Disclosed inventions will be considered as having been made within the general scope of University employment:

1. Whenever the duties include research or investigation or the supervision of research or investigation, and the invention is conceived or first reduced to practice as part of, or as a direct result of, such research or investigation and relates to the general field of an inquiry to which the person is assigned, or
2. Whenever the invention is in a substantial degree made or developed through the use of University financing, resources or on University time, or
3. Whenever activities involve the use of University information not then available to the public.

##### B. Inventions Resulting from Externally Sponsored Research

Any discoveries or inventions made or produced during the course of externally sponsored research will be owned by Mississippi State University. However, if the University determines that it is in its best interest, the University may enter into agreements with sponsors which relinquish or share all or part of intellectual property that results from externally sponsored research. This procedure will ensure that the interests of the

University, the inventor, and the sponsor are considered whenever external funds are granted to the University for research and development.

### C. Inventions Resulting from Activities Outside the Scope of Employment

Any inventions which are developed and achieved by University personnel on their own time and at their own expense and properly disclosed, including inventions derived from the private consulting services of University personnel, which consulting is done on their own time and at their own expense, provided that "substantial use of University resources" has not otherwise been used to develop the invention, will be the exclusive property of the inventor. Prior to applying for a patent, making a public disclosure or contacting any entity or person outside the university, the inventor must disclose by requesting and obtaining University approval of a "declaration of ownership" to avoid future conflicts or misunderstandings. The declaration of ownership and a statement of intent to apply for a patent is filed with the Patent Committee for its review and recommendation. To assist in making decisions regarding rights of the inventor and University, the inventor should provide the following information to the University Patent Officer:

- a. The circumstances under which the invention was made and developed.
- b. The inventor's official duties, as given on his or her job description/contract with the University or as otherwise assigned at the time of the development of the invention.

If the Committee recommends approval, the inventor will be informed, in writing, by the Vice President for Research after consultation with the appropriate Dean or Director and other Vice President. If the Committee determines that the property should be assigned to the University, this recommendation is forwarded to the appropriate Dean or Director and Vice President who shall confer with the inventor before a final determination is made regarding patent disclosure and application. The inventor may appeal a final determination to the Vice President for Research, whose decision is final.

## V. OBLIGATIONS OF THE INVENTOR AND THE UNIVERSITY

### A. Obligations of the Inventor to the University

1. **Disclosure.** University personnel who produce an invention are obligated to disclose such inventions to the University whether or not such an invention is made in the course of his or her assigned

duties, or involves "substantial use of University resources," or results from externally sponsored research or University-sponsored research or in any way relates to his/her professional skills or knowledge. The mechanism for making this invention disclosure for private inventions is set forth in IV. C. above. The Invention Disclosure form is available from the University Patent Officer. Inventors are encouraged to contact the University Patent Officer for assistance in reporting any potentially patentable or otherwise commercializable invention or technology.

2. **Assignment of Rights.** By accepting employment with the university, the inventor has assigned all rights to the university. The inventor as a university employee must submit all required documents, assignments, and any other assistance necessary to protect the patent and all other proprietary rights of the invention for the University. An invention made outside the general scope of the inventor's assigned duties must be properly disclosed and an approved "declaration of ownership" obtained from the University.
3. **Cooperation in Technology Development.** The inventor is obligated to assist University officers in carrying out the work necessary to patent, market, license or otherwise commercialize the invention.
4. **Timely Reporting to the University.** Since public disclosure of an invention can constitute a statutory bar to the granting of a patent for an invention, the inventor is obligated to report his or her invention prior to describing the invention in public.
5. **Delay in Publishing or Other Public Disclosure.** The University Patent Officer may require a delay in making public the nature of the invention until a patent application is filed to protect the interests of the University. Specifically, this may require that the inventor withhold, until release is approved by the University Patent Officer, publicity concerning the invention; disclosure of the invention in a public meeting, professional convention or meeting; disclosure of the invention in a scientific or other publication and any other public disclosure. Such a delay is in no way intended to abridge the academic freedom of the faculty and other research personnel.

