

# **Patents, Trademarks, Servicemarks, Copyrights, & the Digital Media Consumers' Rights Act (coming soon)**

## **Overview & FAQs**

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### **Patents**

A patent for an invention is a grant of a property right by the government to the inventor (or his or her heirs or assigns), acting through the Patent and Trademark Office. The patent term is 20 years from the date on which the application for the patent was filed in the United States. The right bestowed by the patent extends only to the United States and its territories. The right conferred by the patent grant is, in the language of the statute and of the grant itself, the right to exclude others from making, using, offering for sale, or selling the invention in the United States or "importing" the invention into the United States. A patent is NOT the right to make, use, offer for sale, sell or import, but the right to exclude others from these activities relating to the invention.

The Constitution of the United States gives Congress the power to enact laws relating to patents, in Article I, section 8, which reads "Congress shall have power ...to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries." From time to time, Congress has enacted an assortment of laws relating to patents. The first patent law was enacted in 1790. In 1899, just before Man's unprecedented quantum leap into technology and the modern era, then director of the United States Patent and Trademark Office (USPTO), Charles Duell said "Everything that can be invented has been invented."<sup>1</sup>

In April of 1951, Congressman Bryan of South Carolina introduced a bill, H.R. 3760, which was the culmination of over four years work by a two person drafting committee. This committee was composed of the Examiner-in-Chief of the Patent Office, P.J. Federico, and the President of the New York Intellectual Property Law Association, Giles Sutherland Rich. This bill became the Patent Act of 1952, the "most significant revision of the U.S. patent law since 1836."<sup>2</sup> The law now in effect is a general revision which was enacted July 19, 1952. The law establishes the Patent and Trademark Office

to administer the law relating to the granting of patents, and contains various other provisions relating to patents.

In the language of the statute, any person who "invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent," subject to the conditions and requirements of the law. The word "process" is defined by law as a process, act or method, and primarily includes industrial or technical processes. The term "machine" used in the statute needs no explanation. The term "manufacture" refers to articles which are made, and includes all manufactured articles. The term "composition of matter" relates to chemical compositions and may include mixtures of ingredients as well as new chemical compounds. These classes of subject matter taken together include practically everything which is made by man and the processes for making the products. The Atomic Energy Act of 1954 excludes the patenting of inventions useful solely in the utilization of special nuclear material or atomic energy for atomic weapons.

The patent law also specifies that the subject matter must be "useful." The term "useful" in this connection 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. Interpretations of the patent law by the courts have defined the limits of the field of subject matter which can be patented, thus it has been held that the laws of nature, physical phenomena and abstract ideas are not patentable subject matter.

A patent cannot be obtained upon a mere idea or suggestion. The patent is granted upon the new machine or manufacture, etc., as noted above, and not upon the idea or suggestion of the new machine. A complete description of the actual machine or other subject matter for which a patent is sought is required.

## **Trademarks & Servicemarks**

A trademark is either a word, phrase, symbol or design, or combination of words, phrases, symbols or designs, which identifies and distinguishes the source or origin of the goods or services 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. The terms "trademark" and "mark" are used to refer to both trademarks and service marks. Normally, a mark for goods appears on the product or on its packaging, while a service mark appears in advertising for the services.

Trademark rights may be used to prevent others from using a confusingly similar mark but not to prevent others from making the same goods or from selling them under a non-confusing mark. Similar rights may be acquired in marks used in the sale or advertising of services (service marks). Trademarks and service marks which are used in interstate or foreign commerce may be registered in the Patent and Trademark Office (PTO).

Trademark rights arise from either (1) actual use of the mark, or (2) the filing of a proper application to register a mark in the PTO stating that the applicant has a bona fide intention to use the mark in commerce regulated by the U.S. Congress. Federal registration is not required to establish rights in a mark, nor is it required to begin use of a mark. However, federal registration can secure benefits beyond the rights acquired by merely using a mark. For example, the owner of a federal registration is presumed to be

the owner of the mark for the goods and services specified in the registration, and to be entitled to use the mark nationwide.

Unlike copyrights or patents, trademark rights can last indefinitely if the owner continues to use the mark to identify its goods or services. The term of a federal trademark registration is 10 years, with 10-year renewal terms. However, between the fifth and sixth year after the date of initial registration, the registrant must file an affidavit setting forth certain information to keep the registration alive. If no affidavit is filed, the registration is canceled.

