

## Chapter 12

### -- Patent Application Examination --

In this chapter, we will provide an overview of the process through which a patent application goes as it is processed or examined by the U.S. Patent Office.

### -- Provisional Patent Applications --

As we have noted previously, the decision whether to invest in seeking a patent, whether nationally or internationally, can be hampered by an inability to forecast the commercial value of an invention. In the international arena, this concern is addressed by the PCT system which allows an applicant to delay filing patent applications in foreign countries for up to 30 months while the commercial value of the invention can be explored.

At the national level, let us assume that an individual, poorly-funded inventor wants to protect his or her invention without making the substantial investment required to hire a patent attorney and file a utility patent application. As an alternative, this inventor can file a “provisional” patent application.

A provisional patent application is a written document that describes the invention. It can be in any format. It can be any combination of text and graphics. A provisional patent application is essentially a “core dump” of the information the inventor has about the invention.

A provisional patent application can be filed for a fraction of the cost required to file a full utility application. Because there is no set format, it is not absolutely necessary to consult a patent attorney when preparing a provisional patent application. The only real dangers in filing a provisional patent application are (1) disclosing something that you intended to retain as a secret and (2) not disclosing enough information to meet the legal requirements for patenting the invention. If either of these is a question in a particular application, it may be wise to consult with a registered patent attorney.

Once filed, a provisional patent application is valid for one year. During that year, a utility patent application can be prepared and filed that claims priority from the provisional patent application. Thus, the eventual utility application will be treated essentially as if it had been filed when the provisional patent application was filed.

The provisional application itself is never examined and cannot mature into a patent. It is merely held by the U.S. Patent Office as evidence that the inventor had possession of the invention described at least as early as the date on which the provisional patent application was filed. If no utility application is ever filed that claims priority from the provisional patent application, the application is held in secret by the Patent Office and may eventually be destroyed.

The benefit of filing a provisional patent application is the opportunity to explore the commercial potential of the invention before investing in a regular utility patent application. However, while a provisional patent application is pending, no progress is being made toward obtaining an issued patent. A patent application cannot be “enforced” against an infringer, only an issued patent confers the right to exclude others from the invention. Thus, the trade-off in filing a provisional application is delaying the investment in a utility application, but also delaying the eventual issuance of any patent on the invention.

### -- Inventor Declaration --

Around the time a patent application is filed, when the draft application has been reviewed by the inventors and placed in final form, all the inventors must sign an oath declaration. A form for such a declaration, as provided by the U.S. Patent Office, is appended at the end of this chapter.

By signing the Declaration, each inventor declares that he or she has reviewed the patent application, including the claims, and that the application and claims accurately disclose and describe the invention. The inventors also acknowledge a duty to disclose to the U.S. Patent Office anything of which they are aware, particularly previous publications and documents, which would impact the patentability of the invention.

There are legal sanctions and penalties if any of the statements the inventors make in the declaration are untrue. Declarations usually contain the following or similar language.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that all such willful false statements may jeopardize the validity of the application or any patent issued thereon.

### -- Information Disclosure Statement --

One of the obligations that an inventor accepts when signing the declaration is the duty to disclose information. Particularly, the inventor acknowledges a duty to disclose previous publications or documents that are material to the examination and patentability of the invention. In other words, if any of the inventors is aware of, for example, an issued patent, a technical journal article, a published thesis, etc., that is similar to the invention and could be used to reject a patent application on the invention, the inventors

must provide that information to the U.S. Patent Office so that it can be used by the patent examiner against the inventor's patent application if the examiner so chooses.

Moreover, this duty to disclose is not limited to information of which the inventor or inventors are aware. If the patent application has been assigned, anything that the assignee is aware of must also be cited to the Patent Office. If a patent attorney or agent is hired to prepare and file the patent application, anything material to the patentability of the invention known of that attorney or agent must also be cited to the Patent Office.

When the applicants, assignees and attorneys or agents provide documents to the Patent Office that may be relevant to the patentability of a particular patent application, the filing is referred to as an Information Disclosure Statement (IDS). An IDS includes the following elements (1) an IDS Form (provided by the U.S. Patent Office) which lists all the documents that are being cited in the IDS; (2) a copy of each of the documents being cited; and (3) an explanation of why any non-English language documents cited are thought to be relevant to the patent application. A copy of the Patent Office's IDS Form is appended at the end of this chapter.

## -- Examination Outline --

After a utility patent application has been filed with the U.S. Patent Office, it will be processed to make sure that all the required parts of an application are present. For example, the Patent Office will check to make sure that an apparently complete specification has been filed and is accompanied by a signed declaration and payment of the appropriate filing fee.

Next, the application will be classified according to the technical area of the invention. The purpose of the classification is so that the application can be assigned to an examiner who has some experience in the technology to which the invention pertains.

The patent application may then wait a year or more before examination starts. Applications are generally handled in the order received by the Patent Office. Therefore, if a particular technology is very active and many applications are being filed in that technological field, it may take longer to get an application in that technology examined than in a less active technology.

