



Intellectual Property: Obtaining Patents, Trademarks, and Copyrights

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Overview

Intellectual property rights, including patents and trademarks, are frequently used to protect innovations. These rights allow their owners to exclude competitors from using the innovation. In essence, they are a limited monopoly. As the pace of discovery progresses, the use of patents and other intellectual property (IP) rights to protect discoveries has increased tremendously.

If you have formed a creative expression, invention, software, or process by yourself or in conjunction with others, then you have created intellectual property. Ownership of such intellectual property may generate a competitive advantage for your business. By protecting your work you can generally exclude other businesses from using your ideas.

At its simplest, property involves exclusive rights. An owner of a farm, for example, has the right to exclude others from walking across the fields. Without the owner's permission, someone who enters the owner's land is a trespasser, against

Audience: Entrepreneurs with intellectual property (IP) assets

Content: Explains the three basic types of protectable IP assets and instructs users in how to protect them

Outcome: Reader should be able to determine if an invention is patentable and to begin IP protection process

whom the owner has certain legal rights. An owner of intellectual property rights likewise holds exclusive rights in the intellectual property assets. For example, an owner of the copyright of a song has the exclusive right to publicly perform that song (among the rights granted by statute to copyright owners). That person can legally prevent others from publicly performing the song.

This publication describes the four general types of intellectual property protection (Table 1) and explains how to obtain protection.

Table 1. Four Types of IP Protection

Patent	Protects an original device, process, or composition of matter
Copyright	Protects creative expressions and printed materials, e.g., consulting manuals, books, maps, or computer software
Registered Trademark	Guards a product name, logo, symbol, or figure
Service Mark	Guards a brand or service name, logo, symbol, or figure

Patents can only be obtained in the United States through an application to the federal government. Copyrights, trademarks, and service marks may be obtained through tangible expression and/or use, but federal registration of these IP types provides additional protections. Once obtained, intellectual property is like any other property; it can be sold, licensed, given away, or even forfeited. If you are using intellectual property that belongs to others, then you should buy it or acquire the rights to use it through a license in order to avoid a dispute and expensive litigation.

Patents

A patent is the grant of a property right issued to the inventor by the United States Patent and Trademark Office (USPTO). The federal government grants the inventor exclusive rights to profits in his or her invention upon the issuance of a patent claiming the invention. The duration of a patent is up to 20 years from the filing date of the patent application, although only limited rights to sue infringers are available between the time the application is filed and when the respective patent issues (i.e., the “Patent Pending” period). After the patent is issued, and before it expires, the patent is the holder’s personal property and can be sold, given away, or licensed to anyone the patent holder chooses. Upon expiration of the patent, the patent becomes a part of the public domain.

There are three types of patents. A utility patent is for a process, machine, article of manufacture, composition of matter, or any new and useful improvement thereof. A design

patent is for the ornamental design for an article of manufacture. A plant patent is for inventing or discovering and asexually reproducing any distinct and new variety of plant. Utility and plant patents are granted for up to 20 years from the date of application filing. Design patents are for 14 years from the date the patent issues from an application.

What Is Patentable?

A patent can be issued if you invent any new useful process, machine, process of manufacture, or composition of matter. (Essentially these are, respectively, industrial/technical processes; machines; making things and the things that are made; and chemical compositions, mixtures of ingredients, and new compounds.) In addition, an improvement to an invention can sometimes be patented. Even a small functional or decorative improvement may be patentable. So even if you did not invent the mousetrap, you could certainly patent an improved one.

An idea is patentable if it meets three criteria: novelty, usefulness, and nonobviousness.

1. **Novelty:** Nothing essentially the same as the claimed innovation exists; i.e., the invention must be new. It is important to note that if the public were aware of or used the invention in this country, or if the invention was sold, offered for sale, or used commercially (even if hidden from public view, such as a secret machine on an assembly line) more than one year before the application date, then the invention would not be novel, and the application would be denied.
2. **Usefulness:** The invention must provide significant benefits to society, although this requirement is generally more relaxed than it sounds.
3. **Nonobviousness:** The invention must possess a new characteristic that is not known in the field and must not be obvious to a person with an average or ordinary knowledge of the field at the time the application is filed.

The ultimate decision on whether or not your invention is patentable is made by USPTO, when it examines your application. But there are some steps you can take to pave the way for a favorable outcome. The questions in the “Patent Questions” section will help you determine if your idea is patentable. However, the best way to establish the novelty of an

invention is to conduct a search of the Patent Office files and worldwide publications. To assist you in your search process, the federal government created the Depositing Library Program. Libraries in this program contain issued patents and provide technical staff and useful publications. You can find library locations through the Government Printing Office (URL at the end of this publication).

