# **Patents and Inventions**

**Summary/Purpose:** To designate the University of Mississippi policy for intellectual property rights as they pertain to patentable materials, including inventions, but excluding copyrights.

#### I. FOREWORD

The development, dissemination and transfer of new knowledge historically has been the responsibility of the University of Mississippi mostly through teaching and publications. More recently, universities have also awakened to the importance of technology-based research and development to the overall mission of the university. 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 inventor, the university and, when applicable, the licensee of the technology. In the case of the University of Mississippi, priority will be put on placing such technology in Mississippi with Mississippi firms.

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 inventor, the University 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 inventor, the University and other applicable parties.

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

### A. Intellectual Property

**Intellectual Property** is defined as any technical innovation, invention, 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; copyright and trademark protections may be covered in separate University policies.

#### **B.** Invention

**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. The term does not refer to computer software, which is the subject of a separate University policy.

### C. Patents

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 filing a patent application in the United States.

### **D.** Foreign Patents

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 Director of Technology Transfer for further information.

### E. Tangible Research Property

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)

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 not 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

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

**Royalties** are a form of income that is received by the inventor and the University 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.

### I. Other Income

**Other Income** refers to any other form of income that may be derived by the inventor or the University as a result of the development and distribution of a patented product or other invention.

## J. Substantial Use of University Resources

**Substantial Use of University Resources**, within the context of this policy occurs when an invention results from use of University of Mississippi facilities, equipment (except typewriters or word processors), supplies in excess of \$100 total value, personnel or other resources.

## **K.** University Personnel

University Personnel includes all faculty and staff, 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

General Scope of Assigned Duties is defined in Section IV, A.

#### III. WHO IS COVERED BY THIS POLICY

All University personnel are covered by this policy.

### IV. WHAT IS COVERED BY THIS POLICY

# A. Inventions Resulting from University-Sponsored Research

The University shall have ownership of any invention developed in the course of the assigned duties of all University personnel. Each employee is required to assign to the University all domestic and foreign rights to any invention made within the scope of his or her assigned duties, unless the Associate Vice Chancellor for Research notifies, in writing, that the University abandons its interest in the invention. An invention will be considered as having been made within the general scope of assigned duties:

- Whenever the duties include research or investigation or the supervision of research or investigation, and the invention arises in the course 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 or on University time.

### 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 the University of Mississippi. However, if the University determines that it is in its best interest, the Office of Research 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 inventor, the University 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 that are developed and achieved by University personnel on their own time and at their own expense, including inventions derived from the private consulting services of University personnel, provided that "substantial use of University resources" has not been used to develop the invention, will be the exclusive property of the inventor. If the inventor desires, a request may be made to the Associate Vice Chancellor for Research to assign such an invention to the University. If assignment occurs, the inventor and the University will share any royalties or other income derived from the invention in the same manner as in all other inventions owned by the University.

## V. OBLIGATIONS OF THE INVENTOR AND THE UNIVERSITY

## A. Obligations of the Inventor to the University

### 1. Disclosure

**Disclosure.** University personnel who produce an invention that may have commercial value are obligated to disclose such inventions to the University when 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. The disclosure must be in writing, and it must be full and complete, as determined by the Associate Vice Chancellor for Research. The mechanism for making this invention disclosure is the Record of Invention form or a revision of the form that may be made from time to time. The Office of Research will acknowledge receipt of a disclosure when it is full and complete. Inventors are encouraged to contact the Office of Research for assistance in reporting any potentially patentable or otherwise commercializable invention or technology.

# 2. Assignment of Rights

**Assignment of Rights**. The inventor is obligated to assign patent and all other proprietary rights of the invention to the University, unless the invention was made outside the general scope of the inventor's assigned duties.

If the inventor believes that the invention was made outside the general scope of his or her assigned duties and is unwilling to assign the rights of the invention to the University, the inventor can, in the Record of Invention form, request the Associate Vice Chancellor for Research to make a determination of the respective rights of the University and the inventor in the invention. If the inventor disagrees with the decision, he or she can appeal the decision to the Provost/Vice Chancellor for Academic Affairs. To assist in making decisions regarding rights of the inventor and University, the inventor should include the following information as an addendum to the Record of Invention form:

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

### 3. Cooperation in Technology Development

Cooperation in Technology Development. The inventor is obligated to assist University officers and the Associate Vice Chancellor for Research in carrying out the work necessary to patent, market, license or otherwise commercialize the invention.

### 4. Timely Reporting to the University

**Timely Reporting to the University**. Since public disclosure of an invention constitutes a statutory bar to the granting of a patent for an invention, the inventor is obligated, whenever possible, to report his or her invention prior to describing the invention in public.

### 5. Delay in Publishing or Other Public Disclosure

Delay in Publishing or Other Public Disclosure. To protect the interests of the inventor and the University, the Associate Vice Chancellor for Research may require a delay in making public the nature of the invention until a patent application is filed to protect the interests of the inventor and the University. Specifically, this may require that the inventor withhold, for a reasonable time: publicity concerning the invention; disclosure of the invention in a public meeting, professional convention or meeting; or disclosure of the invention in a scientific or other publication. Such a delay is in no way intended to abridge the right, privilege and duty of faculty and other research personnel to publish the results of research conducted at the University, and such a delay will be kept to the minimum necessary to protect the patentability of the invention.

