

UNITED STATES PATENT PROTECTION

I. Introduction To A Patent

If you are reading this paper, you are probably interested in how a patent is obtained and have requested an estimate of costs. The starting point is for us to introduce you to a patent and so we have attached to this letter a copy of U.S. Patent No. 4,437,480, relating to a folding crutch.

The attached patent, like all patents, has three basic parts: a drawing, a written description and “claims.” The “claims” are word descriptions of a structure. They establish what the patent protects. The numbers of claims differ from one patent to the next. Patent No. 4,437,480 has three claims.

The patent laws require that a patent include, in addition to the claims, a written description of the invention and a drawing showing at least those features of the invention that are claimed. As you will note, the drawing and the written description in Patent No. 4,437,480 include reference numerals that identify the various parts of the disclosed structure. This enables a reader to easily find the described features in the drawing while reading the description.

When the United States Patent and Trademark Office (PTO) grant a patent, it is assigned a patent number. This number is placed on products that are protected by the patent. This allows the members of the public to obtain a copy of the patent (from the PTO) and determine from the claims what the patent protects.

You have probably seen the term “patent pending.” This merely means that an application for a patent has been filed in the PTO. Patent No. 4,437,480 shows a filing date of July 8, 1982. Below the patent number it sets forth the date of March 20, 1984. This is the grant date of the patent. Up until 1995, the term of the patent was seventeen years from the grant date. Presently, the term is twenty years from the filing date. If today’s system were in effect when patent number 4,437,480 was filed, the term of that patent would be twenty years from July 8, 1982. In other words, the patent would expire on July 8, 2002, assuming that all maintenance fees were paid. Maintenance fees are discussed below.

We prepare patent applications for our clients, with their assistance. Our clients, usually by the inventor or inventors, furnish all information that we obtain about an invention to us. The patent application includes a drawing that eventually becomes the drawing in the patent. We have a patent draftsman who prepares the drawing for us. We write the description and claims.

Mr. Husa, the inventor of Patent No. 4,437,480, came to us with a prototype of the folding crutch that is pictured in the patent. Our draftsman took measurements from the prototype and prepared the patent drawing. We then prepared the claims and description, with assistance from Mr. Husa. Once a complete draft of the application was finished, we presented it to Mr. Husa for his review. From his input, some changes were made to both the drawing and description and then both were made final. Our draftsman made final ink drawings that were submitted to the PTO as a part of the application. The written description and the claims were submitted in typewritten form.

The patent application also includes a Declaration that is signed by the inventor(s). By signing this document, an inventor represents that he/she is a true inventor of the claimed subject matter. When completed, the drawings, the written description, the claims and the Declaration are mailed to the PTO, together with a filing fee.

Shortly after an application is filed, the PTO notifies us of the filing date and a serial number that is assigned to the application. Note on page 1 of Patent No. 4,437,480 there is a reference to application number “396,155.” This is the serial number. It is used to identify the application in all correspondence with the PTO up until a patent is granted.

The application is assigned to a patent Examiner who is a specialist in the technology field to which the invention relates. Each Examiner is assigned a large number of applications to examine. This means that a new application will not be examined immediately. A typical waiting time to receive a first letter from a patent Examiner is about nine months to one year from the filing date. When an application is reached for a first action, the Examiner picks it up, reads it and then conducts a “patent search.” That

is, he/she searches amongst previously granted patents directed to similar structures, to see if the invention claimed in the application is already known or would be obvious from what is already known. After locating pertinent prior patents, if any, the Examiner writes us a letter stating his/her position. The Examiner's letter is termed an "Office Action." In most cases, the initial "Office Action" rejects the application, usually on the basis that the claimed subject matter would have been obvious from known technology that is identified in the Office Action.

After we receive an Office Action, we study it and report it to our client. Our report letter provides an evaluation of how the Examiner's action would appear to affect the chances of the inventor(s) ultimately obtaining a patent. The next step is to answer the Office Action. We do this by filing what is known as a Response. A Response may amend the claims and/or submit new claims and/or submit arguments as to why the claims are patentable. It is sometimes necessary to file more than one Response.

