4.6.001 Intellectual Property (IP) Management-Faculty and Staff

Effective date: November 1, 2001 (as part of the Patent policy)

Last revision date: August 6, 2019

Approvals: Executive Educational Council (EEC)

Responsible office: Applied Technology Center™

Policy contact: Dean of Applied Research

I. PURPOSE and SCOPE

The primary objective of the IP management process is to transfer technologies from MSOE to companies with the interest, ability, and resources to commercialize them such that the public can benefit from MSOE inventions. Another objective is to capture a fair portion of the value of the invention for the benefit of the inventors, the department in which the invention was developed and MSOE.

Inasmuch as new ideas and discoveries of commercial interest are often a consequence of university research, and inasmuch as intellectual property and patent protection can often enhance the reduction to public usefulness of inventions which result from university research, MSOE, as a general policy, will seek patent protection for those ideas and discoveries which arise out of the research activities of its faculty and staff.

I. RELATED POLICIES

Intellectual Property (Students), Copyright (Faculty)

II. DEFINITIONS

University Research: For the purpose of this policy, this includes all research conducted in the course of an inventor's employment with MSOE (including but not limited to the performance of a grant contract or award made to MSOE by an extramural agency) or with the use of MSOE resources.

University Resources: All tangible resources provided by MSOE to creators or inventors, including:

- Facilities such as office, lab, and studio space and equipment;
- Computer hardware and software and Internet access;
- Support and administrative services;
- Research, teaching, and lab assistants;
- Supplies and materials;
- Utilities;

- Funding and reimbursement for research and teaching activities, including travel.

III. POLICY STATEMENT

The Milwaukee School of Engineering (hereinafter "MSOE") recognizes that inventions and discoveries of commercial importance may be the natural outgrowth of research conducted by faculty and staff, and desires to secure both public benefit from the applications of such research and enhancement of MSOE's capacity for such research. MSOE's primary obligation in conducting research is the pursuit of knowledge for the benefit and use of the sponsors, the University, and in a great sense, society itself.

A. Ownership of Inventions

- All patentable inventions conceived or first reduced to practice by faculty and staff in the conduct of University Research belongs to MSOE. The inventors shall cooperate and assist MSOE in all phases of the patent application process, including prompt full disclosure, and assigns such applications or any patents resulting therefrom to the MSOE.

- Patentable inventions made by individuals on their own time, not in the conduct of University Research and without the use of MSOE resources, belongs to the individual inventor.

- If a faculty or staff member chooses not to release his/her rights to intellectual property on a specific project, this will be addressed in the non-disclosure agreement for the project.

B. Royalty Distribution

- In the case of a patent owned by MSOE and in recognition of the efforts and contributions of the inventor or inventors, total net royalty income shall be distributed to the inventors as follows:

    - 33% of the first $100,000
    - 25% of net royalty income in excess of $100,000

- Joint inventors share the percentage of net royalty income allocated to the inventor equally among them. Any person hired or retained for the purpose of producing an invention shall not be entitled to a distribution of net royalty income with respect to that invention.

- MSOE shall receive the remainder of the net royalty income to provide operating funds to cover the cost of service provided with regard to intellectual property matters and particularly to cover the costs associated with patenting and marketing inventions where royalty income or other cost recovery has not been achieved, including retiring prior deficits from patent activity, as well as to support the general operation of the University.

- Net royalty income shall mean gross royalties received by MSOE less directly assignable expenses resulting from patenting, licensing and, if necessary, defending the particular invention.

- The Dean of Applied Research shall report to the Vice President of Academics at Milwaukee School of Engineering upon matters of significance relating to the administration of this Policy.

IV. PROCEDURE

The management of IP from the submission of an invention disclosure to the execution of a license agreement is a complex, non-linear process involving multiple steps. Key elements of the most typical steps of the process are summarized below:

A. Disclosure of Inventions: Inventions conceived or first reduced to practice in furtherance of the University Research shall be promptly disclosed in writing to the MSOE Dean of Applied Research. An invention disclosure form is submitted to the Applied Technology Center™ (ATC). Forms and guidelines are available.

B. The Dean of Applied Research is assigned to manage the invention. The Dean will be the principal point of contact for the disclosers and MSOE. Persons submitting an invention disclosure are called "disclosers" until inventorship is officially determined by a patent attorney.

C. The ATC reviews the invention disclosure, discusses the invention with the disclosers, and initiates an assessment to address the following:

    1. Clearly identify the invention.
    2. What is the state of development/reduction to practice of the invention? Is further development necessary? If yes, are the resources (personnel, funding, facilities and equipment) available?
    3. Is the invention marketable?
    4. What is a rough estimate of the size of the market?
    5. Is the invention patentable? Is the invention new, non-obvious and useful? Is there prior art? Is the invention an improvement of an existing invention?

6. If the invention is patentable, is the patent enforceable? Will it be difficult to determine if others are infringing the patent?
7. Have there been any enabling public disclosures (publications, presentations, thesis/thesis defense or non-confidential discussions outside the University) of the invention? If yes, when. If no, are there plans to publicly disclose the invention? Any enabling public disclosure has an immediate and irreversible effect on patenting.