In a similar manner, the Associate Vice Chancellor for Research may withhold from the library shelves, and decline to distribute for a limited time, any thesis or dissertation that contains descriptions of any technology that is being considered for patenting or for which a patent application is being prepared. The dissertation or thesis will be held by the Dean of the Graduate School until the patent application is filed or the decision is made to abandon the pursuit of a patent. This procedure will not affect the standing of the student and he or she will be awarded the degree on schedule.

#### **B.** Obligations of the University to the Inventor

### 1. Timely Determination of Interest

**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. If the determination is made not to exert its proprietary rights in the invention, the University is obligated to release its rights, in writing, to the inventor. Normally, this determination will require no

longer than 90 days from the date at which a full and complete Record of Invention form is submitted by the inventor.

#### 2. Reasonable Efforts to Commercialize

**Reasonable Efforts to Commercialize**. The University has the obligation to make reasonable efforts to commercialize any inventions to which it holds proprietary interest or, alternatively, to release all or an equitable part of that interest to the inventor.

## 3. Income Sharing

**Income Sharing**. The University has the obligation to share with the inventor an equitable portion of the income that is generated by the commercial development of the invention. This includes the sharing of royalty or other income.

#### VI. THE PROCESS OF OBTAINING PATENT COVERAGE

### A. The Office of Research

The Office of Research is the focal point for decisions made regarding technology transfer activities on the campus. Record of Invention forms are submitted to and acted upon by the Office of Research. Office of Research staff recommend decisions regarding the patenting of a particular invention and, assisted by the inventor, make marketing strategy and commercial development decisions concerning the invention. Office of Research staff also provide education and advice about patents and licensing; determine resolutions for unique situations, including the arbitration of disputes; and make recommendations about assigning rights of the invention back to the inventor.

### **B.** Invention Disclosure

**Invention Disclosure**. A Record of Invention form is submitted by the inventor to the Office of Research. Copies of these forms are available in the Office of Research. The

function of Record of Invention is to clarify and describe fully and completely 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 encouraged to contact the Office of Research for assistance in reporting any potentially patentable or otherwise commercializable invention or technology.

#### C. Evaluation

- If the inventor asserts in the Record of Invention form that the invention resulted from activities outside the scope of University employment, the Associate Vice Chancellor for Research will make a determination of the respective rights of the University and inventor in the invention. (See Paragraph V.A.2. for further discussion.)
- 2. Once it has been determined that the Record of Invention is full and complete, the Office of Research staff will examine the invention from legal, patentability, technological, and marketing standpoints and recommend to the Associate Vice Chancellor for Research a determination of the University's interest in pursuing a patent or exerting other proprietary rights concerning the invention. Staff may also recommend additional R & D steps that must be completed prior to submitting a patent application. If a determination is made not to pursue the University's proprietary rights, the Associate Vice Chancellor for Research will notify the inventor, in writing, that the University releases its rights to the inventor provided that all further development of the invention will be at the expense of the inventor, on his or her own time, and will not entail the substantial use of University resources.
- 3. If a disclosed invention is determined to be more appropriately "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 Record of Invention form is submitted by the inventor.

# D. Patenting and Licensing

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 Associate Vice Chancellor for Research will inform the inventor about the cause of any delays or, alternatively, if the University determines that it wishes to abandon its efforts to file a patent application, will inform the inventor that the University releases its proprietary interest in the invention subject to the same conditions that were outlined in Paragraph VI.C.2.

The inventor will almost always 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.

# **E.** Decision to Terminate Proprietary Interest

**Decision to Terminate Proprietary Interest**. If, at any stage of the patent application process, a decision is made not to continue, the Associate Vice Chancellor for Research will notify the inventor, in writing, that the University releases its proprietary rights to the inventor provided that all further development of the invention will be at the expense of the inventor, on his or her own time, and will not entail the "substantial use of University resources." If sponsoring agencies are involved, commitments may also need to be resolved between the University and the agency.

### VII. ROYALTIES AND OTHER INCOME

# A. Royalties

Royalties. If the University receives a patent, negotiates a license agreement, or otherwise exploits an invention, the first royalty income will be applied to the reimbursement of the out-of-pocket expenses entailed by the Office of Research for patenting and licensing the invention. Thereafter, the next \$5,000 of royalty income will be given to the inventor(s). After the first \$5,000 and through the first \$100,000 of royalty income, the inventor(s) and the University will receive the following proportion of the royalties, as long as the payments continue: 45% to the inventor(s), 12.5% to the inventor's department, 2.5% to the inventor's dean's office, and 40% to the Office of Research. After the first \$100,000 of royalty income, the inventor(s) and the University will receive the following proportion of the royalties, as long as the payments continue: 25% to the inventor(s), 20% to the inventor's department, 5% to the inventor's dean's office, and 50% to the Office of Research. In all instances, out-of-pocket licensing, legal and other related expenses will be deducted before royalty income is distributed to

the inventor(s) and the University. 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 which will be signed prior to submitting the patent application. 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 Associate Vice Chancellor for Research. If the inventors are from different schools or departments, the departments' share will be distributed in the same relative proportions as that of the inventors.

#### **B.** Other Income

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 and equity income. The equitable division of these sources of other income will be negotiated by all parties concerned will be based on the unique characteristics of the commercialization and of the specific technology under consideration.