

BASICS OF PATENTS
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Our legal system provides certain rights and protections for owners of property. The kind of property that results from the fruits of mental labor is called Intellectual Property. Rights and protections for owners of Intellectual Property are based on Federal Patent laws, Trademark laws, Copyright laws and state Trade Secret laws. In general, Patents protect inventions of tangible things; Copyrights protect various forms of written and artistic expression; and Trademarks protect a name or symbol that identifies the source of goods or services. The focus of this article is on Patents, Trademarks and Copyrights.

If you have any questions regarding Patents, Trademarks and Copyrights, contact Howard Cohn at howard@cohnpatents.com or at 1-800-613-0955.

WHAT IS A PATENT?

A U.S. patent is a document, issued by the Federal Government, that grants to the owner of a new invention a legally enforceable right to exclude others from using the invention described and claimed in the document. Congress allows this right, for a term ending twenty years from the date of filing of an application for patent, to encourage their public disclosure of their idea and as an incentive for investing in its commercialization. When a patent expires, or is held invalid, the right to exclude the others expires.

UNDER WHAT CONDITIONS IS A PATENT GRANTED?

Congress has specified that U.S. Patents will be granted if the inventor files a timely patent application which describes a new, useful and unobvious invention of proper subject matter. To be timely, an application must be filed within one year of publicizing the new invention. Note that this one-year grace period is not available in most foreign countries. Therefore, a U.S. inventor who wants to obtain corresponding foreign patents must first file a U.S. Patent before divulging their new invention to the public. The description of the new invention in the US Patent application must be complete enough to enable others to use the new invention. Moreover, the US Patent application must describe the best manner known to the inventor of carrying out the new invention. The described invention must be new i.e., not used or invented by someone else.

The proper subject matter of a US patent is any product, process, apparatus

or composition of matter. Special provisions in the US patent law also permit Design Patents directed to ornamental designs for products.

WHY OBTAIN A PATENT?

An inventor usually patents a new idea to obtain commercial advantages that go along with the right to exclude others from using their invention. Given the high cost of research and development, the opportunity to recoup these costs through commercial exploitation of an invention may be the primary reason or justification for undertaking research in the first place. It is preferable for inventors to take their patent idea to a Patent invention attorney or lawyer to obtain guidance in the steps necessary to obtain a patent.

U.S. Patent rights can be commercially used in two basic ways: (1) directly, by the inventor's using the new invention to obtain an exclusive marketplace advantage (as where the US patented technology results in a better product or produces an old product less expensively) and (2) indirectly, by receiving income from the sale or licensing of the patent.

It is important to note that a U.S. Patent does not give the inventor the right to use the new invention. The inventor can use his invention only if by so doing he does not also use the invention of an earlier unexpired patent. While only one patent can be granted on a particular invention, it is easy to see how more than one patent could be infringed by making a single product. For example, consider that A has a patent on a new type of door and B invents an improved door of this type with a special lock. B could not sell the improved locking door since A's patent broadly covers all doors of this type. On the other hand, A could not incorporate the improved lock in his basic door since B's patent covers this combination. In these circumstances both A and B can be free to practice the best technology (locking door) only if each grants a patent license to the other.

The indirect exploitation of a patent may be exclusive, e.g., by selling all rights in the patent or granting an exclusive license. Licenses can be non-exclusive, allowing many parties, including the inventor, to practice the invention simultaneously. A patent may also provide commercial advantages in addition to the potential for an exclusive market position or licensing income. A patent often lends business credibility to start up ventures and can enable both technical assistance and financing necessary to bring a new product to market. An improvement patent may also provide the barter necessary to cross license any basic patents held by others which block the path to market.

HOW TO OBTAIN A PATENT

Patents are obtained through a complex administrative proceeding in the United States Patent and Trademark Office. Since the legal rules that govern these procedure are quite extensive and often complicated, it is strongly recommended that an inventor seek the assistance of an experienced patent attorney before beginning the process.

Before actually applying to the Patent and Trademark Office there are several important preliminary steps that should be followed to prevent possible loss or damage to future patent rights. One of the most important of these preliminary steps is proper record keeping. Since United States Patents are granted to the first inventor, it may become necessary to prove when the invention was made. This is best accomplished by making a complete record of the invention from the first idea right up through development of commercial products. The invention record should clearly describe the invention with words and pictures (photographs, sketches, drawings, etc.) and should explain fully how it operates or is used. Each page of invention record should be signed and dated in ink by the inventor. The record should also be reviewed as it is made by at least one other trustworthy person who is capable of understanding the invention, who should sign and date the record under the notation "read and understood by...."

Another important preliminary step is the determination of whether the invention is likely to be considered patentable by the Patent and Trademark Office, and if so, whether a patent which might be granted would be broad enough in its coverage to be worthwhile in a commercial sense. A preliminary evaluation of patentability should be made by a patent attorney, based in part on the prior patents and other materials located in a search of relevant records in the Patent and Trademark Office. The attorney's opinion determining whether the invention should be patentable is not a guarantee that the patent will be granted. However, if the attorney finds that the invention probably is not patentable or economically worthwhile, the considerable cost and effort of going forward with the process can be avoided.

