# Cislo & Thomas LLP®

# The Manager's Guide to Intellectual Property

SECOND EDITION

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### **CHAPTER 2**

#### **Patents**

#### Introduction

How important can a patent be? Very simply, patents can make or break a company. A couple of personal examples demonstrate the point:

- 1. A client that develops coatings developed a coating for airplanes that resulted in less air pollutants than existing coatings. This was an important development because of air pollution regulations required the phase out of conventional coatings. We were able to obtain strong patent protection for that product, so strong no one ever challenged the patent. The client not only dominated the marketplace during the life of the patent, but has maintained market dominance even after the basic patent expired.
- 2. In the medical field, Raychem developed use of a material that allowed new uses for existing medical devices. The technology was adopted for products such as medical instruments and cardiac stents. A strong family of patents was developed and purchased by Medtronic, which successfully enforced and licensed the patents.

Even more important, a strong patent system is vital to the health of a nation's economy. There needs to be rewards for investment in research and

development, or there will not be any such investments. The countries with the strongest patent systems, the United States, Japan, Europe, Canada, and Australia, generally have the strongest economies. China, which for many years had a weak patent system and actively encouraged copying, has seen the light and is now developing a strong patent system.

#### What Is a Patent?

A patent issued by the United States Patent and Trademark Office grants the patent owner the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States, or importing the invention into the United States. There are two principal types of patents:

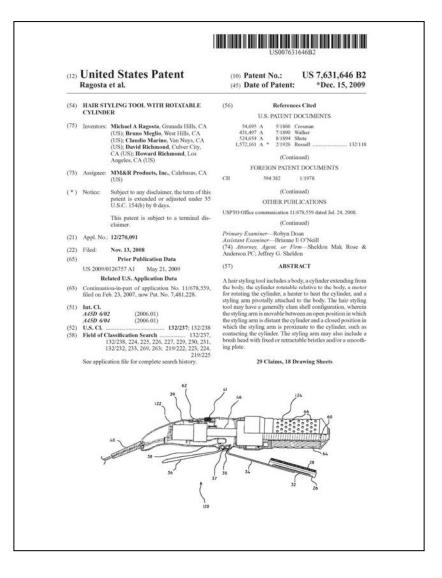
 Utility patents may be granted to anyone who invents or discovers a new and useful process, machine, article of manufacture or composition of matter; or a new and useful improvement of these.

Exhibit 2-1 is the first page of a typical utility patent.

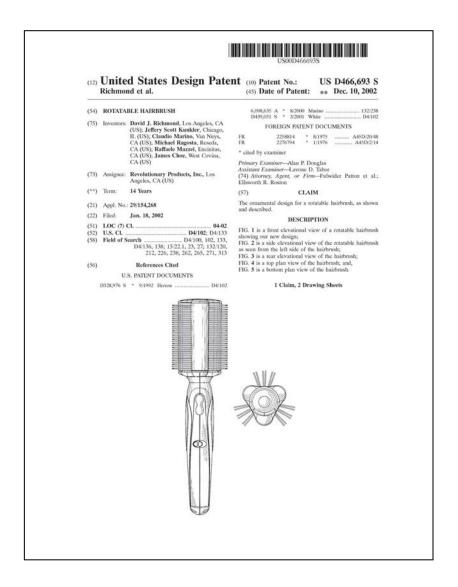
• **Design patents** may be granted to anyone who invents a new, original, and ornamental design for an article of manufacture.

Exhibit 2-2 is the first page of a typical design patent.

#### Exhibit 2-1: First Page of a Typical Utility Patent



#### Exhibit 2-2: First Page of a Typical Design Patent



An issued patent has two parts. The first part is a description of the invention, which can be accompanied by drawings. Design patents always have drawings. The second part is the claims, a numbered set of paragraphs that appear at the end of the patent. It is the claims that define what the patent covers. As an analogy, when buying a house, there is the glowing description provided by the real estate broker, but what is being purchased is defined by the actual deed to the house. Similarly, with a patent, the description of the invention may be much rosier and broader than what is granted by the Patent Office; it is the claims that define the patented invention.

#### Example of Claim Analysis: A Chair

I now present a simple primer of what claims are all about. This will help the executive intelligently discuss patents.

A claim directed to a chair could state:

- 1) A chair comprising:
  - a) a seat:
  - b) a back support extending upwardly from the seat; and
  - c) four legs extending downwardly from the seat.

