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INTELLECTUAL PROPERTY PROTECTION

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PROCEDURES AND COSTS FOR PATENTS

PLEASE NOTE: This information is provided for informational purposes only, and does not constitute legal advice. For legal advice, please contact one of our attorneys.

1. Introduction

An idea has occurred to you or an employee of your company. It appears to have some market potential, and you want to protect it. Patents give you the opportunity to exclude others from making, using, selling or offering for sale the invention. A patent may be the best way for you to protect the invention, but how do you go about obtaining one? This is a brief outline of the major steps and some typical costs ordinarily taken by an inventor or company toward obtaining a U.S. Patent.

Numerous cost ranges are listed below in order for you to have an idea of what steps might cost in a typical case. These should not be taken as quotes for any particular case. Additionally, we ask clients to deposit retainers with us for any estimated costs, and the retainer amount is typically the full amount for the task to be performed. If you have any questions about costs, payment or any other matter, we sincerely hope you will raise those so we can resolve them.

2. Types of Patents

There are three types of patents in the United States: Utility, Design and Plant. Utility patents protect the functional features of an invention, and usually are directed to scientific and engineering technology. For example, utility patents protect machines, processes, improvements to existing machines and processes, and compositions of matter. Some patents protect business methods but these are usually computer implemented. Design patents protect the decorative, ornamental or aesthetic features of a useful device, but not the functional features. Plant patents are directed to asexually reproduced, distinct and new varieties of plants, other than tuber propagated plants or plants found in an uncultivated state. Feel free to inquire further about the type or types of patents that may protect your invention.

3. Records of Invention

The first step that an inventor should take is to secure records which prove the date on which the inventor thought of the invention, dates on which experiments were conducted in perfecting it, and the date it was first used and found to operate satisfactorily. An inventor who has an idea should, as soon as possible, write down a complete description of the invention, make sketches of it, describe how it works and what it does. Then the inventor should sign and date the papers and indicate that he or she is the inventor. These papers should then be shown to two colleagues who have no financial interest in the invention and the invention should be explained to them. These colleagues should sign and date the papers, writing before their signatures that the invention was explained to and understood by them. The papers should be kept in a safe place.

Records should be kept of experiments and tests performed, as well as the observations made and information learned. These records should also be signed and dated. If a person is often engaged in inventive and/or experimental activity, it is typically desirable that the inventor (or each inventor if there are two or more) maintain a personal bound notebook into which ideas and observations are sequentially recorded in the manner described above.

Records should also be kept of all events in which the invention is disclosed to any other person(s). A copy of all documents given to others which describe the invention should be retained. A written record should be made giving information that identifies the other person(s) and describes the manner and purpose of the disclosure.

4. Searching

To be patentable, an invention must be different enough from the prior technology to warrant the grant of exclusive rights by the U.S. Patent and Trademark Office. Since patent applications are expensive, the usual second step for inventors is to obtain a rough idea whether the invention is different enough that it would have a reasonable probability of being patented if a patent application were filed. To accomplish this, a patent attorney can perform a search in the U.S. Patent and Trademark Office. A reasonable amount of time is spent, usually a few hours, trying to find patents showing similar inventions. Several days could be spent, but the added expense is not normally justified. No matter how extensive the search, there is always some chance that an important prior art reference will not be found. Also, previous printed literature other than patents is relevant, but is not ordinarily searched because of the cost of doing a reliable search of it.

The patents found in the search are studied and an opinion estimating the probability of obtaining a U.S. patent is then written and sent to the inventor, along with copies of the closest patents found in the

search. The cost of a search and opinion is ordinarily approximately \$2,000.00 but could be more depending principally upon the technical complexity of the invention. If we believe it would be more, we will tell you before the search is undertaken.

5. The “Obviousness” Test

In order to be patentable, an invention must be sufficiently different from the prior technology, usually called the “prior art”. The legal test for sufficiently different is that the invention would not have been “obvious” to a person of ordinary skill in the technical field of the invention who is aware of the relevant prior art. More specifically, we first determine the differences between the invention and the prior art in the field of the invention. Often a patent search is performed to try to find the prior art that is most similar to the invention. Then we form an opinion whether those differences would have been what the patent statute calls “obvious” to that person of ordinary skill. It does not matter whether the inventor was aware of that prior art. In determining whether the differences were “obvious”, we assume that such a person of ordinary skill applies to the prior technology the principles and reasoning which such persons normally apply. Typically, people who are knowledgeable in a technical field are aware of modifications that can be made to preexisting ideas. They are also aware that sometimes features of different but related structures, processes or materials can be combined or a feature from one can be substituted for something in another. The invention is not patentable if the differences between the prior art and the invention would have been obvious to a person of ordinary skill in the field.