Anyone who claims rights in a mark may use the TM (trademark) or SM (service mark) designation with the mark to alert the public to the claim. It is not necessary to have a registration, or even a pending application, to use these designations. The claim may or may not be valid. The registration symbol, ®, may only be used when the mark is registered in the PTO. It is improper to use this symbol at any point before the registration issues.

## **Copyrights**

A copyright protects the writings of an author of "original works of authorship" against copying. Literary, dramatic, musical and artistic works are included within the protection of the copyright law, which in some instances also confers performing and recording rights. This protection is available to both published and unpublished works.

The copyright protects the form of expression rather than the subject matter of the writing. For example, a description of a machine could be copyrighted as a writing, but this would only prevent others from copying the description; it would not prevent others from writing a description of their own or from making and using the machine. Copyrights are registered in the Copyright Office in the Library of Congress.

The Copyright Act of 1976 generally gives the owner of copyright the exclusive right to do and to authorize others to do the following:

- To reproduce the copyrighted work in copies or phonorecords;
- To prepare derivative works based upon the copyrighted work;
- To distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending;
- To perform the copyrighted work publicly, in the case of literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works;
- To display the copyrighted work publicly, in the case of literary, musical, dramatic, and choreographic works, pantomimes, and pictorial, graphic, or sculptural works, including the individual images of a motion picture or other audiovisual work; and
- In the case of sound recordings, to perform the work publicly by means of a digital audio transmission. In addition, certain authors of works of visual art have the rights of attribution and integrity pursuant to the Copyright Act.

Copyright is secured automatically when the work is created, and a work is "created" when it is fixed in a copy or phonorecord for the first time. "Copies" are material objects from which a work can be read or visually perceived either directly or with the aid of a machine or device, such as books, manuscripts, sheet music, film, videotape, or microfilm.

## **Digital Media Consumers' Rights Act (coming soon)**

The Digital Media Consumers' Rights Act restores the historic balance in U.S. copyright law by reaffirming fair use. The DMCPRA provides that it is not a violation of Section 1201 of Title 17 (the Digital Millennium Copyright Act, or DMCA) to circumvent a technological measure in connection with gaining access to or using a work if the circumvention does not result in an infringement of the copyright in the work. For example, under the bill a user may circumvent an access control on an electronic book he purchased for the purpose of reading it on a different electronic reader. However, if he were to upload the book onto the Internet for distribution to others, he would be liable for both a Section 1201 circumvention violation and for copyright infringement.

The bill amends the DMCA to permit researchers to produce the software tools necessary to carry out "scientific research into technological protection measures." Current law allows circumvention for encryption research under specified circumstances. The bill will enable circumvention for research on technological measures other than encryption. The bill also permits a researcher to develop the tools necessary for such circumvention.

## **Patent FAQs**

### **What is a patent?**

A patent is a government-granted right to exclude competitors from practicing an invention for a limited period of time - formerly 17 years from the date of issue and now 20 years from the date of application. This right can be licensed to third parties in return for fees and royalties. Thus, a patent is a means of securing economic benefit from an invention. An invention must be new, useful and unobvious to qualify as patentable.

### **Who owns my inventions?**

Inventions made in the course of work for an employer generally belong to the employer.

### **Can I patent a discovery after publishing it?**

In the US an inventor has a year from the date of first publication to file a patent application. In virtually all other countries a patent application cannot be filed if there has been any prior publication. The only exception to this rule is provided under an international treaty specifying that if a patent application has been filed in the U.S. prior to publishing, is allowed a year from the application date to file in other countries. Accordingly, an application should be filed early.

### **Who is an inventor?**

An inventor is the one who first conceives of an invention, in detail, and with enough specificity that one skilled in the field could construct and practice the invention. Those who translate the concept into practice are not considered co-inventors unless they add to the original concept of the invention although, with the agreement of the inventor(s), they may share in financial benefits of the invention.

### **What is an invention?**

Inventions include new processes, products, apparatus, compositions of matter, living organisms, or improvements to existing technology in those categories.

A process is a method of producing a useful result. It can be an improvement on an existing system, a combination of old systems in a novel manner, or a new use of a known process. A machine is an apparatus that performs a functions and produces a definite result or effect. It can range from a simple device to a complicated combination of many parts. A manufacture is an article that is produced and has a usefulness. Compositions of matter include chemical compounds, mixtures such as drugs and, more recently, living matter.

Abstract ideas, principles, and phenomena of nature cannot be patented.