In most cases, we ultimately obtain an allowance of the application. Once this happens, it is then necessary for us to take care of any formal matter(s) that might be outstanding. An example of a formal matter is the filing of a formal ink drawing. Under current practice, we can file the application with an informal drawing. After we have been informed that a patent will be granted, we must replace the informal drawing with a formal ink drawing. It is also necessary to pay an issue fee.

As stated above, the term of the patent is now twenty years from the filing date of the application. However, this term is conditioned on the patent owner paying what are termed "maintenance fees" as they become due. A first maintenance fee is due at three and one half years following the grant date of the patent. A second maintenance fee is due at seven and one half years following the grant date of the patent. A third maintenance fee is due at eleven and one half years following the grant date of the patent. Maintenance fees may be paid on a late basis (within six months), if paid together with a surcharge. If a maintenance fee is not paid, the patent will lapse.

An advisable first step that should be taken before filing a patent application is to conduct what is known as a "patent novelty search." This is a search conducted in the PTO for the purpose of finding patents that might be used by an Examiner to deny a patent. The search might also locate patents that would be infringed by any commercial use of the invention.

The following is a summary of the steps that are normally involved in securing a patent:

1. We meet with the inventor(s) to learn what the invention is and discuss what patent protection might be available.
2. We conduct a patent novelty search. Hopefully, the inventor(s) brings with him/her drawings or at least rough sketches of an example of the invention. We have an associate on the east coast who does the actual search. We write this associate a letter, enclosing the drawing or sketch obtained from the inventor(s), or one we have prepared. The letter describes the invention by reference to the drawing and instructs the searcher as to what we want him/her to search.
3. The searcher does the search. He/she orders copies of the patents found by the search and sends them to us. We analyze the patents and give the inventor a written patentability opinion.
4. If the search is negative, we may be asked to do nothing further. If the search is positive, and the inventor(s) elects to file a patent application, the first thing that we do in most cases is to have our draftsman prepare a pencil layout of the application drawing. Some clients are able to furnish us with a drawing that is good enough to use for filing purposes. If so, we use it and delay obtaining a drawing from our draftsman until the application is allowed.
5. After we have a drawing to work from, we prepare a first draft of the patent application. We write the claims first in order to develop the language that best describes the invention. After the claims are prepared, we prepare the description, using the same language that was used in the claims. When a first draft is ready, we give it to the inventor(s) for his/her review and further input. Sometimes, several drafts are exchanged back and forth between the attorney and inventor(s) before we have an application that is ready to file.

6. When the written description has been approved by the inventor(s) and we have a drawing that is suitable for filing, we have a signing ceremony. The inventor(s) makes a final review of the application. After any additional charges are made, the signatory papers are signed and then the application papers are forwarded to the PTO for filing.

7. Eventually we will receive an Office Action from the patent Examiner. It will be studied and reported. Then, within a prescribed time, a Response will be prepared and filed.

8. At about the time we receive the first Office Action, we will ask the inventor(s) to disclose to us any significant changes that he/she made in the invention subsequent to the filing date of the patent application. It is not possible to add any “new matter” to the patent application. We cannot change or expand the original disclosure of the application. However, if the changes are significant, we can file a new application termed a “continuation-in-part” application. This is an application that includes all of the contents of the original application and some new material as well. A continuation-in-part application has two filing dates; the original filing date and its own filing date. Claims that are supported by the original disclosure will be given the filing date of the original application for priority purposes. The claims that include added subject matter are given the filing date of the continuation-in-part application.

Another topic that is discussed shortly before the one-year anniversary date of the filing of the original application is the possible filing of applications for foreign patents. Foreign patent protection is beyond the scope of this letter. Please ask if you want information about foreign patent protection.

There are costs for each stage of the proceeding, starting with the initial office conference and continuing up to and beyond payment of the issue fee. After the issue fee is paid, the patent document is printed and sent to us. We proof it for possible errors. There is a charge for this service.

