

Legal FAQ: Introduction to Patent Law

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1. What is a patent?

A patent is a legal right to exclude others from practicing the patented invention for a limited period of time in exchange for disclosing the details of the invention to the public. An owner of a United States patent can exclude others making, using, offering for sale, or selling their invention in the United States, importing their invention into the United States, exporting a substantial portion of the invention for assembly into the invention overseas, or exporting components overseas that were especially made or adapted for use in a system that infringes and those components are not staple articles of commerce suitable for substantial non-infringing use.

There are several different types of patents in the United States. Utility patents are the most common, and they cover processes, machines, articles of manufacture, and compositions of matter. Design patents cover the ornamental features (i.e., appearance) of a product. Plant patents cover newly developed varieties of plants provided they can be reproduced asexually.

2. What can be patented?

The United States Patent Law specifies the broad categories of what can be patented. Any useful, new and nonobvious process, machine, article that is made, or chemical composition, or improvement of any of the above can be patented. Business methods and software can also be patented, but laws of nature and abstract ideas cannot be patented. (For more information on what “useful, new, and nonobvious” means, see “Is my invention patentable?”.)

3. Is my invention patentable? What are the standards my invention has to meet?

Not all inventions are patentable. In the United States, an invention has to be useful, new, and not obvious. An invention generally is assumed to be useful unless there is some reason to believe that it will not work. It is new if it differs from previously existing technology. It is nonobvious if the differences from the previously existing technology would not be obvious to ordinary practitioners in the relevant technological field. Patentable inventions need not be pioneering breakthroughs. A patent can be

obtained on modest improvements in existing technology as long as the improvements are useful, new, and not obvious.

4. How long does it take to get an issued patent?

The length of time it takes to obtain an issued patent varies significantly depending on the technology area. The backlog of patent applications filed with the United States Patent and Trademark Office (“PTO”) and waiting for examination is considerable. Some technology areas are appreciably slower than others. For software and financial inventions, the PTO predicts that the delay between an application being filed and when an Examiner reviews the patent application for the first time could exceed five years. In other technology areas, such as optics, an Examiner may review the patent application within one to two years of the filing date. Typically, after the Examiner has reviewed a patent application for the first time, it may take one to two additional years of back and forth communications with the Examiner to come to an agreement as to the scope and wording of the patent claims and get the patent issued. There are some provisions for speeding up review when there is active infringement by others of the invention.

5. What are the parts of a patent application?

A United States patent application typically contains the following sections: Background, Summary of the Invention, Brief Description of the Drawings, Detailed Description, Claims, Abstract, and Drawings. These sections are briefly described below.

The Background identifies and describes some of the problems solved by the invention. This section may also describe conventional solutions to the problems and the shortcomings of such solutions. The Summary of the Invention briefly describes the structure and operation of at least one embodiment of the invention. The Detailed Description describes in detail the structure and operation of one or more embodiments of the invention. From a legal perspective, it is essential that this section adequately describes the invention, enables a person skilled in the relevant art to make and use the claimed

invention, and describes the best mode known to the applicant for carrying out the claimed invention. The Claims identify the exact scope of the rights provided by the patent. The Claims of a patent are analogous to the legal description in a deed to real property. The Abstract presents a one paragraph summary of the subject matter described in the application. The Drawings illustrate the structure and operation of the invention.

6. Is there anything less expensive or faster to file than a full-blown patent application? What is a Provisional Patent Application?

A United States provisional application can be filed when there is either limited time or funding to prepare a full non-provisional utility patent application, or when an applicant wants to wait up to a year to see how the market responds to technology to determine whether to proceed with a full patent application.

A provisional application allows an applicant to get a U.S. filing date without all the formal requirements of non-provisional utility applications, such as claims, formal drawings, an oath or declaration by the inventor, and the higher filing fee. However, the provisional patent application must still describe the invention with the same level of detail that is required for utility patent applications. The provisional application does not receive a substantive examination by the PTO. Instead, the applicant has up to 12 months to file a corresponding complete application with claims. The priority date established by the provisional filing only applies to claims for which there was an enabling disclosure in the provisional application.