Infringement

Anyone who makes, uses, sells, or imports a patented product without the patent holder's consent has committed infringement. With any unauthorized use, the patent holder can bring a civil suit for damages against the infringer. If the suit is successful, a patent holder may receive either (1) lost profits that were taken by the infringer or (2) reasonable royalties, depending on a number of factors.

If the infringement is determined to be willful, then damages of up to three times the actual damages, as well as court costs and attorneys fees, may be awarded. To win on the issue of infringement, the patent holder must show that he or she owns the patent and that the defendant infringed on the patent. The infringer may try to win the suit by proving the patent was invalid (e.g., that the invention was not novel or nonobvious) or unenforceable (e.g., due to inequitable conduct by the patentee).

Obtaining Patents

Before beginning the patent application process, an inventor should know as much about what has already been invented (the "prior art") as possible. The application to the Patent Office must show how the invention works, typically including detailed technical drawings and written information describing how the device can be used (and for some types of inventions, manufactured). Utility patent applications also end with a set of claims that serve as the legal definition of what is sought to be patented. As part of the application, the inventor must pay an application fee and may have to pay a separate examination fee. If the application issues a patent, the inventor (or other owner of the patent) is required to pay a periodic maintenance fee, usually due every few years.

A U.S. patent application requires:

- A declaration that the applicant discovered the invention (by him- or herself or with other co-inventors);
- A detailed specification, including necessary drawings to explain the invention, and a written description with claims. The elements of the specification should enable an informed person in the field to make and use the invention; and
- The required fees.

A patent examiner will review the application and decide if the application is allowable. This will typically involve a review of issued patents, publications, and materials supplied by the applicant under a duty of disclosure to ensure that the invention has not already been protected, was not known by others prior to being conceived by the applicant, or was not publicly disclosed, used, sold, or offered for sale more than one year before the applicant filed his or her patent application.

The application process for a utility patent typically costs at least a few thousand dollars and sometimes \$10,000 or more, including the fees of a patent attorney or agent. The application process typically takes from one to three years, but may take longer. If the claims of the application are rejected (usually because the examiner found prior patents), then the inventor may respond to the examiner's rejection. If a final rejection is then levied, the applicant may appeal to the USPTO Board of Patent Appeals and Interferences, and then either to the U.S. Court of Appeals for the Federal Circuit or the U.S. District Court for the District of Columbia. Many patent applications are filed that never yield an issued patent.

The application process requires a thorough knowledge of the technical aspects of the patent as well as of the patent process. In some cases, the inventor may be able to acquire intellectual property rights by him- or herself. But the process is tedious and lengthy, so it is often advisable to use a registered attorney or patent agent. Additionally, an improperly drafted application could fail to specifically define the innovation or define it so broadly as to be useless. The ultimate goal is to obtain a patent with claims sufficiently broad as to prevent others from legally copying your invention.

If the USPTO improperly issues you a patent with claims that cover the prior art, then someone accused of infringing it will have a strong defense. By using a professional advisor, you will maximize your chances of obtaining a patent with a meaningful scope of protection.

Patent Questions

Answer the following questions regarding your idea to help you determine if your idea is patentable.

1. Is the invention of practical use?
2. Does the invention show an element of novelty (some new characteristic not known in its technical field)?
3. Would someone skilled in the field be unable to deduce the invention in view of what is already known? Note: If there is no suggestion or motivation in the field to combine or modify past knowledge to come up with your invention, even if it is physically possible to pick and choose known features in the art to form your invention, then your invention would not be considered “obvious” in light of the prior art and may be patentable.
4. Was the invention described in a printed publication anywhere or used in this country more than one year prior to the date of patent?
5. Was the invention in public use or on sale in this country more than one year prior to the date of the patent?

If you can answer “yes” to the first two questions and “no” to the last three, then your idea may be patentable. If it is, and your idea holds commercial promise, then you should begin the patent application process.

Plant Variety Protection Act (PVPA)

Providing protections similar to the federal patent laws, the Plant Variety Protection Act of 1994 grants developers of new varieties of plants a certificate with patent-like rights that protect the reproduction and distribution of such varieties. The PVPA ensures that protected varieties can be sold as seed stocks only if permission of the certificate holder has been obtained and, in some cases, only as a class of certified seed. To take advantage of the protections under the PVPA, varieties

must have labels on the seed containers indicating the type of protection. Additionally, farmers may save a limited amount of the plant variety seed for replanting, but cannot sell it to anyone without permission of the owner of the PVPA rights to the variety.

A Certificate of Protection is awarded to a variety’s owner after an examination shows that it is new, distinct from other varieties, and genetically uniform and stable through successive generations. The cost of protection is \$4,084. Owners of U.S. protected varieties have exclusive rights to multiply and market the seed of that variety. Protection is for 20 years for most crops and 25 years for trees, shrubs, and vines.