We remind our clients of the due dates for paying the maintenance fees. After we obtain approval to do so, we pay the maintenance fees and charge our clients a fee for this service in addition to the PTO fees.

Congress reviews the PTO fees each year as part of its budget process. Most years, the fees are increased an amount proportional to the increase in the cost of living during the year. From time to time, we increase our fees. Thus, it is not possible to present you with a fixed fee schedule. Instead, you will receive with this information letter a separate document setting forth fee information that is as up to date as is possible. Also, prior to any work being done, you will be given an estimate of the cost of that work based on an attorney’s evaluation.

II. A PATENT APPLICATION MUST BE TIMELY FILED

A patent application must be filed within one year of the date that an invention is first offered for sale or put into public use, whichever happens first. 35 U.S.C. § 102(b). If a patent application is filed after the year has expired, any patent that is granted would be invalid. The on sale and/or public use creates what is referred to as a “statutory bar” to a valid patent.

Most “statutory bars” are of the on sale type. In *Pfaff v. Wells Electronics, Inc.*, 525 U.S. 55, 119 S.Ct. 304, 48 USPQ2d 1641 (1998), the United States Supreme Court stated:

We concluded, therefore, that the on-sale bar applies when two conditions are satisfied before the critical date. First, the product must be the subject of a commercial offer for sale. An inventor can both understand and control the timing of the first commercial marketing of his invention. The experimental use doctrine, for example, has not generated concerns about indefiniteness, and we perceive no reason why unmanageable uncertainty should attend a rule that measures the application of the on-sale bar of Section 102(b) against the date when an invention that

is ready for patenting is first marketed commercially. In this case the acceptance of the purchase order prior to April 8, 1981, makes it clear that such an offer had been made, and there is no question that this sale was commercial rather than experimental in character.

Second, the invention must be ready for patenting. That condition may be satisfied in at least two ways: by proof of reduction to practice before the critical date; or by proof that prior to the critical date the inventor had prepared drawings or other descriptions of the invention that were sufficiently specific to enable a person skilled in the art to practice the invention. In this case the second condition of the on-sale bar is satisfied because the drawings Pfaff sent to the manufacturer before the critical date fully disclosed the invention.

Pfaff is viewed as having changed the law. Prior to *Pfaff*, the courts would consider a number of facts and circumstances, including alleged experimental use, before concluding whether or not the invention had been sufficiently completed to make it ready for patenting. Under the old test, an invention could be built and tested for some time before the year started to run.

The patent law still permits an inventor to offer an invention for sale and have a full year following that offer in which to experiment with the invention before having to file a patent.

III. TERM OF UNITED STATES PATENT

Prior to a law change that took effect on June 8, 1995, the term of a United States patent was seventeen years from the grant date of the patent. The change provided:

(1) For applications filed on or after June 8, 1995, the term of the patent is twenty years from the filing date of the application. Where the filing of a regular application is preceded by the filing of a provisional application, the twenty-year term runs from the date of filing the regular application.

(2) For Continuation, Continuation-in-Part and Divisional Applications filed after June 8, 1995, the term is twenty years from the filing date of the earliest original patent application.

(3) For patents still in force on June 8, 1995, or based on applications that were filed before June 8, 1995 and issued after that date, the term is the longer of (a) seventeen years from the grant date of the patent or (b) twenty years from the filing date of the application.

The term of a patent is subject to terminal disclaimers that might have been filed, and to the payment of maintenance fees, and in some cases to term extensions provided under some conditions to patents concerning a drug product, a medical device, a food additive or a color additive that is subject to regulation under the Federal Food, Drug and Cosmetic Act. The term of an original patent may also be extended if the grant of the patent is delayed due to an interference proceeding, or because the application for a patent is placed under a secrecy order, or because the application that became the patent was on appeal for too long of a time.

The term of each patent should be determined when the patent is granted and the expiration date noted on the patent itself or on some other record respecting the patent.

IV. DESIGN PATENTS

A design patent doesn't stop a competitor from making a product that operates exactly like your product. Instead, it prevents your competitor from making its product *look* like yours.