The next step in the process of obtaining a patent is the preparation of a patent application. A patent application is a legal document, which must fully describe the invention with words and, where appropriate, drawings, and which includes claims that define the legal boundaries of the invention. It is essential to the validity of the patent, and its ability to adequately protect the invention, that the invention be described and claimed completely and precisely. Accordingly, the inventor should tell the patent attorney everything about the invention, including

what problems it solves and what difficulties were overcome to make it work.

Particularly important is the duty to tell the attorney about prior patents or other prior inventions of which the inventor is aware, so this information can be disclosed to the Patent and Trademark Office. The U.S. Patent Application will also contain a Declaration and Power of Attorney form which the inventor must sign indicating that he has read and understood the application and affirming that he is the first inventor. The U.S. Patent Application and a filing fee are then filed with the U.S. Patent and Trademark Office.

BASICS OF THE PATENT APPLICATION

The U.S. Patent Application is a written description of your new invention, somewhat like a technical manual, and certain formalities must be observed. First of all, the U.S. Patent Application must contain "a written description of the new invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out [the] new invention."

A certain format is expected of the U.S. Patent Application, and it must contain one or more *claims* particularly pointing out and distinctly claiming the subject matter which the inventor regards as his/her invention or discovery. (37 CFR §1.75(a))

The "gist" of the new invention will often be repeated in the summary, detailed description, claims and abstract, in various ways. There are various parts to a U.S. patent application, as follows.

The *Title* should be short and general.

The *Technical Field* is a very short statement in the patent application which is intended to aid the Patent Office in properly classifying the application for examination. This is not the "new invention".

The *Background Art* is where the stage is set for your new invention. What is out there? What are some of the shortcomings? What problems are going to be solved by your invention. This is not the "invention".

The *Summary* is relatively meaningless. It normally contains a repetition

of the main *claims*. It may contain some general statements about the invention and its advantages.

The *Brief Description of the Drawings* is simply short statements saying what the views are, and whether the drawing is illustrative of the *prior art* or of the *invention*.

The *Detailed Description of the Invention* is where the new invention is explained in detail, referencing the drawings, etc. "Detailed" means just that — detailed, including alternatives, including "best mode", including ... everything. Prior art may also be discussed here, as appropriate — for example, to introduce another step in the invention.

The *Claims* define the metes and bounds of the invention. Everything in the claims needs to be supported by the preceding description(s) of the invention. This is what tells the world what your invention is, so that they can decide whether they want to infringe it. This is the measuring stick. This is what gets infringed — claims. The claims are VERY important. That is why they are best drafted by a Patent Idea lawyer or Patent Invention lawyer or attorney.

The *Abstract* is a short paragraph which summarizes the disclosure. This is typically a classification (searchability) vehicle. This is not the new invention.

BASICS OF CLAIMS

Claims are written in one of two forms, either "independent" or "dependent".

An *independent claim* is a self-contained description of the invention. It has three parts:

- (1) a "preamble";
- (2) a "transitional clause"; and
- (3) a "body", which includes the elements of the claim.

A dependent claim includes, by reference, everything set forth in a previous independent or dependent claim, and adds to or modifies the description of the previous claim(s).

The filing of an application for a U.S. Patent does not create any enforceable rights since the courts will only stop an infringer after the Patent is

granted. Nevertheless, marking a device Patent Pending or Patent Applied For may discourage potential infringers since it puts them on notice that they may have to stop production once the patent is granted. It is unlawful to use such a notice unless an application for patent is actually pending in the U.S. Patent and Trademark Office. After the patent has issued, it is also good practice to mark the products sold under the patent with the patent number because it gives the inventor certain additional legal rights.

In the Patent and Trademark Office the application undergoes a process called Examination. After an initial processing stage (which may take 18 months or more) a Patent Examiner will review the application and write a letter (called an Office Action) commenting on it. The First Office Action often is a refusal to grant the patent, and the applicant then has an opportunity to modify the application to overcome the Examiner's objections. With the inventor's help, the patent invention lawyer or attorney will reply in writing to the Office Action, usually making some changes and arguing that others are not necessary. Typically, at least two such exchanges between Patent Examiner and patent idea lawyer or attorney are necessary to resolve all the legal and technical issues. In general, it now takes an average of about 18–26 months from filing to complete the Examination Process. During this period the application is kept secret, i.e., only Government personnel and people authorized by the inventor are permitted to examine the file.

When the Patent Examiner is satisfied that the application is in proper form and its claims are allowable, the applicant is notified that a patent will be granted upon payment of final government fees. In order to keep the patent in force until it expires it also is necessary to pay progressively higher maintenance fees at 3½, 7½ and 11½ years after the original Patent Grant.

While the Patent Grant makes the information in the application available to the public, the inventor has the right to prevent others from making, using or selling what is claimed for as long as the Patent remains in force.

I keep my client closely informed of all issues and activity pertaining to their Patent Application. I do so by sending copies of all correspondence received from the U.S. Patent and Trademark Office and the Patent Examining Attorney. I also forward copies of all correspondence sent to the U.S. Patent and Trademark Office on my client's behalf.