6. Telling Others About the Invention - Confidential Disclosure Agreements

Inventors should be cautious about how they disclose their inventions to others for at least two reasons. First, if inventors want to disclose the invention in order to offer to license or sell the invention to someone or to seek an investment from them, the inventor wants the best available legal protection to stop the other party from learning the invention from the inventor and then using it without compensating him or her. Second, disclosing the invention to others can, in some circumstances, destroy the right to obtain a U.S. patent if a patent application is not filed within a one year grace period after such a disclosure. Finally, foreign patent rights will most likely be lost immediately if an inventor discloses the invention before he or she files a patent application, unless the disclosure of the invention is confidential.

Therefore, if an inventor wants to disclose the invention to someone so that they can evaluate it and decide whether they want to have a business agreement, it is desirable that the inventor and the other party sign a confidential disclosure agreement before the idea is disclosed. A confidential disclosure agreement is a contract between the inventor and a person to whom the inventor will disclose the invention. In the contract, the inventor agrees to disclose the invention and the other person agrees to

evaluate it, but not use it or disclose it to others except with the written permission of the inventor. Such an agreement does not grant any rights to the invention. In the absence of such an agreement, the person to whom the inventor discloses the invention is free to disclose it to others and sell it, limited only by any patent the inventor may later obtain. If an agreement is signed, it is also desirable that evidence of what was disclosed be retained. Preferably, the disclosure will be written, a copy is given to the other party and they will sign the inventor's copy acknowledging receipt. The inventor should retain all evidence of any meeting and of what was disclosed. Some companies will not sign a confidential disclosure agreement because they fear an unjustified lawsuit against them. Some companies will only consider an idea if the inventor signs their agreement that the disclosure is NOT confidential. So, as always, inventors should read before they sign any agreement. A patent attorney can prepare a confidential disclosure agreement that protects the invention and can advise you about other agreements.

Inventors should also avoid a disclosure that would destroy the right to get a U.S. patent, unless a patent application will be filed within the one year grace period after the disclosure. A confidential, non-commercial disclosure does not destroy the right to a U.S. patent nor does offering to license the invention to others. However, publishing the idea in any media, including on the internet, in a cataloged scholarly paper or in papers distributed at a seminar, starts the grace period running. So does a public use of the invention or offering to commercialize or sell copies of the invention.

7. Filing a Design Patent Application

The third step for inventors is the filing of a patent application in the U. S. Patent and Trademark Office seeking a patent for the invention. The technology to be protected will determine the type of patent that will be filed. If the invention has unique decorative or ornamental features, a design application may be appropriate. Design patent applications include drawings of all of the important views of the invention, formal papers that must be signed by the inventor, a claim and descriptions of the drawings. The cost of design patent applications vary according to the number and complexity of the drawings, but normally is between about \$1,500.00 and \$2000.00. Because this is so close to the cost of a search, we do not normally recommend that we perform a search before preparing and filing a design patent application.

8. Filing a Complete (“Non-Provisional”) Utility Patent Application

As noted immediately above, the third step for inventors is the filing of a patent application in the U. S. Patent and Trademark Office seeking a patent for the invention. A utility patent application can be filed to protect the functional features of an invention. After receiving the search opinion, the inventor must decide whether the likelihood of success merits the filing of such an application. Inventors or company managers should consider the attorney's opinion of the probability of obtaining a patent, their own

evaluation of the sales, licensing, or other commercial potential for the invention, and the possible value of marking the invention with the designation "patent pending".

A utility patent application includes a detailed description of the invention, drawings, formal papers and, most importantly, the claims. Patent claims are concise legal definitions of what is sought to be patented in increasing steps of detail. They appear at the end of an issued patent as the definition of what is patented.

The cost of preparing and filing a utility patent application is determined primarily by the attorney time required to prepare the patent application. A substantial part of the cost is also based upon the attorney's expenses, such as government fees for filing the application and the cost for a draftsman to prepare acceptable drawings. Patent applications typically cost clients a total of \$6,000.00-\$12,000.00 to prepare and file, depending upon the technology and the complexity of the invention. A significantly more complex invention could cost significantly more. This estimate includes filing fees, patent drawings and all expenses to prepare and file the application.