## B. Obligations of the University

1. **Timely Determination of Interest.** The University has the obligation to make a timely determination of its interest in pursuing a patent or exerting other proprietary rights concerning an invention. Normally, this determination will require no longer than 120 days from the date the inventor provides a complete Invention Disclosure form and any further requested information.
2. **Reasonable Efforts to Commercialize.** Unless prohibited by a Sponsoring Agency the University will make reasonable efforts to commercialize any inventions to which it holds proprietary interest or, alternatively, may release all or an equitable part of that interest to the inventor or sponsor.
3. **Income Sharing.** The University will share with the inventor an equitable portion of the income that is generated by the commercial development of the invention as set forth in Article VII. This includes the sharing of royalty and other income.

## VI. ADMINISTRATION

- A. **Administration of the Policies.** The administration of the policies set forth herein is the responsibility of the Vice President for Research, whose office shall do so by the utilization of a University Patent Committee. The Committee shall normally consist of at least five faculty members appointed by the President and representative of the various research units of the University. A University Patent Officer shall be appointed by the Vice President for Research. The Patent Officer, the Director of Sponsored Programs, and the Associate Comptroller shall serve as ex-officio members of the Patent Committee.
- B. **Focal Point for Patenting and Licensing Activities.** The Office of Sponsored Programs is the focal point for patenting and licensing activities on the campus. The University Patent Officer, with advice from the University Patent Committee, will make recommendations to the Vice President for Research regarding the patenting of a particular invention, and work with the inventor to make marketing strategy and commercial development decisions concerning the invention. The University Patent Officer, in conjunction with the University Patent Committee, also provides education and advice about patents and licensing; recommends resolutions for unique situations, including the arbitration of disputes; and makes recommendations about assigning rights of the invention back to the inventor.



C. **Invention Disclosure.** An Invention Disclosure form is submitted by the inventor to the University Patent Office. Copies of this form are available in the Office of Sponsored Programs. The function of the disclosure is to clarify and describe the proposed invention and the circumstances of its discovery. It is important to fill out the form as completely as possible since it serves as a basis for evaluation of patentability and commercial potential of the discovery or invention. Inventors are required to contact the Office of Sponsored Programs for assistance in reporting any potentially patentable or otherwise commercializable invention or technology.

1. Routine cases where the Patent Officer and the inventor(s) agree as to handling shall be automatically processed according to procedures established for this purpose.
2. All cases in which questions arise shall be referred to the Patent Committee for consideration and interpretation of policy.
3. Decisions of the Patent Committee may be appealed to the Vice President for Research.
4. **Record Keeping:** The patent officer has responsibility for maintaining in a secure environment, all records, report disclosures, and related information concerning inventions.

D. **Evaluation.**

1. If the inventor asserts in the Invention Disclosure form that the invention resulted from activities outside the scope of University employment, the University Patent Officer will make a recommendation as to the respective rights of the University and inventor in the invention.
2. The Director of Office of Sponsored Programs, Patent Officer, and Patent Committee will examine the invention from patentability, technological, and marketing standpoints and recommend to the Vice President for Research a determination of the University's interest in pursuing a patent or exerting other proprietary rights concerning the invention.
3. If a disclosed invention is determined to be more appropriately trademark or "know-how" or tangible research property, the inventor will be notified, and steps will be taken to investigate the possibilities of licensing the invention as non-patented technology.

4. Normally, these determinations will require no longer than 90 days from the date at which a completed Invention Disclosure and any additionally requested information is submitted by the inventor.

- E. **Patenting and Licensing.** If a decision is made to file a patent application, the University will file the application within 270 days of making the determination that a patent will be pursued, unless delays are caused because the application requires more information that must be provided by the inventor or for other reasonable circumstances that delay the filing. In many instances, the University will attempt to negotiate a license agreement in which the licensee files the patent application on behalf of the University or in which the licensee pays the costs of filing the patent application. If, after 270 days, an application is not filed, the Vice President for Research, upon request of the inventor, will inform the inventor about the cause of any delays. Alternatively, if the University determines that it wishes to abandon its efforts to file a patent application, the University may inform the inventor that the University releases its proprietary interest in the invention subject to the same conditions outlined in Paragraph VI.F below.

The inventor will be asked to assist by providing necessary information concerning any stage of the patent application process; patent examiners frequently offer a detailed rejection of all or part of the patent claims, which may require extensive written responses until the factual and legal issues are resolved. This process typically requires two years or more. Licensing negotiations may commence at any time: before, during or after the patent application process occurs.