The claim begins with a preamble, "A chair," followed by a transition term, here, "comprising." Each remaining part of this claim is called a limitation. If just one limitation of a claim is missing from a product, the patent does not cover the product. Thus this claim does not cover a three-legged stool because the stool does not have a back support and does not have four legs.

This is true even if the description of the invention describes a three-legged stool; the claims trump the description.

But imagine a five-legged chair. That is covered by the claim because a chair with five legs also has four legs. Adding a fifth leg does not avoid infringement. This is an example of the basic principal that adding features to a product usually does not avoid infringement, but eliminating a feature from a product that is included in a claim does avoid infringement.

#### **Example of Claim Analysis: A Turkey Sandwich**

An example of a method claim is making a turkey sandwich.

A method of utilizing leftover turkey comprising the steps of:

- 1) selecting two slices of bread;
- 2) placing mayonnaise on at least one of the slices of bread; and
- 3) placing between the two slices, in any order:
  - a) turkey;
  - b) lettuce;
  - c) tomato; and
  - d) stuffing.

Adding in cranberry sauce does not avoid infringement; leaving out the stuffing does avoid infringement.

#### What Can Be Patented?

An invention, to be patentable, must meet certain legal requirements. These requirements, all of which need to be satisfied to obtain a patent, are:

**Useful or Ornamental:** Only "useful" inventions can be patented with a utility patent. The term "useful" means that the invention has a useful purpose and is operative for its intended purpose. Design patents require that the invention be "ornamental" rather than "useful."

**Example:** A new chemical compound is not patentable unless the inventor has some known use for the compound.

Subject Matter: The patent statute states that patentable subject matter encompasses processes. machines. manufactures. compositions of matter. In the Congressional record, Congress said it intended this statutory subject matter to include "anything under the sun that is made by man." However, these broad categories of patentable subject matter are limited. Laws of nature, physical phenomena, abstract ideas, mathematical algorithms, and mere printed matter are not patentable subject matter. In addition, a patent cannot be obtained for a mere idea or suggestion.

Whether or not business methods should be patentable subject matter has been controversial. Currently they are subject to the above limitations.

**Example:** When Samuel Morse, the inventor of the telegraph, tried to patent all uses for communicating with electromagnetism, the Supreme Court said no, since he was just trying to patent a natural phenomenon. However, Morse was able to patent the actual telegraph.

**Novelty:** In order for an invention to be patentable, it must be novel over "prior art," *i.e.*, what the public already has available to it. Prior art includes what was:

- described in a patent or published patent application with an earlier filing date than the filing date for which an invention is sought;
- described in a printed publication;
- in public use;
- on sale; or
- otherwise available to the public before the effective filing date of the application for patent in the United States.

In addition, it is necessary to be the first inventor to file a patent application. The United States, and most of the world, is a first-to-file system so that the second inventor can obtain a patent if he/she files a patent application before the first inventor files. The United States used to have a first-to-invent system, where the first person to make the invention can get a patent even if the first inventor was the second to file a patent application. However, the United States changed

to a first-to-file system from its first-to-invent system on March 16, 2013.

**Example:** Discovering a new use for salt, such as killing snails, does not make the salt patentable since salt has been in existence forever. However, the new use may be patentable since it is "novel."

**Example:** Inventor A invented chemical A on June 15, 2013. Inventor B invented the same chemical on July 1, 2013, but filed his patent application first. Inventor B gets the patent.

**Nonobvious:** Even if the subject matter to be patented is novel over 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 obvious. The invention must be sufficiently different from the prior art that a person with ordinary skill in the pertinent technology would find it nonobvious.

All countries have this "obviousness" concept, but most countries refer to it as the need for an "inventive step."

**Example:** Generally substitution of one color for another and mere changes in size are not patentable unless there is some unexpected result.

# Who Can Apply for a Patent and Who Owns the Patent?

The inventor or the owner of the invention can apply for a patent in the United States. If two or more persons develop an invention jointly, they must apply for a patent as joint inventors. The cooperation of the inventors is generally needed since a declaration is filed as part of the application process in the United States. (There are provisions for filing if an inventor is uncooperative, disabled, or dead). A patent initially belongs to the inventors. However, patents are like other property and can be sold and licensed. In an employer/employee situation, the employer owns the patent if there is an appropriate employment agreement, or if the inventor was hired by the employer to make the invention.

It is important that the actual inventors be accurately identified or any issued patent may be invalid. A supervisor or the owner of a company does not qualify as an inventor merely because of his or her position. What matters is what contribution was made to the patentable invention.