Once the application comes up for examination, the patent examiner will thoroughly review the application. The examiner reads the application to gain an understanding of the invention and how it is claimed. The examiner also considers whether the application meets all the requirements for patentability. For example, does the application fully disclose the invention so that someone else working in that field could duplicate the invention? Is the invention useful? Do the claims clearly and definitely indicate the scope of the invention to be protected? Does the declaration include all the statements required of the inventors?

Generally, the last requirement for patentability investigated by the patent examiner is whether the invention, as claimed, is novel and unobvious. To make the determination, the patent examiner must conduct a search of the prior art to look for previous patents or publications that describe the invention, in whole or in part. If such documents are found, the invention may be anticipated or may be considered obvious and the patent application will be rejected.

Patent examiners search all previous U.S. patents. Patent examiners may also search patent applications and patents published by foreign countries. The prior art search may also include technical journals and periodicals. Anything that has been published and is part of the knowledge available of the public may be considered when deciding the patentability of the invention.

When the patent examiner has completed the prior art search, the examiner will usually prepare an Office Action on the application. If the examiner has found no grounds on which to reject the patent application, the first Office Action may be an allowance of the application. Much more likely, the Office Action will be a document rejecting the patent application and explaining the grounds for the rejection.

The overwhelming majority of patent applications are initially rejected for some reason. The patent application may be rejected because the claims are not in proper form, because the application does not completely disclose the invention so that the invention can be duplicated or because the prior art identified anticipates the invention or renders the invention obvious.

Upon receipt of the Office Action, the applicant or the attorney or agent representing the applicant, can respond to the rejections made. This may entail making changes to the application.

If the patent examiner has charged that the patent application is incomplete and does not explain the invention in enough detail that the invention could be duplicated, the applicant *cannot* add additional information to the application. Once the application has been filed, new material cannot be added. Instead, the response will have to detail how the application does fully explain the invention. The examiner may or may not be persuaded by such a response. Thus, it is very important to make sure that a patent application is a complete and accurate description of the invention before it is filed.

More typically, the patent examiner will cite specific prior art documents and explain how, in the examiner's opinion, these documents anticipate or render obvious the invention as claimed. In response, the applicant or applicant's attorney can argue that the prior art documents cited do not, in fact, show all the features of the claimed invention. Alternatively, the claims can be amended to recite additional features or elements that are not shown in the cited prior art references. If anything is added to the claims, there must be support for it in the application as filed. Remember, no new material can be added to the application after it is filed. This includes material in the claims portion of the application.

When the response to the Office Action has been filed, the patent examiner will review the response. If the patent examiner is persuaded by the changes and/or arguments presented by the applicant's attorney, the examiner may then allow the patent application to issue as a patent. If the examiner is not persuaded, the examiner may again issue an Office Action rejecting the patent application. Under most circumstances, the examiner can make this second Office Action "final."

Under a "final" Office Action, the applicant's ability to amend the claims is severely limited. The applicant can file an after-final response to the final rejection and can argue the merits of any issues raised by the examiner. However, only minimal changes to the claims can be made. Any change to the claims can be refused after a final rejection if that change would raise a new issue requiring further prior art searching or consideration by the patent examiner.

Again, the patent examiner may be persuaded by the arguments in an after-final response and allow the patent application to issue as a patent. If the examiner is not persuaded, the examiner issues an Advisory Action maintaining the rejection of the application.

At this point, the applicant has three main courses of action.

(1) The applicant can file a request for continued examination, along with the appropriate fee and an amendment to the application. The amendment will be entered and a new, non-final Office Action will be issued or the application will be allowed. In other words, the examination process starts over with the amended application.

(2) The applicant can file an appeal of the examiner's rejection to the Board of Patent Appeals and Interferences (BPAI) (the "Board") within the U.S. Patent Office. At the Board level, appeals are reviewed by a panel of three patent judges. After an appeal is filed, the applicant files an appeal brief to explain why the examiner is wrong in rejecting the patent application. The examiner may respond with a reply brief. The briefs and the application are then reviewed by the panel of patent judges. If the applicant wishes, the applicant can request an oral hearing to argue the merits of the application before the panel of patent judges. Applicants are represented almost invariably at oral hearings by a registered attorney or agent. The Board will then issue a decision in which the examiner's rejection may be sustained or overturned.

(3) The Applicant can give up and abandon the application.

Finally, if the patent application is allowed, the applicant will be notified and will be given a time period in which to pay the issue fee for the patent. If the issue fee is timely paid and any other requirements met, the application will be scheduled for issuance and will issue as a U.S. Patent.

Patents are issued on Tuesday of each week and are reported by the U.S. Patent Office. The body of issued patents, going back to the 1970's, is available through the Patent Office web-site at [www.uspto.gov](http://www.uspto.gov).

It should be noted that this is merely an outline of the major events during the prosecution of a patent application. A typical patent application will roughly follow this outline. However, there are many other possible events and scenarios in the examination of a patent application that are beyond the scope of the present text.