Design patents may be the most overlooked and misunderstood form of intellectual property protection available. A design patent protects an inventor's creation of the ornamental appearance of a manufactured article. Most often it is used to protect the aesthetic appearance of a utilitarian thing, as compared to a work of art.

The protection a design patent gives you may seem of little value. Indeed, what protection is a patent that allows your competitor to simply change the appearance of your product to avoid infringement? Nevertheless, when properly used, design patents can be extremely valuable to the owner. For example, a new design for a chair, lamp, running shoe, doorknob or silverware may function exactly like its predecessors. Its appearance, however, is what makes it attractive to purchasers. Being able to stop your competitors from copying this ornamental design could be quite a valuable asset to you as a manufacturer.

Design patents are available for items such as furniture, shoes, plumbing and electrical fixtures, fabric designs and patterns, vehicle body shapes and automotive accessories, tire tread designs, toys, typeface fonts, golf club heads or candy shapes. Even patterns of water made by fountains and a hip replacement prosthesis have been protected by design patents. Each of these items can be made in a variety of styles. The one that has an attractive appearance to purchasers is likely to sell the most – or at the highest price.

Design patents fill an intellectual property niche by providing additional protection not provided by utility patents and copyright protection. In general, a utility patent protects an invention's function against infringement regardless of similarity – or dissimilarity – in appearance. A copyright protects the creative expression of an idea but, by definition, does not protect the underlying idea. A copyright prohibits *copying* of a creative expression, but does not apply to an independently created work. Design patents apply even against a competitor who independently creates a similar design. Occasionally, design and utility patents, along with copyright, can be used together to solidify protection for innovative products.

The cost of obtaining a design patent is only a fraction of that for a utility patent – typically in the range of \$1,000 to \$2,500. A design patent is not a less expensive version of a utility patent. The protection provided is entirely different.

Design patent applications have traditionally been processed very slowly by the U.S. Patent and Trademark Office. The time from filing an application to issuance was often as much as three or more years. This once made design patents less attractive. The Patent Office has recently made headway on its backlog of cases and has reduced this time to about twelve to eighteen months.

Design patent inventions are subject to the same novelty requirements as a utility patent. The design must not have been publicly disclosed, in use or on sale for more than a year prior to filing a design patent application. The design cannot be "obvious" in view of previously existing designs. Simply combining various old elements together into a new design may not be patentable. In other countries, design patents are known as Industrial Design Registrations and may not allow any grace period for commercial use prior to filing. So, if you are considering foreign protection, it's best to seek advice early in the design process.

One of the most effective uses of a design patent can be for establishing trademark significance of a new product shape or package design through exclusive use. A design patent allows you to prevent others from packaging or shaping their product like yours during the fourteen-year life of the design patent. During this time, consumers will come to recognize the shape of your product as indicating its brand. When this happens, the product configuration becomes a trademark which may be registered and protected indefinitely.

Design patents are enforceable against infringers just like utility patents. The owner of a design patent can obtain an injunction against an infringer and may recover damages caused by the infringement or the infringer's profits, whichever is higher. Infringement does not require exact copying. Instead, infringement may be shown by "substantial similarity" such that consumers might confuse one with the other. In 1871, the U.S. Supreme Court made a landmark decision in *Gorham & Co. v. White* defining the way design patent protection is to be interpreted and enforced. In that case, a competitor was making a silverware pattern, which, although not identical to the Gorham pattern, was found to be "substantially similar" in appearance and therefore, an infringement.

When you see the notice, "Protected by U.S. Patent No. _____" on a product, you can easily tell whether it is referring to a design or utility patent. Design patent numbers are usually preceded by the designation "Des." or "D," followed by a six-digit number. A utility patent is identified by a seven-digit number. Any utility patent having a number with only six digits would have expired decades ago. If you see the notice "Patent Pending," it is impossible to tell whether it is referring to a design or utility patent application. You can only find out for sure from the inventor before a patent issues.

When considering the types of intellectual property protection available for your inventions and products, the possibility of a design patent should not be overlooked. Although the protection it offers is rather specific, the benefits may be substantial.