Since determination of who is an inventor can be tricky, usually that decision is left to the patent attorney writing the patent application.

Even if an employee is not obligated to assign an invention to an employer, the employer may have a "shop right" in the invention. A shop right is a personal, nonexclusive license to use the invention. A shop right may exist if the invention was made by the employee using the employer's resources or on the employer's time.

#### Does a Patent Make Business Sense?

When deciding whether to patent an invention, an inventor must not fall victim to the common misconception that a patent is needed to market an invention. A patent only gives its owner the right to

<u>exclude</u> others from making, marketing, importing, or selling a substantially equivalent product or method. It gives the patent owner no right to bring the invention to the marketplace, although it often makes it much easier to license an invention to someone else.

The principal issue to address before embarking on the patent process is whether an invention has the potential to be commercially profitable. Just because something is new or better does not mean it will be profitable. If an invention will not generate a profit, then no patent is needed; chances are no one will copy it if it is not profitable.

**Example**: If the total market for a product is only about \$100,000 per year, a patent generally does not make business sense. Will a third party try to compete in such a small market?

Later on in this chapter, a checklist is provided to determine if an invention is worth trying to patent.

#### **Types of Patent Applications**

#### Design Patents versus Utility Patents

As noted above, there are two main categories of patents: design patents and utility patents. Design patents only protect the nonfunctional appearance of a product, while utility patents cover how an invention works.

For some products, both patent types may be available. Design patents are advantageous because they are relatively inexpensive to obtain and are more likely to be issued by the Patent Office, and to be issued more quickly, than utility patents. Their main disadvantage is that the scope of protection is

generally narrow—they only protect the appearance of the product shown in the drawings, and not the product's function.

**Example:** A chair with a new reclining mechanism and an unusual appearance may have a utility patent for the mechanism as well as a design patent for the appearance.

# Provisional Patent Applications versus Regular Patent Applications

If a utility patent is appropriate for an invention, then it is necessary to decide whether to file a regular application or a provisional application.

Inventors have the option of filing a provisional patent application for an invention that can be protected with a utility patent. A provisional application allows filing without any formal patent claims or declaration. It may establish an early effective filing date for a later filed regular patent application and allows for the term "Patent Pending" to be used.

Provisional patent applications may appeal to an inventor in a tightly competitive field or who may need to disclose the invention such as at a conference or the like, whose research and development may continue to evolve over time or who otherwise may want more time to test market an invention before investing in the cost of a utility patent. However, a provisional patent application does not start the patenting process in the United States Patent and Trademark Office and only lasts for one year. The file corresponding must a application within one year of the filing date of the provisional application to obtain the benefit of the filing date of the provisional application. If this is

done, any prior art developed after the filing date of the provisional application, such as a publication, does not prevent issuance of a patent. However, if the regular application is not filed within one year of the filing date of the provisional application, or the patent claims cover subject matter that was not in the provisional application, then the regular application receives its own filing date and such prior art can prevent issuance of a patent.

The advantages and disadvantages of a provisional application are presented below.

#### **Advantages of a Provisional Application**

**Lower Initial Cost**: Due to lower filing fees and lack of a requirement for claims (claims are discussed in Section 2.2), the initial cost of preparing and filing a provisional patent application is lower than that of preparing and filing a regular patent application.

**Postponement of Examination Costs**: Since the Patent Office does not examine a provisional application, examination costs are delayed during the pendency of the provisional application.

**Shift of Patent Term**: The end of the patent term can be shifted one year into the future—an important advantage for inventions, such as drugs, whose commercial value may be at the end of the patent term.

Being the First to File: The United States has a first-to-file system. Thus, the first to file a patent application, even if not the first inventor, gets the patent. There can be a race to the Patent Office. Therefore, it can be useful to file a provisional application based on the initial disclosure instead of waiting for a professional application to be prepared.

#### **Disadvantages of a Provisional Application**

**Delay in Issuance of a Patent:** A provisional application cannot result in a patent; eventually a regular application must be filed. Accordingly, the initial filing of a provisional application, instead of the immediate filing of a regular application, delays the issuance of any resulting patent.

**Higher Total Cost:** The overall cost of initially filing a provisional application, followed by filing a regular application, will be higher than the immediate filing of a regular application.

Accelerated Foreign Filing Costs: As discussed later, in general, foreign applications are filed within one year of the filing date of the first U.S. patent application relating to an invention. Filing a provisional patent application starts the clock on this one-year period.