What are the criteria for a patent? In the United States, patentability is determined by novelty, utility, and nonobviousness:

1. **Novelty:** An invention is novel if nothing identical previously existed. How does your invention differ from what already exists? In what ways might it not be unique?
2. **Utility:** An invention is useful if it produces an effect, if the effect is the one claimed, and if the effect is desired by society, at least in principle. Who might find your invention useful, and why? What companies might be interested in making or selling it, and why? Is there other technology that currently provides similar utility? If so, what is the unique advantage of your invention?
3. **Nonobviousness:** Nonobviousness measures the degree to which an invention differs from the totality of previous knowledge, and the degree to which an invention could not have been anticipated from that knowledge. At the time it was conceived, why might your invention not have been obvious to people reasonably skilled in the field?

### **What does "unobvious" mean in patent law?**

There is much ambiguity about what "unobvious" means in the context of U.S. patent law. The level of unobviousness required to render an invention patentable is a function of the particular art area containing the invention. In some cases the unobvious part of an invention (the part that renders the invention patentable) is simply identifying the problem, even if the solution is obvious once the problem has been identified.

### **Are algorithms or computer software patentable?**

If one has invented a novel and unobvious algorithm or piece of computer software, and wishes to obtain patent protection, the next step should be to consult one or more patent attorneys or patent agents who are experienced in getting patents on inventions having algorithms or software in them. The law (in the U.S.) is settled that the mere presence of software in an invention does not automatically render it unpatentable. It is commonplace for inventors to obtain patents in inventions composed largely or nearly entirely of software.

### **What are the time limits for filing a patent application?**

Before making plans for the timing of the filing of a patent application, any inventor should seek advice of competent counsel or agent. The time periods described here represent only a few of the factors that will influence how quickly a patent application should be filed.

Under U.S. patent law, a patent will not be granted to an applicant unless the application is filed less than one year from the date that the invention was sold or offered for sale within the United States. Yet another condition imposed under U.S. patent law is that the patent will be denied unless the application is filed within one year of the date the invention was described in a printed publication anywhere in the world.

While these are the two most commonly mentioned so-called "statutory bars" in U.S. patent law (35 USC section 102), they are by no means the only factors that should be taken into account when one decides when to file a patent application (or, when to consult patent counsel). Numerous other factors influence the timing of the filing of a U.S. patent application. For one thing, there is always the possibility that someone else has filed or will soon be filing a patent application on the same subject matter.

Even if the invention has not been publicly divulged there are reasons to file a patent application sooner rather than later. Filing the application sooner will help to some extent in prevailing over others who happen to have developed the invention independently and who also file a patent application. In the United States two approaches are possible to the protection of an invention in the face of a statutory bar such as the on-sale bar or the publication bar: filing a patent application or filing a provisional patent application.

If you are interested in obtaining protection in countries other than the U.S., it is important to bear in mind that the patent application should be filed prior to any public divulgation of the invention.

### **What is a priority date for a patent application?**

The term "priority date" can mean any of several different things, depending on the context. The "priority date" of a patent application is the date which controls what prior art affects its patentability, for example, whether a statutory bar applies. For many patent applications, the priority date is the date on which the patent application was filed with the patent office. In some circumstances, a patent application will enjoy a priority date earlier than its own filing date. For example, a continuation or divisional application will enjoy the filing date of the application for which it is a continuation or divisional. Another example is the application which claims priority under the Paris Convention from a counterpart application filed less than one year earlier in another country; such an application has a priority date equal to that of the earlier application. Yet another example is the application which claims priority from a provisional application. Finally, an application may enjoy a priority date by virtue of being a national-phase application arising out of a PCT patent application in which the United States was designated. There are other circumstances in which a patent application will have a priority date differing from its filing date.

### **What is the PCT (Patent Cooperation Treaty)?**

PCT stands for the Patent Cooperation Treaty (text). PCT patent applications are administered by the World Intellectual Property Organization. The Patent Cooperation

Treaty permits an inventor to file what is called a PCT patent application. The Treaty is the result of an effort by many countries to provide some streamlining of patent applications across several countries at once. The US Patent and Trademark Office has additional information about PCT.

### **What benefits are derived from a PCT application?**

For an applicant who has filed a patent application in a particular country, a PCT application offers a way to postpone having to make decisions about filing patent applications in other countries. If there were no such thing as the Patent Cooperation Treaty, then the only opportunity to postpone making decisions about foreign filing would be the opportunity provided by the Paris Convention. Under the Paris Convention, someone who files an application in one country is forced to make a decision, within one year, as to whether to file patent applications in other countries which would claim priority from the first application. A PCT application offers a way to extend the time during which a decision must be made about foreign patent filings, for a longer period than the decision-postponement period provided by the Paris Convention. By filing a PCT application, the applicant can postpone for 20 months (rather than 12 months under the Paris Convention) the decision about whether or to spend the money for foreign patent filings. In addition, assuming that the first application was filed in a country that has adhered to Chapter II of the Patent Cooperation Treaty, it is possible to perform a step called "demanding preliminary examination" which permits postponing the decision about foreign filing (in many countries) until 30 months after the priority date.

