PATENTS

INTELLECTUAL PROPERTY GENERALLY

What is Intellectual Property

Intellectual Property comprises legal rights derived from "products of the mind." It includes legal rights in inventions, discoveries, new ideas, works of authorship, etc., including patents, copyrights, and trademarks.

What is Know-how

Information that is secret, or that is otherwise not readily available to the public.

INVENTIONS AND IDEAS

Who owns LSU employee inventions

It depends upon the circumstances under which the invention is made. The general rule is that any employee invention belongs to LSU, regardless of when or where the invention was conceived or reduced to practice, and regardless of whether LSU equipment and other resources were used when the invention was conceived or reduced to practice. The Bylaws provide a narrow exception for some inventions that are unrelated to the employee's field of expertise.

A student is treated as an LSU employee for these purposes when acting in the course of his/her employment. While each case will depend on its own facts, graduate students are usually treated as LSU employees for this purpose, while undergraduate students usually are not.

Who owns an invention made on an employee's own time, without use of LSU facilities or funds, and that is in an area or field that has nothing to do with his/her LSU position

In this situation, the inventor will usually own the invention. Check with the Office of Intellectual Property and Tech Transfer to help avoid potential misunderstandings.

If an employee of LSU and an employee of an outside company or university invent something jointly, who owns the invention

The resulting patent will usually be jointly owned by LSU and the outside employee/outside employer. Again, each case depends on its own facts.

How are inventions made by faculty who have joint appointments on two LSU campuses handled

By cooperation between the Intellectual Property officers of the two campuses. This is an almost routine occurrence.

Under what circumstances does LSU release inventions back to the inventor(s)

On the written request of the inventor(s), if approved by LSU at LSU's discretion. There is no automatic right to have inventions released back to the inventor(s).

INVENTOR/CO-INVENTOR

Who is an inventor

One who conceives of an invention as it is ultimately reduced to practice.

Who are co-inventors or joint inventors

Two or more persons who materially contribute to the conception of an idea are co-inventors or joint inventors. Naming the correct inventors is a requirement under federal law in order for a patent to be valid. Identifying the correct legal inventors of an invention can be difficult in some circumstances. Not everyone who works on a research project is necessarily an inventor legally. It is important to understand that the identification of inventors is not a matter to be determined by consensus. Responsibility for this legal determination usually falls upon the patent attorney.

PATENTS

What is a Patent

A United States patent is a grant of a property right to the inventor, issued by the United States Patent and Trademark Office. Generally, the term of a new patent is 20 years from the date on which the application for the patent was filed in the U.S. or, in special cases, from the date an earlier related application was filed, subject to the payment of maintenance fees. U.S. patents are effective only within the U.S., its territories and possessions.

The right conferred by the patent gives the owner the right to exclude others from making, using, selling, offering for sale, and importing the invention in the U.S.

What can be patented

A patent may be obtained on a **novel**, **nonobvious**, and **useful** composition of matter, process, machine, article of manufacture, plant, microorganism, animal, computer software, or improvement of any of the above. <u>Process</u> is defined as a process, act or method, and primarily includes industrial or technical processes. <u>Composition of matter</u> relates to chemical compositions and may include mixtures of ingredients as well as new chemical compounds.

Novel:

In order for an invention to be patentable it must be <u>new</u> as defined in the patent law, which provides that an invention cannot be patented if: -(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, || or -(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country more than one year prior to the application for patent in the United States . . .||

Nonobvious:

Even if the subject matter sought to be patented is not exactly shown by the prior art, and involves one or more differences over the most nearly similar thing already known, a patent may still be refused if the differences would be <u>obvious</u>. The <u>subject matter sought to be patented</u> must be <u>sufficiently different</u> from what has been used or described before that it may be <u>said to be nonobvious to a person having ordinary skill in the area of technology related to the invention</u>. For example, the substitution of one color for another, or changes in size, are ordinarily not patentable.

Useful:

The term <u>useful</u> refers to the condition that the subject matter has a useful purpose and also includes operativeness, that is, a machine which will not operate to perform the intended purpose would not be called useful and therefore would not be granted a patent.

A patent cannot be obtained

- Upon a mere idea or suggestion, laws of nature, physical phenomena, or abstract ideas.
- If the invention has been <u>described in a printed publication</u> anywhere in the world, or if it was known or used by others in this country <u>before the date</u> that the applicant made his/her invention

- If the invention has been <u>described in a printed publication</u> anywhere, or has <u>been in public use</u> or on sale in this country <u>more than one year</u> before the date on which an application for patent is filed in this country
 - It is immaterial when the invention was made, or whether the printed publication or public use was by the inventor himself/herself or by someone else
 - If the inventor describes the invention in a printed publication or uses the invention publicly, or places it on sale, he/she must apply for a patent before one year has gone by, otherwise any right to a patent will be lost
 - The inventor <u>must file on the date of public use or disclosure</u> in order to <u>preserve patent rights</u> in <u>many</u> <u>foreign countries</u>.

Types of patents

Utility patents – may be granted to anyone who invents or discovers any new and useful process, machine, article of manufacture, or composition of matter, or any new and useful improvement thereof.

Design patents – may be granted to anyone who invents a new, original, and ornamental design for an article of manufacture.

Plant patents – may be granted to anyone who invents or discovers and asexually reproduces any distinct and new variety of plant.

