PATENTS

A patent is a government grant that gives the owner the exclusive right to keep others from making, having made, using leasing, offering to sell, selling or importing a product that infringes upon any claim contained in the patent.

Types of Patents and the Patent Process
U.S. Patents can be designated either as design, utility or plant. A design patent relates to an article of manufacture. A utility patent protects compositions of matter, processes, machines or articles of manufacture. A plant patent provides for a new variety of plant.

A provisional application is less comprehensive than a full patent application and does not include formal patent claims. A provisional application is not made public, is not examined by a USPTO examiner and expires one year from the date of filing unless a non-provisional application is filed which claims the priority of the provisional application.

Most countries throughout the world have agreed to the international Patent Cooperation Treaty (PCT). PCT applications provide protection of inventions in countries throughout the world. The PCT application process is more complex and more expensive than the USPTO process.

Patentability: In order to be granted a patent, an invention must be new, have utility and be considered novel. It is also a requirement of the U.S. Patent & Trademark Office (USPTO) that information that is considered enabling; allowing one to practice the invention, not have been disseminated previously by more than one year. The one year anniversary of such a disclosure is referred to as a bar date.

Patent Applications consist of four major sections:
• Specification: In this section of the patent application the invention must be described in sufficient detail to enable “one skilled in the art” to reproduce the invention.
• Claims: This section establishes what the patent specifically protects.
• Abstract: Provides a brief summary of the invention.
• Drawings: Figures, graphs, charts or other graphic representations describing any element of the invention.

Patent Life:
• U.S. utility patents are granted for 20 years from application date (those filed after 6/8/1995)
• Design patents: 14 years from issue date
• Foreign patents: duration varies widely from country to country

What about publishing my research? Patents and publications are closely related, both represent means of disseminating the results of research. A patent, however, 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 patented information. Care must be taken against premature disclosure of an invention (by publication in a scientific or technical journal or through public use) in order to avoid placing the invention in the public domain and thus losing the right to obtain a patent. However, TTED staff will work with you to protect the IP in a timely manner and avoid delay of publication, presentations, and other public disclosures.

Patent Rights and Sponsored Research: Patent rights under sponsored research agreements are generally negotiated before the agreement takes effect. It is important that these agreements reserve patent rights for the University. Inventions arising from federally sponsored research are governed by Public Law 96-517 as amended by Public Law 98-620, which allow universities to retain rights to these inventions while reserving certain rights for the government. These laws are issued as 37 Code of Federal Regulations Chapter IV, Part 401.
**Inventorship:** Determination of inventorship is a legal determination involving conception of the idea for an invention.

Did you know that purposefully naming too few, too many, or the wrong people as inventors can invalidate any resulting issued patent? Inventorship on a patent is a legal determination that can require the University consults a patent attorney. Inventorship can differ from authorship on an academic paper.

- **I worked hard on this project, so I am an inventor, right?** Maybe. Each named inventor must have contributed to the CONCEPTION of the subject matter of AT LEAST ONE of the claims. You can’t tell if you’re an inventor until you’ve read and understood the claims.
- **What if I only conceived of the subject matter of one claim, the subject matter of all of the other claims were conceived of by my genius coworker?** You are an inventor. There is no requirement that each joint inventor make the same type or amount of contribution.
- **But my coworker and I never worked in the same location, we’ve been working together by phone and fax.** Joint inventors need not physically work together.
- **My coworker worked on this project first, but then handed it over to me.** If you both contributed to the conception of the subject matter of at least one claim, you are both inventors. Joint inventors need not work together at the same time.
- **I never actually built it; my lab technician built it based on my lab notebook pages recording my conception.** You are an inventor if you contributed to the conception of the subject matter at least one claim. The inventor need not build the invention.
- **Is my lab technician (or junior engineer) an inventor?** They sure worked hard on making it work. Did the lab technician contribute intellectually or experimentally to the conception of any claim, beyond the normal skill expected of one skilled in the art? If not, he or she isn’t an inventor. But is there anything that the lab technician did conceive of that could be added as a claim? Discuss this with your technology transfer office.
- **Others contributed suggestions and ideas, are they inventors?** If such ideas are publicly known, they may not amount to an inventive contribution – even if they came from consulting a highly regarded domain expert. Moreover, as long as the inventor maintains intellectual domination over making the invention, ideas, suggestions, and materials may be adopted from others. But it may be safer to name such persons as inventors. Discuss this with your technology transfer office.

Determining proper inventorship isn’t always easy. You should explain the facts and circumstances to the UMSL Technology Transfer and Economic Development staff and specifically discuss this important issue!

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A copyright is a right that protects original works of authorship fixed in a tangible medium of expression from being copied. Copyrights can include published and unpublished works - literary, dramatic, musical and dance compositions; films and photographs; audiovisual works; paintings, sculpture and other visual works of art; as well as computer programs. Copyright protects the expression of ideas, not the ideas themselves (e.g., computer code, but not computer program functionality). Copyright exists from the moment the work is created. Registration of the copyright is voluntary, but it is necessary in order to bring a lawsuit for infringement of a U.S. work.

**TRADEMARKS - ™ / ®**
A trademark is a word, phrase, symbol or design, or a combination of words, phrases, symbols or designs, that identifies and distinguishes the source of the goods of one party from those of others. A service mark is the same as a trademark, except that it identifies and distinguishes the source of a service rather than a product. Trademarks do not need to be registered, but federal registration can help protect the mark legally.
TRADE SECRETS
In Missouri (RsMO 417.453), "Trade Secret" is defined as "information, including but not limited to, technical or nontechnical data, a formula, pattern, compilation, program, device, method, technique, or process, that:

• Derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by other persons who can obtain economic value from its disclosure or use; and
• Is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.