The PCT process is helpful to those who don't have enough money to file in several countries, but who expect to have enough money at a later time. A PCT application provides a convenient way to keep the options open for foreign filing for up to thirty months.

### **How do patents differ from trade secrets?**

There is a tension between the notion of trade secrets and patents. One approach to protecting intellectual property is to hold everything as a trade secret. The decision to apply for a patent includes necessarily a decision to take some fraction of one's trade secrets and to give them away, in return for the grant of a patent.

The decision to apply for a patent does not necessarily require giving up all of one's trade secrets, however. One might have trade secrets on inventions A, B, and C, and applying for a patent on C might not require giving up the trade secret status of A and B.

However, to obtain a U.S. patent on C, it is necessary that the application contain (1) enough to enable one skilled in the art to practice C and (2) the best mode known to the applicant for practicing C. This might require revealing A and B in the application. If so, it would probably make sense to seek patent protection on A and B as well as on C.

Depending on the time sequence, one could patent an invention and simultaneously keep secret an improved version of the invention. For example, if a patent application for invention A is filed, and if an improvement A+ is conceived after the filing of the patent application on A, the improvement A+ could be kept secret.

One should keep in mind, however, that it is difficult to keep information "secret" at a public institution. The U.S. Patent Office has announced plans to begin publishing patent applications 18 months after filing.

### **Why are laboratory notebooks important?**

Laboratory notebooks are important for several reasons. In the U.S., if two applicants are seeking a patent on the same invention, the patent is not necessarily awarded to the one who filed first, but is sometimes instead awarded to the one who was the first to invent. Establishing priority of invention often depends on such documentation as laboratory notebooks. An inventor who fails to keep a laboratory notebook runs the risk of having difficulty establishing the date on which the invention was made, and thus may lose out in a priority contest with another inventor.

Laboratory notebooks are also important for other reasons. For example, when one is accused of taking a trade secret from someone else, a laboratory notebook can show that one was in possession of the contested information before any access to the adversary's information, this helps to negate a claim that the secret was stolen from the adversary.

### **What if I am about to publish something?**

Anyone who is going to publish an article, whether it be in a scholarly journal, the trade press, or elsewhere, would be wise to consider whether such a publication would be a bar to patent protection. For example, where it is desired to get patents in countries other than the United States, it would be wise consider filing a patent application prior to the publication. If you are quite sure you will not want patent protection in countries outside of the U.S., and if the only patent protection you think you would ever want is protection within the U.S., then you might take advantage of the one-year grace period offered by U.S. patent law. In such a case you would mark the one-year anniversary of the publication on a calendar and be sure to file the patent application before the year was up.

### **What is a Provisional Patent Application?**

Effective June 8, 1995, as a consequence of the adherence of the U.S. to GATT, it is possible to file what is called a Provisional Patent Application with the U.S. Patent and Trademark Office. The Provisional Patent Application is intended to be a relatively low-cost way of postponing the cost and effort of drafting and filing a full patent application. The provisional application need not contain claims, and the filing fee is modest (\$160 for large entities, \$80 for small entities). The applicant may then wait almost a year before filing a patent application. The twenty-year patent term that runs from the first U.S. filing date does not start with the provisional application, but instead begins only with the date of the subsequent patent application. As a result, one may postpone the start of the 20-year patent term by up to one year by the use of a provisional patent application. The provisional application may serve as a priority document for non-US convention filings.

Under U.S. patent law, the provisional application is subject to the same burdens under 35 U.S.C. § 112 as a patent application. This means that the provisional application must be complete enough to enable one skilled in the art to practice the invention, and that the application must disclose the best mode known to the applicant for practicing the invention. These requirements are likely to lead to difficulties for those who file sketchy provisional applications. One who files a provisional application (and



who fails to satisfy the requirements of § 112) would be making a mistake to sit back and rely on that application as a justification for waiting eleven months before taking the time and trouble to prepare and file a full patent application.