Trademarks and Service Marks

Trademarks are a way that businesses can identify goods as their own. Trademarks can be words, names, symbols, or devices that are used in trade with goods to indicate the source of the goods and to distinguish them from the goods 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. The terms “trademark” and “mark” are commonly used to refer to both trademarks and service marks.

Obtaining Trademarks

Trademarks (and service marks) are essentially acquired in two ways (aside from purchasing rights in a mark from a rightful owner). First, acquisition may be accomplished through use of the mark in commerce. Acquiring a trademark through use alone limits the mark owner to protection of the mark in the geographic area in which it is used. If the mark is used in conjunction with goods or services offered over the Internet, however, the mark owner may, in some circumstances, enjoy exclusive rights to use the mark nationwide.

Second, federal law (as well as individual state laws) allows applicants to reserve, or “register,” a trademark. Trade or service marks cannot be for names, titles, or certain categories of similar phrases and cannot be generic terms. For instance, a trademark like Coca-Cola identifies and distinguishes a product, but the term “cola” is too general to trademark. A trademark cannot be the same or confusingly similar to a trademark already in use. A search of the federal

registrations—and preferably state registrations and other databases containing brand names for goods and services, including Internet domain names—will be necessary to determine this. You can find the URL for the USPTO at the end of this publication. Registration requires that the trademark be in use on goods sold as part of business. If the goods are sold in only one state, then that state’s trademark law will apply. If sold as part of interstate commerce, then federal law will apply.

A typical registration fee is \$335 per class of good and/or service sold in conjunction with the mark. Protection lasts for 10 years before it must be renewed, but filings attesting to use of the mark must be made at 8 and 15 years after the mark is registered. Fees for renewal and penalties for late renewal apply.

If an application for a trademark or service mark is rejected it is probably because:

1. There is a likelihood that consumers will confuse your mark with a mark already registered or applied for or an unregistered well-known mark;
2. Your mark merely describes a product, service, or feature of the product or service;
3. Your mark consists of a geographical term that is misleading or should not be monopolized by a single enterprise; or
4. Your mark violates public order or morality.

The standard format of notification of a trademark is to place the letters “TM” after every use of the trademark or symbol. Use “SM” for a service mark. You should use the symbol ® when the federal trademark registration process has been completed and confirmed.

Copyright

Obtaining copyright does not require an official registration. A created work is considered protected by copyright as soon as it exists. If the work has been put into a fixed form, such as written down or recorded, then it is considered copyrighted. While registration is not necessary, filing with the U.S. Copyright Office of the Library of Congress adds protection in the event of a dispute.

Formal registration with the Copyright Office creates a public record of the copyright and, in most cases, serves as absolute evidence of the copyright’s validity and entitles statutory damages of up to \$100,000 per infringement to be available to the copyright owner (who is otherwise limited to actual damages and lost profits). The registration fee is \$30. A search of the Copyright Office records may help you identify registered copyrights (URL at the end of this publication).

Generally, for works created after 1978, copyright protection lasts for the author’s life plus 70 years. In the case of works made for hire (a technical definition that does not necessarily include independent contractors), the protection is for 95 years from publication or 120 years from creation, whichever is shorter.

Once a work has been copyrighted (i.e., created and fixed in a tangible medium of expression) the author can notify users of this by using a copyright notice, such as the © symbol or the word “Copyright.” These symbols should be used in conjunction with the year of creation and the name of the copyright owner.

Final Comment

Another type of IP right you should be aware of is trade secret protection. Although this publication did not cover rights in trade secrets, you should know that trade secret laws (both federal and state laws) protect the owner of confidential information when such information puts the owner at a competitive advantage in the relevant market.

Resources

For more information about patents and trademarks, consult the following sources.

Online searchable database for patent, trademark, and service mark queries:

- U.S. Patent and Trademark Office
www.uspto.gov
- U.S. Copyright Office
www.copyright.gov
- U.S. Government Printing Office
www.gpoaccess.gov

Searchable database, publications, and other online resources:

- Plant Variety Protection Office
www.ams.usda.gov/science/PVPO/PVPindex.htm
- BNA, Inc. (Bureau of National Affairs) IP Center Online
ipcenter.bna.com

Intellectual property research and publications:

- Cornell University's Legal Information Institute (provides the U.S. Code)
www4.law.cornell.edu/uscode
- U.S. Copyright Office's Entrepreneur's Reference Guide to Small Business Information
www.loc.gov/rr/business/guide/guide2

Categorized compilation of books, references, and directories on general entrepreneurship:

- World Intellectual Property Organization
www.wipo.int/index.html

Information on international intellectual property issues:

- *The Entrepreneur's Guide to Business Law*, by Constance Bagley and Craig Dauchy (1998).

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