D. Based on this initial review and assessment, the ATC will formulate an appropriate strategy to protect the invention, typically involving either patent protection or copyright protection. A typical patent protection strategy is outlined below.

1. File a provisional patent application either: 1) immediately prior to the first enabling public disclosure or 2) immediately if there is concern about competing technologies under development. In order to file a fully enabled provisional patent application, the inventors must provide a full and complete disclosure of the invention to the patent attorney preparing the application. Inventors must be available to assist the attorney preparing the application.

2. It is important to file a provisional patent application soon enough to fully protect the invention, but not unnecessarily early. A provisional patent application provides one year of protection in both the U.S. and internationally. This allows time for additional research, development, sample preparation, prototype development and assessment of the invention. Filing a provisional patent application unnecessarily early will limit the time available for further development and assessment.

3. The next patenting decision is whether or not to convert the provisional patent application to a "full" U.S. patent application and/or a Patent Cooperation Treaty (PCT) patent application. This is a difficult decision due to the expense involved. A typical U.S. patent costs $20,000 or more. International patent protection is highly dependent upon the countries involved, but typically begins at $50,000.

4. If the invention is licensed (or optioned) to a company prior to or during the one year of protection provided by the provisional patent application, then the provisional will be converted to a "full" U.S. patent application and/or Patent Cooperation Treaty (PCT) patent application and the licensee (optionee) typically pays all patent expenses.

5. If the invention is not licensed during the one year of protection provided by the provisional patent application, then the decision whether or not to convert is made by the Vice President of Academics with input from the inventors and the Dean.

6. If the decision is made not to convert the provisional patent application, then: 1) the provisional is abandoned and no further action is required, 2) depending upon the date of enabling public disclosures of the invention (if any), another provisional patent application could be filed or 3) the inventors could petition MSOE to release the invention to them. The inventors should discuss the above options with the Dean.
7. If the decision is made to convert the provisional patent application to a "full" U.S. patent application and/or PCT patent application, then it is essential that the inventors cooperate fully and be available to offer their input to the patent attorney preparing the patent application. The inventors' insights and inputs in response to patent office inquiries and office actions will be required throughout the patent prosecution process.

E. When appropriate (as determined by a variety of factors) the Dean will begin marketing the invention to potential licensees with assistance from the inventors. Marketing activities may occur before, during and/or after the patenting process as necessary. A marketing strategy may include any combination of the following:

    1. Pursuing leads and contacts developed by inventors. 75% of university license agreements result from contacts provided by the inventors.
    2. Focused/directed informational mailings.
    3. Leads developed from databases and the Internet.
    4. Publicity from publications, presentations at conferences and newspaper and trade journal articles.

F. After a company or companies with interest in the invention are identified, discussions begin, and it is likely that a series of agreements will be negotiated and executed. These may include the following.

    1. Confidential Disclosure Agreements allow the parties to share proprietary information under confidentiality.

    2. Material Transfer Agreements allow one party to share materials, samples or prototypes with another party for evaluation purposes and to determine if there is interest in licensing. This sharing of materials occurs while maintaining control of the invention, ownership and rights.

    3. In an Option Agreement the owner of an invention grants certain limited rights to another party for a defined period of time for the purpose of evaluating and/or further developing the invention.

    4. License Agreements transfer well-defined rights from one party to another party for the purpose of commercializing an invention in return for some form of compensation, usually financial benefit. Key elements of License Agreements include:

- Identification of rights being licensed
- Definition of the Field of Use
- Type of license – exclusive, non-exclusive or semi-exclusive
- Fees – up-front fee, milestone payments
- Royalties – running royalty, minimum annual royalty
- Equity
- Due diligence – licensee's obligations to make progress toward commercialization of the invention
- Reimbursement of all patent expenses associated with the invention

5. After the execution of license agreements, the ATC continues to communicate with licensees.
    - To follow up on the payment of fees, royalties and equity
    - To monitor due diligence requirements
    - To seek licensee's input regarding patenting decisions and payment of patent expenses

V. EXCEPTIONS

If, in its sole discretion, MSOE decides not to pursue defense of an issued patent, the Dean of Applied Research will inform the applicant about that decision, the inventor(s) may choose to pursue such defense.

VI. APPENDICES

None

VII. ASSOCIATED LEGISLATION/REGULATIONS/ACCREDITATION STANDARD

Higher Learning Commission (HLC) Core Components 1.D, 2.A, 2.E.1
U.S. intellectual property law and regulations
Bayh-Dole Act

This section to be completed by the Records Manager:

Due date for review
Biennially or as needed

Public Location
MSOE Policy Library

Version History

- **2019, November 20 (legal review), December 9 (EEC):** Policy library format. Combined with Patent policy. Defined "university resources" and added "in the course of employment." Removed licensing policy, waiver requests, deferral, patent management agencies, patent agreement, patent advisory committee and notes sections; added option for not releasing rights; removed regents as approvers; replaced patent review committee with VP of Academics; per legal, removed "shall" from "shall assign."
- **2001, November 1:** Initial approval as part of the Patents policy

Records Manager
Assistant VP of Curriculum & Knowledge Management