What is a provisional patent application

A provisional patent application is a United States patent application that may be filed without some of the formalities required of a regular patent application. A provisional patent application is not examined by the US Patent and Trademark Office, and a patent cannot issue directly from a provisional application. A provisional application is abandoned as a matter of law one year after its filing date. A provisional application may be "continued" by filing a regular, non-provisional patent application satisfying all necessary formalities within one year of the provisional filing date.

The principal advantage of a provisional patent application is that its pendency, which cannot exceed one year, does not count as part of the twenty-year patent term. Although a provisional application need not satisfy all the formal requirements of a regular patent application, a provisional application should not be viewed as a vehicle to file a hastily-prepared application, with the thought that any problems can be fixed within the year. Except for complying with certain formal requirements, a provisional application should be prepared with the same degree of care as a regular patent application.

The filing of a provisional patent application starts the one-year period during which a foreign patent application may be filed that claims the benefit of a United States filing date.

LICENSING

What is the difference between licensing a patent and selling a patent?

When a patent is licensed, LSU still holds title to the patent. Only certain rights in the patent are granted to the licensee, under specific terms and conditions. Licensing is somewhat like leasing an apartment. LSU seldom sells a patent. An outright sale changes the ownership, somewhat like selling a home.

May an LSU employee take a license from LSU?

Yes, under limited circumstances, provided that the conditions of PM-67 are fulfilled.

What are licensing fees?

Initial fees usually due upon execution of a license, and usually not based on sales.

What are royalties?

Amounts paid by a licensee, based on the extent to which a patented invention is used. Royalties are often (but not always) a fixed percentage of sales of embodiments of the patented invention. **Patents**

Who owns patents at LSU?

The Board of Supervisors of Louisiana State University and Agricultural and Mechanical College owns patents on most inventions made by LSU employees.

How does one go about obtaining a patent at LSU?

The process of obtaining a patent on an LSU invention begins when a researcher submits a technology disclosure to the Office of Technology Transfer for evaluation. The OTT initiates the patent prosecution process with one of LSU's contracted patent attorneys, who prepares, files, and prosecutes patents on behalf of LSU's inventors. The patent attorney works closely with the inventors throughout the process.

How does the inventor participate in patent prosecution?

The patent attorney communicates with USPTO in close consultation with the inventors.

What is the cost of obtaining a US patent?

The cost of obtaining a patent varies widely. Factors include the attorney's time and hourly rate, the type of technology being patented, the number of claims and drawings included in the application, the number and nature of rejections from the USPTO, filing fees, etc. It is not unusual for the cost to range between \$4,000 and \$10,000.

What is the cost to the inventor or his/her department to obtain patents?

None. All patenting and other legal expenses, including licensing expenses, are borne by LSU. In certain cases the licensee or the research sponsor pays for such expenses.

Can LSU help a non-LSU employee obtain a patent?

No.

PUBLICATIONS AND PATENT FILING

Can a researcher publish his/her findings? If yes, how does it affect patenting in the USA?

Researchers are generally free to publish or make public disclosures of their findings any time, in any media of their choice, limited only by any pertinent contractual obligations. However, a public disclosure or publication destroys most non-US patent rights immediately if a patent application has not already been filed; US patent rights are lost if a patent application is not filed within twelve months of the publication or presentation. In most cases, filing a US patent application before the first publication or presentation will temporarily preserve the right to file outside the US.

What is publication for patent purposes?

For purposes of patent law, a publication may be a published article in a journal, magazine, or newspaper; a presentation at a conference; a thesis or dissertation; distribution of preprints; a posting on the Internet; and a number of other events that tend to disclose knowledge to the public, or at least that portion of the public most likely to appreciate its significance. While not technically a "publication", other events that have a similar effect include the sale of an embodiment of an invention, an offer to sell, and the public use of an invention. There are certain narrow exceptions.

Is a grant proposal considered a publication? A discussion of an idea with colleagues?

Submission of grant proposals to state or federal agencies, and discussions on a one-to-one basis with co-workers or peers may or may not be considered publications, depending on all the circumstances. Once a grant proposal has been approved, its abstract is generally published, typically online. At least the abstract will then be considered a publication, from the date it become publicly available. The remainder of the grant may or may not be considered a publication as well. Some funding agencies permit portions of a grant application to be specifically marked as "Confidential."

Are patent applications published?

Yes. Most US patent applications filed after November 2000 are published on the Internet approximately 18 months after the earliest filing date claimed. Patent applications in many other countries have long been published 18 months after filing. A published patent application is itself a publication that might be cited against a later patent application.

Patentability issues when there is a public disclosure:

When there is public disclosure of the subject matter of a patent application more than one year prior to the application being filed it can raise bars to patentability because such disclosure dedicates the subject matter to the public as a matter of law. Another issue arises because in a patent application an inventor can only claim those inventions which the inventor can demonstrate they had possession of at the time of filing the application and the inventor also must provide information in the application that is detailed enough for another practitioner skilled in the art to practice the invention without undue experimentation.

When the subject matter of the claims of a patent application were disclosed publicly more than one year prior to the patent application being filed it can result in a loss of patentability. This is a very strict requirement.

Depending on the circumstances surrounding that presentation it may or may not be considered a public disclosure. The availability of the information presented and also the "enablement" or level of detail in the presentation are key.