PROVISIONAL PATENT APPLICATION

Congress has recently authorized a new form of preliminary Patent Application known as a Provisional Patent Application. Inventors turn to the

Provisional Patent Application as an inexpensive way to protect their new inventions. Often this is necessary because an upcoming product release or trade show does not allow enough time to prepare and file a Utility Patent Application before disclosing the invention publicly. The Provisional Patent Application protects the invention for one year providing time to prepare and file a more detailed Utility Patent Application.

The Provisional Patent Application is not as detailed nor as costly as a Utility Patent Application. But then, its goals and benefits, as set forth below, are somewhat different.

1. The Provisional Patent Application provides the inventor with the all-important priority date.
2. It offers an extra year of protection (which means instead of 20 years of protection if the patent is granted, it has 21 years).
3. It gives a 12-month period to more fully develop the invention.
4. It doesn't require a specific format; in some cases, a drawing and specification, a paper, or just a handwritten description with a photograph is all that is filed.
5. The government filing fee is relatively inexpensive(\$100 for small entities; \$200 for large entities).
6. The Provisional Patent Application is never examined by the U.S. Patent Office, as with a Utility Patent Application. It is only reviewed for procedural matters.
7. After a Provisional Patent Application is filed, the invention may be disclosed or sold without fear of losing patent rights.
8. The Provisional Patent Application cannot be converted into a design patent.
9. Once a Provisional Patent Application is filed, the invention can be designated as Patent Pending.

The priority date is important because it establishes the date when the subject matter of the disclosed invention was first filed in a Provisional Patent Application. To rely on the priority date, within one year of filing the Provisional Patent Application, the inventor must convert the Provisional Patent Application into a Utility Patent Application, incorporating the information contained in the Provisional Patent Application.

Filing of the Provisional Patent Application provides a one-year cushion. During the year, as the product or concept is further developed, additional Provisional Patent Applications may be filed. Failure to convert the Provisional Patent Application to a Utility Patent Application within one year of the filing date, results in the loss of the priority date.

Since the Provisional Patent Application will not be substantively examined, claims defining the scope of the invention are unnecessary. However, to rely on the priority date of the Provisional Patent Application, the disclosed invention has to support the broadest invention that is ultimately claimed in the Official filed Patent grant incorporating the Provisional Patent Application.

A description of the invention and supportive drawings are typically the essence of the Provisional Patent Application. A Provisional Patent Application can even protect a theoretical working model that is not yet reduced to practice. Just as the filing fees are substantially reduced, so are the legal fees for writing the Provisional Patent Application because far less work is involved.

Development of the invention should be continued after the Provisional Patent Application is filed with the goal of filing for a Utility Patent Application within one year of the priority date. As the development continues, it is often wise to file additional, more current Provisional Patent Applications. The Provisional Patent Application is not a substitute for a Utility Patent Application, which should be filed as soon as possible. I recommend that once the idea to be patented is developed, the Provisional Patent Application be drafted with all the details available and then filed as soon as possible. As mentioned before, it is best to use a Patent Invention lawyer to handle this task.

Special Considerations

It is possible for an inventor to sell a product without first filing for a patent, and then filing a Provisional Patent Application up to a year later, and finally filing a Utility Patent Application one year after the filing date of the Provisional Patent Application. The effect of this procedure is to gain a two-year grace period. The downside of waiting the extra year before filing the Provisional Patent Application is the loss of one's legal right to file patent applications covering the invention in foreign countries.

The most important and least understood aspect of the Provisional Patent Application is that it must disclose all of the elements set forth in the claims of the Official Patent Grant resulting from the later filed Utility Patent Application. That is, the description of the invention in the Provisional Patent Application must include enough detail for others to make or use the claimed invention in the Patent

Grant. Moreover, if the Patent Grant is challenged, and the written description in the Provisional Patent Application is found inadequate, all could be lost.

A few years ago, the U.S. Court of Appeals for the Federal Circuit, handed down a decision in *New Railhead MFG, LLC v. Vermeer Mfg. Co.* invalidating New Railhead's Patent. The Railhead's Patent covered a drill bit for horizontal drilling in rock. Railhead sued a number of patent infringers using similar drill bits. Ultimately Railhead lost because its utility patent was invalidated on the grounds that the claimed drill bit defined a structural feature that had not been fully described in the Provisional Patent Application. In other words, the content of the Provisional Patent Application did not support the relevant claims and was not available for its all-important priority date. This caused New Railhead's Patent Grant to be rendered invalid because it was filed more than a year after the drill bit (initially disclosed in the Provisional Patent Application) was sold.

The decision means that although the Provisional Patent Application does not require claims, it must clearly and exactly describe the invention and the manner and process of using it, in order to support the claims based on the Provisional in the later filed Utility Patent Application. But without incorporating claims, how can a Provisional Patent Application be drafted to support them?

The solution is straightforward. One must put great effort into preparation of the Provisional Patent Application, no matter how rushed for time, consider the broadest scope of the invention and ensure that it is covered by the Provisional Patent Application. As mentioned before, it is best to use a Patent Invention lawyer to handle this task.

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