Alternatively, inventors can submit Statutory Invention Registrations to the United States PTO. Although these documents are not patent applications and will not issue as patents, they will be published by the PTO. Therefore, they become available as prior art that may block others from subsequently gaining patent rights to the disclosed invention. Note that the tradeoff is that the publishing inventor may be giving up their ability to protect the invention under trade secret law.

7. Do you have to do a prior art search before applying for a patent?

No, an applicant does not need to perform a prior art search at any time during the patenting process. There is, however, an obligation in the United States to disclose to

the PTO all material information known to the inventors, and anyone else participating in the application process, during the application process.

8. How does the PTO decide whether to issue a patent?

Once a patent application is filed with the United States PTO, it is assigned to a patent examiner who works in a specific area or areas of technology. Because of the application backlog, one to five years may pass before the examiner actually reviews the application. Typically, after reviewing the application, the examiner sends an “office action” to the patent attorney or agent involved in the application, listing both objections as to the form of the application and to the substance, often including citations to previous patents and other prior art documents that the examiner states raise questions about the patentability of the claims presented to him or her.

A patent applicant can then respond in writing to the office action, offering either arguments as to why the objection should be withdrawn, or amendments to the claims to address the objections raised by the examiner. An applicant may also request an interview with the examiner. The examiner may then either agree with the reasoning in the response and “allow” the pending claims, or send another office action with the same or additional objections.

9. What happens if my patent claims are rejected by the PTO?

If the applicant and the U.S. examiner reach an impasse over an issue, the examiner issues a “final” action. The applicant can then either appeal to a special board of the PTO or decide not to pursue the argument. If the applicant decides not to pursue the argument, the applicant can either abandon the application or start the examination process over by using various “continuation” procedures.

10. What is a restriction requirement in a patent application?

A U.S. patent applicant is entitled to examination of one invention per application. If two or more inventions are claimed in a single application, the Examiner may issue a “restriction requirement” that forces the Applicant to select a single one of the inventions to be examined. The claims to any other invention can be put into a separate application, which if filed while the first application is still pending, should be entitled to the benefit of the filing date of the first application.

11. What do the terms “patent pending” and “patent applied for” mean?

Once a patent issues, one way the patent holder can give notice of its patent rights is to mark products incorporating the invention with the word “Patent” or “Pat.” and the patent number. A patent notice must typically be placed directly on the patented article, unless such a marking is not physically feasible. Patent marking is not mandatory but can help the patentee accrue money damages if it pursues litigation against patent infringers. Marking articles with the terms “Patent Pending” or “Patent Applied For” has no legal effect.

12. Can I keep the content of my patent application a secret until it issues? When will a patent application publish?

Until recently, the United States PTO maintained patent applications in strict secrecy until a patent issued. However, the PTO now by default publishes patent applications approximately 18 months from their original priority date. An applicant can opt out of publication by filing an appropriate request at the time the application is filed. However, this option cannot be pursued (and an existing request not to publish must be rescinded) if the applicant pursues any international applications that have a publication requirement, such as a PCT application (discussed below).

Publication can be beneficial to the patent applicant, as provisional enforcement rights for the period between the dates of publication and patent grant are potentially available, so long as the published claims are substantially identical to the claims ultimately granted in the patent.

However, if an application is not published and during prosecution it appears that the PTO will not allow claims or only allow extremely narrow claims, the applicant can still decide to abandon the application in favor of continued trade secret protection.

13. When are patent maintenance fees due?

U.S. maintenance fees on all utility patents that issue from applications filed on or after December 12, 1980, are due at 3.5, 7.5, and 11.5 years from the date the patent is granted. These fees can be paid without a surcharge up to six months before they are due. A six-month grace period after the due date is available upon payment of a surcharge. Failure to pay the current maintenance fee on time may result in the patent expiring.

14. What types of activities before I file an application will prevent me from being granted a patent?

An applicant must file a patent application before or on the date of public use or disclosure anywhere in the world in order to obtain patent rights in many foreign countries.