A second potential drawback of the provisional filing is that it postpones, by a year, any hint or clue from a patent examiner as to whether or not the invention is likely to be patentable. No search report or office action will come during the pendency of the provisional application; they will only be received after the filing of the patent application. For the applicant who is considering whether or not to file patent applications in countries outside of the U.S., the use of a provisional application virtually guarantees that no clues to patentability will be received from the U.S. Patent Office that might assist in deciding whether or not to spend the money on foreign filing. The applicant who files a patent application (rather than a provisional application) may, in contrast, receive an Office Action before the year is up for making foreign-filing decisions, and the content of the Office Action may be helpful in deciding what to do about foreign filing.

### **What are the requirements for a Provisional Patent Application?**

A Provisional Application, to obtain a filing date in the U.S. Patent Office, has to contain the items set forth in 37 CFR § 1.51(a)(2). The requirements of that Rule are summarized here but the reader is advised to consult the Rule personally and to be familiar with it. The Provisional Application requires a specification satisfying 35 U.S.C. § 112, except that it need not contain claims. In simple terms the specification must enable one skilled in the art to practice the invention, and must disclose the best mode known for practicing the invention. A drawing must be provided if needed to explain the invention, see 37 CFR § 1.81-1.85. The Provisional Application must also identify the inventors who contributed to the subject matter disclosed in the application. The filing fee (\$160 or \$80) is required. A cover sheet is also required.

### **Are provisional patent applications public or are they kept confidential?**

All patent applications, provisional and non-provisional, received at the US Patent Office are published after 18 months, unless inventor specifically request differently. Therefore, a patent application becomes public 18 months after the priority date.

What is a divisional patent application?

A divisional patent application is an application claiming priority from some previously filed patent application (called a "parent application") in which more than one invention was disclosed. The divisional application has claims directed to a different invention than that claimed in the parent application. The most common way this happens is the Patent Office rules that your application contains more than one invention, communicating this in what is called a "restriction requirement." The applicant then elects to pursue one of the inventions in that application (the "parent application"), and optionally submits a "divisional application" containing the claims regarding another of the inventions. The divisional application is entitled to the filing date of the parent application as its priority date. It is not uncommon to receive a restriction requirement identifying several inventions, leading to several divisional applications and several issued patents.

### **What is a continuation patent application?**

Under United States patent practice, a continuation patent application is an application which claims priority from a previously filed application. A continuation application is usually filed when the Patent Office has responded to the parent application with a "final" office action (rejecting the claims in the application), but the applicant wishes to revise the claims again. A continuation application receives the priority date of its parent application. A continuation application is often filed using the file wrapper continuation (FWC) administrative procedure. A related type of patent application is the continuation-in-part (CIP) application.

### **What is a CIP (continuation-in-part) patent application?**

Under United States patent practice, it is possible for the owner of a pending patent application to file a what is called a "continuation-in-part" patent application. A CIP patent application is an application which contains some matter in common with a previous patent application (called the "parent" application), and that also contains new matter, and which was filed at a time when the parent application was pending. If such an application issues as a patent, then the patent has a sort of a blurred priority date. It is possible that some claims of the patent enjoy the priority date of the parent application, while other claims might enjoy only the filing date of the CIP application as their priority date.

### **What is the governing law for patents?**

In the United States, the law that governs patents is Title 35 of the United States Code, commonly cited as "35 USC". It incorporates the Patent Cooperation Treaty and changes made for conformity to the intellectual property provisions of the General Agreement on Tariffs and Trade.

### **How long does it take to prepare and file a patent application?**

Where the subject matter is simple, for example, an improved machine with three or four moving parts, the preparation of a patent application may take only a few hours. With these applications, it is essential that the inventors review the draft carefully to see what else needs to be included. It often happens that upon review of the draft, the inventors identify entire additional aspects of the invention that the attorney was not told about. These aspects have to be included in the application, the claims are revised, and it is necessary to revisit the question of who the inventors are (which is defined with respect to the claims) and a new inventor may be added or deleted. That inventor must review the entire application as well, and perhaps more material is identified that needs to be added.

In summary, the patent process is a tricky bureaucratic set of rules and regulations that has unforgiving time deadlines. It is not an easy task to transcend an idea into patent, but the protection afforded by its grant can be a great source of safety and revenue generation, both in the U.S. and in the world. As long as "Everything that can be invented has been invented," has not been invented.

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<sup>1</sup> Walter Isaacson, *Who Mattered and Why*, *Time*, Dec. 31, 1999, at 48, 54.

<sup>2</sup> *Remarks of Q. Todd Dickinson, Acting Assistant Secretary of Commerce and Acting Commissioner of Patents and Trademarks at Memorial Service for Judge Giles Sutherland Rich*, September 27, 1999