The Risk of Unwarranted Reliance: A provisional application can give a company a false sense of security, particularly if the invention changes after the date the provisional application was filed. Any future patent claim can enjoy the early filing date of a provisional application only if the claim recites exclusively subject matter that was disclosed in that provisional application. To properly protect an invention that undergoes one or more significant changes over the span of the one-year life of a provisional application, therefore, one may need to promptly file a second provisional application or a regular application after any such change.

#### Should a Patent Application Be Filed?

Not all inventions are worth patenting, and there are alternative types of protection for inventions that may make more sense than a patent. This chapter provides a checklist to determine if a patent application is appropriate for an invention, after answering some very basic questions.

When deciding whether to patent an invention, do not become the victim of a common misconception—a patent is not always needed to market an invention. That is because a patent only gives the owner of the patent the right to keep others from practicing an invention. It gives absolutely no rights to bring an invention to the marketplace. For example, patenting a new drug for curing cancer gives the inventor no right to market the drug in the United States; FDA approval is required.

#### The Key Issue: Profit

The first issue to address before beginning the patent process is whether the invention can be sold at a profit. Just because something is new or better does not mean it can be sold at a profit.

So before starting a patent application, answer the basic business questions:

- What price will the ultimate customer pay for the invention?
- What will it cost to sell the invention, including raw materials, labor, packaging, marketing, overhead, shipping, etc.?

- What will be the markup of those in the distribution chain?
- What sales volume is expected?
- Is there enough left over for a profit at that volume?

It is beyond the scope of this book to teach how to answer these basic business questions, but they must be answered.

The point is a realistic financial projection for the business operations surrounding the invention should be established before considering obtaining a patent.

A preferred method is to ask: "How many will you order at a price of \$\_\_\_?" An honest answer may be received to that question, particularly if the person being asked knows that when the product is available on the marketplace, they will be requested to place such an order.

Of course, you should also be mindful that a patent may be necessary if you need or want to partner with others, such as a manufacturer or a major investor; license rights to an already established leader in the field; or otherwise disclose the invention before you have an inventory of the final commercial product and are prepared to be the first entrant into the marketplace.

#### Is a Patent the Right Type of Protection?

A patent might not be the appropriate type of protection to seek for an invention for multiple reasons. As discussed above, not everything invented qualifies as patentable subject matter; thus, a patent

may not even be available. Second, there are other types of protection available that may better suit your business goals or may be less costly than a patent.

The following discussion briefly summarizes the various types of other protection available to protect an invention and the features of each type of protection.

Copyright: One alternative type of protection to consider is copyright protection, which is discussed in detail in Chapter 5. Copyright protection is available for original works of art, software code, books, fabric patterns, and the like. Copyright protection is automatic, registration is inexpensive, and copyright protection lasts much, much longer than patent protection. So, if an invention is something like a new doll with an original appearance, a copyright may be a viable alternative. Similarly, if the invention is implemented with software, a copyright on the software code may provide adequate protection. Although the copyright protect in software does not the implemented by the code or protect against someone independently creating similar code, no one can copy the protected code.

**Trade Secret:** Another type of protection that is available is trade secret protection, which is discussed in Chapter 3. Trade secret protection is useful only for inventions that can be maintained secret, such as a secret formula or a laboratory process. If a product can be reverse engineered once it is on the market, trade secret protection is not effective since there is no secret.

**Trade Dress:** Another type of protection to consider is trade dress protection, which is discussed in Chapter 4. If the appearance of nonfunctional features of a product becomes recognized by consumers as distinctive—that is, they come only from a single source—then trade dress protection is available. One problem with trade dress protection is that it takes many years in the marketplace and high sales volume to accomplish. It therefore might not be available early enough to keep someone from copying a product right after it is introduced to the marketplace. Also, it does not protect how a product works; it only protects what it looks like.

Multiple types of protection can be used. Sometimes patent protection, copyright protection, and trade secret protection are all available. There may be aspects of an invention that are suitable for all types of protection. As an example, a computer-implemented invention can have copyrightable code and copyrightable screen shots, and the invention as a whole may be patentable.

#### The Patent Process

The process to obtain a patent involves the following steps:

#### **Patentability Study**

Usually a patentability study is conducted before filing a patent application. This is optional; the Patent Office does not require such a study. A key purpose of a patentability study is to determine the chances of obtaining a patent from the Patent Office. The study usually includes the following steps:

- 1. The first step of a patentability study is a patent attorney requests a patentability search from a professional searcher. The request defines the invention and identifies the general categories of references to investigate. (A patentability study does not determine whether practicing an invention infringes an issued patent. That requires a right-to-use study as discussed in section 2.13).
- The searcher conducts a search for references relating to the invention, typically by searching for U.S. patents and published patent applications.
- The patent attorney evaluates and reports the search results.