The University, in all licensure agreements, will include "march in" rights if the licensee licensing the invention does not proceed with development and commercialization.

- F. **Decision by the University to Abandon or Not to pursue Its Proprietary Interests.**

1. If at any stage, a determination is made not to pursue the University's proprietary rights or a decision is made not to continue a patent application process, the following actions will occur. Reasons for such decision shall be fully documented.
  - a. For externally sponsored research when the sponsor's agreement does not preclude doing so, the Vice President for Research shall notify the inventor, in writing, that the University releases its rights to the inventor provided that all

further development of the invention shall be at the expense of the inventor.

- b. For research sponsored, all or in part, by the University, the Vice President for Research shall notify the Dean or Director and Vice President of the sponsoring unit for disposition of the matter. The Dean or Director and Vice President may recommend publication or other public domain release, or through written notice, notify the inventor that all proprietary rights are released to him/her provided that all further development of the invention shall be at the expense of the inventor.
2. When all proprietary rights are released to the inventor, all further development of the invention shall be at the expense of the inventor, on his/her own time, and will not entail the "substantial use of University resources." If an external sponsor is involved, commitments may also need to be resolved between the University and the sponsor. In either case, the University shall retain a royalty free, non-exclusive license to the invention unless otherwise provided in an existing contractual relationship.

## VII. ROYALTIES AND OTHER INCOME

- A. **Royalties.** When the University negotiates a license agreement, or otherwise exploits intellectual property:
  - (1) The first royalty income will be applied to the reimbursement of the patenting expenses. The next \$5,000\* received will be allocated to the inventor(s).
  - (2) Thereafter, annual maintenance or related fees, if any, will be paid before other distributions are made. Other distributions will be made subject to the following conditions:
    - (a) When pre-determined amounts of University expenses are to be recovered, the inventor(s)\* will receive up to \$5,000 annually until all such expenses are recovered. (If revenue of \$10,000 or less is received in any year during this expense-recovery period, the University and the inventor(s)\* will each receive 50% of the revenue.)

- (b) When all University expenses have been recovered or no expenses have been incurred by the University, the inventor(s)\* will receive 50% of the revenue; the remaining 50% will be allocated to the office of the President for reallocation to the appropriate units.

*\*If there is more than one inventor, the income is the total to be received by the group of inventors (e.g., 3 inventors would equally share/divide the \$5,000).*

If two or more inventors collaborated on the invention and are listed as co-inventors on the patent application, the inventors' share of royalties will be distributed in accordance with a letter of agreement that is signed by the inventors and which bears the concurrence of the Department Head(s) and his/her immediate superior(s). This letter of agreement will reflect equitably the contribution of each inventor to the invention, and disagreements concerning relative contribution to the invention, if any, will be arbitrated by the Patent Officer and the Patent Committee, and decisions may be appealed to the Vice President for Research. If the inventors are from different divisions, schools or departments, the other distributions will be made in the same relative proportions as that of the inventors.

In the instance that rights to patents are shared with another university or entity, income from the invention and/or know-how will be shared using appropriate percentages, agreed upon prior to patenting and licensing. The intra-university distribution will remain the same.

- B. **Other Income.** Other income refers to non-royalty income that results from licensing a patent or exploiting other forms of technology for the benefit of the inventor and the University. Examples include, but are not limited to, non-royalty income from spinoff technologies, know-how and equity income. The equitable division of these sources of other income will be negotiated by all parties concerned and follow the general spirit of the formula as outlined for royalty income.

**REVIEWED BY:**

*Ronda D. Inel*  
University Patent Officer

5/24/94  
Date

*James Christy*  
Director of Sponsored Programs

5/24/94  
Date

*Bob Donit*  
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Forestry and Veterinary Medicine

6/6/94  
Date

*Berna Norman*  
Director of Internal Audit

8/23/94  
Date

*Charles L. [Signature]*  
University Counsel

8/30/94  
Date

**RECOMMENDED BY:**

*Ralph C. Polme*  
Vice President for Research

8/30/94  
Date

**APPROVED:**

*[Signature]*  
President

9/12/94  
Date