In the United States, the answer is a bit more complicated. The following table summarizes the types of activities by an applicant or third party that can prevent an inventor from being granted a patent on an invention:

ACTOR	ACTIVITY	TIME	LOCATION
Inventor	abandoned the invention	at any time	anywhere in the world
Inventor	derived or stole the invention from third-party	before the date of invention	anywhere in the world
Inventor	patents the invention in another country	more than one year before filing a US patent application	outside the U.S.
Anyone	patented or described the invention in a printed publication. A reference is a printed publication if it is made available in tangible form and accessible to those interested in the field.	more than one year before the filing date of the patent application	anywhere in the world
Anyone	offered for sale, sold, or publicly used or disclosed the invention	more than one year before filing date of the patent application	U.S.
Third-party	knew or used the invention	before the date of invention	U.S.
Third-party	patented or described the invention in a printed publication	before the date of invention	anywhere in the world
Third-party	filed a patent application that ultimately issues as a patent, or published a PCT application in English, that describes the invention.	before the date of invention	anywhere in the world
Third-party	invented the invention and did not abandon or conceal it	before the date of invention	U.S.

Even if the invention itself was not publicly disclosed, known, or used, in any of the above ways, any information that was publicly disclosed, known, or used as set forth above will still bar a patent if it makes the claimed invention obvious. The above chart is

not exhaustive. Particularly since engaging in certain activities may destroy the ability to patent an invention, it is strongly recommended that you consult with legal counsel prior to engaging in conduct concerning your invention.

15. Can I change the content of my patent application after I file it?

In the United States, an applicant can make only limited changes to the patent application after it is filed. An applicant can correct typographical errors, submit formal versions of informal drawings, and amend the claims if there is support for the claim amendments in the originally filed patent application. No new information can be added to a patent application after it is filed. If you want to add new information or material to the description of the invention, you must file a new patent application that will lose the benefit of the earlier filing date for at least the new information and material.

16. How do I correct a mistake in an issued patent?

If a clerical error was made by the United States PTO, such as typographical errors made in printing the patent, the PTO may issue a Certificate of Correction upon the applicant's request. Some minor typographical errors made by the applicant may also be corrected by submitting a request for a Certificate of Correction and a fee.

A patent holder may request a "reissue" of a patent to correct mistakes in the scope of the U.S. claims. A reissue that broadens the claims must be filed within 2 years after the issuance of the patent. A reissue that narrows the claims can be filed at any time during the life of the patent.

A request by a patent holder or a third party for a "reexamination" by the United States PTO can be made if prior art is uncovered that raises a substantial new question as to the patentability of the claims in the issued patent. There are two types of reexamination proceedings, each with their own rules. They are increasingly popular as part of a litigation strategy. (See patent litigation FAQ)

17. How do I obtain patent rights in foreign countries?

Patent rights are typically granted on a country-by-country basis, and each country has its own rules for determining what is patentable, which may differ significantly from the U.S. rules.

Most of the world's industrialized countries, including, for example, Australia, Canada, China, Germany, India,

and Japan, are parties to an international treaty known as the Paris Convention. The Paris Convention gives an applicant one year to file a corresponding patent application in a member country and still obtain an original U.S. priority date.

To obtain patent protection in countries that are not members of the Paris Convention, a patent application must be filed directly in those countries prior to the first public disclosure or sale of the invention, unless there is a legislative agreement with those countries that honors the one-year grace period. For example, Taiwan is not a member of the Paris Convention but has entered into an agreement with the United States that recognizes the grace period and grants priority rights based upon U.S. filings.

In addition to the Paris Convention, there are other international treaties that seek to harmonize patent protection among countries. For instance, the Patent Cooperation Treaty (PCT) provides a two-stage examination process for applications: first at an international level, and then in the individual countries from which patents are sought. Filing a PCT application only defers filing in the individual countries, and it does not replace these filings and associated costs. The principal reason for filing a PCT application is to defer deciding in what countries to seek patent protection and the expenses of regional or national patent filings. By 30 months from the earliest priority date asserted in the PCT application, the applicant must file a regional or national patent application in each country or region where protection is sought. The applicant must satisfy the requirements of the respective regional or national patent office to actually obtain the patent.

Another treaty, the European Patent Convention, established the European Patent Office (EPO) that handles applications for over 30 European countries. A single EPO application can be filed for protection in some or all of those countries. The application is examined by the EPO in any of the three official languages and, if granted, the specification is translated into the languages of the designated countries. There is an additional fee for issuance of the patent in each selected country.

If you have any questions about this memorandum, please contact Robin W. Reasoner (reasoner@fenwick.com) or Charlene M. Morrow (cmorrow@fenwick.com) of Fenwick & West LLP.