Reasons for conducting a patentability study include the following:

**Economics:** A patentability study assists in deciding whether to invest the money and time to file a utility patent application.

A Better Application Can Be Prepared: A patentability study helps identify the features of an invention that are most likely to be patentable. With this knowledge, a better application that stresses those features can be written.

**Commercial Reasons:** Often the commercial potential of an invention depends on whether a patent can be obtained. A patentability

study provides an early indication of the chances of obtaining a United States patent.

Foreign Filing Decision: Patentability studies are useful in determining whether to file international applications, which are expensive. Most inventors start the foreign filing process within one year of the United States filing date, which is usually before the Patent Office will examine a patent application. Accordingly, in view of the cost of foreign filing, it makes sense to conduct a patentability study before making the decision to file international applications.

Patentability studies have limitations that should be considered in using the results of a search. The limitations include the following:

- 1. A patentability search may only cover issued U.S. patents and published applications. Thus, foreign patents, U.S. patent applications that have not been published, periodical articles, and commercial activities may not be discovered during a patentability search.
- 2. The search conducted is a patentability search and not a right-to-use search. A right-to-use search is conducted to determine whether making, using, or selling an invention would infringe a U.S. patent. A right-to-use search is more comprehensive and more expensive than a patentability search.

- 3. Searchers are human. They may miss an important reference.
- 4. Reasonable minds can differ as to the patentability of an invention. Thus, even if your patent attorney concludes that it is likely a patent should issue, this is not a guarantee the Patent Office will agree with the attorney's analysis. Sometimes patent examiners are just plain wrong, and it may not be worth the expense to appeal their incorrect conclusion.

#### Preparing and Filing a Patent Application

If the patentability study results are favorable, then it is time to file a patent application—a petition to the U.S. government asking for a patent. The application includes formal paperwork, a description of the invention, any drawings necessary to understand the invention, and the claims that define the invention.

The patent application includes a description of the best mode of carrying out the invention. For this reason, it is difficult to have both trade secrets and a patent in an invention.

#### **Duty of Disclosure**

Typically, the application papers include an Information Disclosure Statement, where your attorney discloses to the Patent Office any information that an examiner might consider important in deciding whether to issue a patent. Inventors and their attorney are under a duty to disclose such information, and intentional failure to do so may jeopardize the enforceability of any patent that issues. Usually, the results of a patentability search are cited in the Information Disclosure

Statement to the Patent Office. The actual document filed with the Patent Office is usually a form provided by the Patent Office that is filled out by the attorney where patents and other prior art are listed.

#### **Patent Prosecution**

The U.S. Patent Office assigns the application to an examiner to determine if a patent should issue. The process of obtaining a patent after the initial filing is called "patent prosecution." More often than not, the examiner initially rejects at least some of the claims in an application for a utility patent. This occurs over 90% of the time. Typically, the rejections are based on the particular wording used in the claims, lack of novelty of the invention, obviousness of the invention, and combinations of these. The initial success rate for applications for a design patent is much better, with about 50% of such applications being allowed initially. If a rejection is received, the inventor has the right to present arguments to the examiner and amend the application and claims to overcome the examiner's initial position. If the examiner cannot be persuaded to issue a patent, there are appeal rights.

#### **Publication**

Utility patent applications generally are published 18 months from the effective filing date. The effective filing date is the actual filing date unless the application refers to and claims priority from an earlier application such as an earlier provisional application. In that situation, the effective filing date is the filing date of the provisional application.

Publication can be avoided if, at the time of filing, nonpublication is requested. When nonpublication is requested, it is necessary to state that no corresponding foreign applications will be filed.

There is an advantage to publication with regard to infringement damages. Generally, no damages are available for infringement that occurs before a patent actually issues. However, there is an exception to this rule. If the following requirements are satisfied, damages can be awarded for infringement occurring in the time period before the patent actually issues. The requirements are (1) the patent issues with claims substantially the same as the published claims and (2) the infringer is put on notice of the published application.

#### **Keeping an Application Alive**

For valuable inventions, it can be desirable to maintain a pending application, even after a patent application has issued as a patent. Stringing together patent applications to keep at least one pending is permissible. One reason for doing so is if a competitor designs around the issued patent, the claims of a pending application can be modified to cover the design around. In addition, additional references may be discovered that could result in the issued patent being invalid; the claims of a pending application can be modified to distinguish the new references. However, it is not possible to modify a pending application by adding new disclosure. The claims need to be based on what was originally in the application.

**Example:** A patent issued on a new clothes pressing device. A competitor introduced an inferior product to avoid the patent by reversing the position of one

part. Although the product was inferior, it still took away some market share. Because a "continuation" application was still pending, it was possible to issue that application as a patent that covered the competitor's inferior product, with the result being removal of the inferior product from the marketplace.

#### Third-Party Involvement in the Patent Process

Generally, third parties are not involved in the patent process. Only the owner of the patent application communicates with the Patent Office. However, members of the public can submit documentary prior art to the Patent Office to be considered and can comment about the relevance of the submitted prior art.

**Example:** A competitor filed a patent application on a scuba device. Unknown to the Patent Office, a very similar device was shown in a catalog ten years prior. A member of the public submitted that catalog to the Patent Office. As a result, no patent issued.

#### **Patent Marking**

If a product covered by a U.S. patent is being sold by the patent owner or someone authorized by the owner, such as a licensee, it is recommended that the product be marked with the patent number. The reason for this is to maximize damage recovery from an infringer. If the product is not marked, then damages are collectible only from the date the infringer was put on notice of the infringement. If the product is marked with the patent number, then

damages can be collected from the infringer even if the infringer did not know about the patent.

If the product cannot be marked, the packaging can be marked.

It is important to only include patents that actually cover the product. There are penalties for false patent marking. This includes falsely putting "Patent Pending" on a product.

Rather than marking the product with the patent number, it is permissible to put on the product the word "patent" or the abbreviation "pat." together with an address of a posting on the Internet that associates the patented article with the patent numbers that apply to the product. This is a convenient option in that it is much easier to update a website than change packaging or molds.

A commercial service can be engaged to host such notices. See <a href="www.Maxval.com">www.Maxval.com</a>. In 2012, they charged \$500 per year.

#### **Foreign Patents**

A U.S. patent does not provide rights in foreign countries. If someone is using an invention only outside the United States, a U.S. patent usually cannot be used to stop them. Therefore, it is necessary to file applications in those countries where a patent will be of value.

It is recommended to start the foreign filing process within one year of the U.S. filing date in order to obtain the benefit of that filing date. Under international treaties with most countries, if an application is filed overseas within one year of the U.S. filing date, it is treated as if the inventor filed in the foreign country on the same day as the application was filed in the United States. This is

known as claiming "priority" from the U.S. application. This sometimes can be very important when, for example, a paper is published in the one-year period that would destroy the novelty of the invention if that "priority" were not available.

# The Checklist: Should a Patent Application Be Filed?

Before filing a patent application, go through the checklist in Exhibit 2.3 and honestly answer the questions. By doing this, you can determine if a patent application is needed or appropriate for an invention.

**Exhibit 2.3:** Checklist for Patent Protection Evaluation

Question	Significance
<ul> <li>[1] Is the invention (product or process) different in any way from information that has been available to the public such as by being:</li> <li>Described in a printed publication?</li> <li>Offered for sale?</li> </ul>	If the answer is no, it may be too late to obtain a patent. Consult with a patent attorney to have this determined.
"The public" means anyone who does not have a confidential relationship with the invention.	

Question	Significance
The information can be in any form: for example, a product, a written publication (including a U.S. or foreign patent, a scientific or trade journal, a trade brochure), a publication on the Internet, or a display at a trade show. A sale, or offer for sale, of the new product, or of a product of the new process is also "information."	
<ul> <li>[2] Does the invention provide a competitive advantage such as:</li> <li>Doing something not done before?</li> <li>Doing something cheaper?</li> <li>Doing something better?</li> </ul>	If the answer is no, it is not worth filing since a competitor can practice an equally good option.
[3] How large is the potential market?	If the market is less than \$100,000 per year, then it is possible no one will compete.
[4] How long will the market exist?	If the market will not exist two years from now, patent protection may not make sense since it generally takes at least 18 months to get a patent, although procedures are available to speed up the process.
[5] How likely is it that there will be competitors in the market?	If there will be no competitors, there is no reason to file.

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Question	Significance
[6] Is it possible to contractually prevent all customers from doing it themselves or purchasing from a competitor?	If the answer is yes, there may be no reason to file.
[7] Is this an invention that can be licensed to third parties?	If the answer is yes, then most likely you should file since royalty rates are generally higher for a patented invention.
<ul> <li>[8] Can this be protected as a trade secret? Any of the following can eliminate the trade secret option:</li> <li>The invention can be reverse engineered.</li> <li>Disclosure to customers is necessary for them to use the invention.</li> <li>Disclosure to the government is necessary.</li> <li>Persons without a confidentiality obligation already know the invention.</li> </ul>	If the answer is yes, trade secret protection may be the way to go. One option is to file a patent application and reserve the trade secret vs. patent decision for later.
[9] Will filing a patent application and satisfying the best mode requirement require disclosure of valuable trade secrets?	A yes answer may mean no filing.
[10] Can this invention be protected with a copyright or trademark or trade dress rights?	If the answer is yes, there may be a cheaper and easier way to obtain protection than through a patent. Consult an attorney regarding these options.

Question	Significance
[11] Is this invention nonobvious compared to what came before it?  How different is the invention from the prior art?  How long have people been trying to solve the problem?  How much effort and time did it take to solve the problem?	To actually receive a patent, it is necessary that the invention be nonobvious. (However, many attorneys recommend that a patent application be filed for any commercial product that is different, even if obviousness is problematic. The patent pending notation generally slows down competitors enough to more than justify the cost of a patent application.)
[12] Has anyone who does not have to assign his or her rights contributed to the invention?	If third parties will have the right to practice the patented invention, it may not be worth filing.
[13] Can an enforceable patent be obtained?  Can infringement be detected if someone is infringing?	If the patent is not enforceable, there may be no reason to file. For example, if the invention is a new process for making a product, but the product is indistinguishable from products made by the old process, it may not be possible to detect infringement.

#### **Post-Issuance Procedures**

Issuance of a patent is not the end of the process. Once a patent actually issues, there remain procedures involving the Patent Office. These include:

- **Maintenance Fee:** For utility patents, it is necessary to pay maintenance fees to keep the patent from expiring. Design patents have no maintenance fee requirements.
- Certificate of Correction: If minor errors are in the patent, they can be corrected by a Certificate of Correction.
- Reissue: If a patent is defective by claiming too much or too little, the defect can be corrected by reissuing the patent. However, it is not possible to broaden claims more than two years from issuance of the patent.
- Ex Parte Reexamination: Any person, including the patent owner, can request that a utility patent be reexamined based on documents such as other patents that create a substantial new issue of patentability. This procedure is commonly used by infringers to delay court proceedings since many judges will suspend the court proceedings while reexamination is pending in the Patent Office.
- **Supplementary Examination:** This procedure is similar to ex parte reexamination but differs in two ways. First, only the patentee can request supplementary

examination; it is not available to third parties. Second, the examination can be based on more than documentary prior art. For example, the patent owner may wish to have a possible sale of a product embodying the invention that occurred before the filing date considered by the Patent Office.

Inter Partes Review and **Post-Grant** Review: A third party can request inter partes review or post-grant review of a patent. A key difference between inter partes review and ex parte reexamination is that in ex parte reexamination, the third party generally is not involved in the process after the initial request, while in inter partes review, the third party is able to participate. Post grant review differs from ex partes reexamination in that validity challenges are not limited to those based on printed procedures. documents. These reexamination, can be used to delay a lawsuit because judges can stay a lawsuit while the Patent Office deals with the matter.

#### **Avoiding Patent Infringement**

An executive needs to know not only if and when to seek patent protection, but also how to avoid infringing the patent of another. A loss in a patent infringement suit can devastate a company. There are reported decisions where the patent owner was awarded hundreds of millions of dollars. Not only can a patent owner receive damages, but an injunction can also issue, which can stop the sale of a successful product.

To avoid patent infringement, usually a patent attorney is retained to conduct what is commonly called a "right-to-use" study. A right-to-use study typically involves the following steps:

- 1. Understand the product and/or process that may be introduced to the marketplace.
- 2. Conduct a search to identify patents and published patent applications that may cover a product or process to be introduced. This is similar to a patentability search discussed in Section 2.7(A). It differs in that it is substantially more expensive because more is at risk. If a patentability search misses a reference, typically what is lost is the cost of a patent application. If a right-to-use study misses a patent, the risk is substantial damages and an injunction against further infringement, which could result in withdrawal of a product from the marketplace.
- 3. Analyze the patents and published applications developed by the search that may pose an infringement risk.

Typically, most of the patents discovered by the search are not relevant. Those that may be an issue usually require obtaining the "file history" of the patent from the Patent Office to analyze exactly what is covered by the patent. A file history is the record between the applicant and the Patent Office. These communications can contain arguments and explanations by the applicant for the patent. These file histories can

be helpful in determining the coverage of the patent.

With regard to published applications, where there is no issued patent, it sometimes is necessary to track the progress of the pending application through the Patent Office. If the application issues a patent, it can be evaluated.

If any of the patents analyzed have a serious risk of infringement, the primary options for dealing with the patent are (a) designing around the patent and (b) determining whether the patent is valid or invalid. Just because the Patent Office issued a patent does not mean the Patent Office made the right decision. Challenging the validity of an issued patent is discussed in the next section. In designing around, the patent attorney works with the client to find alternatives that avoid infringement.

4. If the design-around option proves unsuccessful, then a validity study can be authorized to determine if there is any prior art that makes the patent invalid. Frequently the Patent Office did not have the best prior art available when examining a patent application. Such prior art can include other issued patents, publications, products on sale, and other publicly available information. Also, the Patent Office may not have understood prior art it already considered.

Sometimes it is not possible to design around a patent, or find prior art that leads to a conclusion that the patent is invalid. Other options available under these circumstances include the following:

- Do not use the process or introduce a product to the market.
- Take a license, as discussed in Chapter 7.
- Acquire the patent.
- Acquire the company that owns the patent.

If a warning letter is received from a patent owner, patent counsel should be consulted promptly. Such warning letters take many forms. They may appear innocuous, merely being an offer of a license, or they can be a cease and desist letter, ordering your company to stop infringement.

Ignoring such a letter can be dangerous. It can result in willful infringement. If patent infringement is willful, the court can award treble damages and attorney fees.

#### Challenging the Validity of a Patent

There is a common misconception that the decision of the Patent Office to issue a patent cannot be challenged. That is not the case. The Patent Office makes mistakes. This can be as simple as the Patent Office examiners getting it wrong by missing a key disclosure of prior art before them. Sometimes the examiner is wrong because certain information was not available to the examiner that if available, the examiner would not have allowed a patent to issue. And sometimes the law changes so under more recent law, a patent should not have issued.

There are two options for challenging the validity of a patent. The validity of a patent can be challenged in a court proceeding (see Chapter 8). The validity of a patent can be challenged in the Patent Office as discussed in section 2.13.

#### **FAQs**

#### Do I need a patent to sell my product?

No. A patent only gives the inventor the right to keep others from using the invention, not the right to sell the invention.

#### Can I keep my trade secrets and get a patent?

Generally, no. The inventor must disclose the "best mode" of practicing the invention in the patent application. Disclosure of the best mode is in exchange for the right to exclude others from using an invention. However, even though the best mode needs to be disclosed, it is not possible to invalidate a patent because the best mode was not disclosed. Therefore, some applicants for a patent may withhold the best mode.

#### Will the government enforce my patent?

No. If someone infringes an issued patent, the remedy is to sue that person in federal court, or ask the International Trade Commission to bar importation of an infringing product.

#### What is the process to obtain a patent?

The overall process includes the following steps:

- 1. Conduct a patentability search (optional).
- 2. Prepare and file the application.
- 3. Receive a filing receipt from the Patent Office.
- 4. The application is typically published 18 months after the filing. It is possible to opt out of publication if no foreign patent applications will be filed.

- Receive an office action from the Patent Office.
- 6. If the office action raises issues with regard to the patent application, which happens over 90% of the time, respond to the Patent Office. This can occur multiple times.
- 7. Hopefully, a patent issues.

#### How long does it take to get a patent?

It is impossible to precisely predict the length of time to obtain a patent. It depends on many factors, such as the overall backlog in the Patent Office, the backlog in a particular technological area, whether it is an application for a design patent or utility patent, and the level of difficulty involved in persuading the Patent Office to actually grant a patent. Under certain circumstances, such as if an inventor is over 65, it is possible to file a petition to expedite the process. There is also the possibility that a patent may never issue. Sometimes the Patent Office is not willing to issue a meaningful patent, or the invention turns out not to be worth the cost of a patent.

#### How long does a patent last?

Generally, a utility patent expires 20 years from the effective filing date. The concept of "effective filing date" is complex, so consult with a patent attorney to determine exactly when a patent actually expires. Moreover, the term of a patent may be extended if delay in issuance of the patent was due to the Patent Office's failure to expeditiously process a patent application. Design patents filed on or after May 13, 2015 last for 15 years.

Design patents filed before May 13, 2015 last for 14 years.