The patent statute requires that the patent application include a description of the invention that is sufficient to enable a person of ordinary skill in the field of technology to practice the invention without the necessity of undue experimentation. It is therefore very important that your patent attorney be given all information that is important to enable such a person to construct the apparatus or practice the method of the invention. It is a common misunderstanding that a patent will be broader and stronger if less information and fewer details are given in the description of the invention. To the contrary, giving less information can only make a patent narrower and weaker. Doing so might also prevent the grant of a patent and could result in any patent that is granted being declared invalid. In general and when properly presented, the more information in the patent application, the better.

Furthermore, the patent statute requires that the application include a description of the best or preferred mode of practicing the invention as the inventor currently believes it to be. Therefore, it is important that you describe all the details to your patent attorney of the best embodiment of the invention. It is important that inventors not withhold any information about the preferred structural or method features or parameters. If there is any question about this, inventors should inquire whether something must be disclosed. There is no obligation to find the best mode possible, only to avoid inadvertent or intentional concealment of the best mode as the inventor believes it to be at the time of filing the application.

With two exceptions, the patent law prohibits a patent if the invention was offered for sale, commercially or publicly used, published or otherwise made available to the public or included in a filed patent application anywhere in the world before your U.S. patent application filing date. One exception is that none of the above actions prohibits a patent if the inventor, or someone who derived the information from

the inventor, takes the action less than one year before the inventor's U.S. patent application filing date. The second exception is that an earlier patent application filed by the same inventor(s) does not prohibit a patent unless that application was published more than a year before the inventor's U.S. patent application filing date. Therefore, if it is possible that any of these situations may be applicable, inventors should tell their patent attorney about the related facts and circumstances. It does not make sense to spend money trying to obtain a patent that will be clearly invalid.

9. Filing a Provisional Application

A “provisional” application is a utility patent application that may be helpful to some inventors, but it is not a substitute for the complete, non-provisional utility patent application described above. A provisional application provides a filing date for the technology disclosed in it and delays the time when a complete utility application must be filed. A provisional application has the same description and drawing requirements as a complete utility application, and differs in content by its lack of claims (the concise definition of the invention). The filing fee is also significantly less than for a complete, non-provisional utility patent application.

A provisional application is not subjected to an examination by the U.S. Patent and Trademark Office. In fact, a provisional application is destroyed unless a non-provisional application is filed within one year of the date of filing the provisional application. Therefore, a provisional application should not be considered a less-expensive alternative to a complete, non-provisional application. Instead, it is preliminary to a non-provisional application.

The primary benefit of a provisional application is that it “buys” an inventor time by providing an application filing date. Obtaining the earliest possible filing date is usually desirable because the filing date is used to determine what is included in the prior technology over which the invention must be an improvement. Additionally, a patent issuing from an application filed after June 7, 1995 is in force for 20 years from the filing date of a complete (non-provisional) patent application. The provisional application gives an inventor a filing date, allowing him or her to make the invention public, without starting the 20 year period of the patent's life. The 20 year period does not begin to run until a non-provisional application is filed. But it must be emphasized that a provisional application will not result in a patent being issued unless a complete (non-provisional) application is filed within one year after the provisional application was filed.

A provisional application will ordinarily cost less than a non-provisional application because the filing fee is lower and there are no claims. Not drafting claims for the provisional application results in less attorney time, since a significant portion of the time spent in drafting a patent application is spent drafting claims. However, that portion of the attorney's fees are merely delayed for a year, since it will be necessary to

draft claims if a non-provisional application is filed. Depending upon the quantity of attorney effort the client wants, the cost for a provisional application can vary from \$500 to as much as the cost of having a complete (non-provisional) patent application prepared.

If some information is later deemed necessary to get claims allowed and that information is not in the provisional application, but is only included in a later filed non-provisional application, only the filing date of the non-provisional application will be effective. Consequently, prior art will not be based on the earlier filing date of the provisional application and therefore, its benefit will be lost.

The amount of effort an attorney can expend in preparing a provisional application can vary over a wide range. At one end of the range is the simplest application, with the least effort. With such a provisional application the attorney simply takes existing disclosures and descriptions provided by the inventor, places them in the format of a provisional application, and files them as a provisional application. This minimizes the cost to the client.

At the other end of the range of attorney effort is that the attorney can exert substantially the same effort as is exerted in preparing a complete patent application. One or more patent claims might even be included. While this increases expenses, it minimizes the risk that the provisional application will be unable to support a later filed, complete, non-provisional application. Some companies file provisional applications at this latter boundary of the range.

It is obvious that applications prepared with more attorney effort will incur more attorney expense, but also will minimize the risk of later problems. Provisional applications anywhere in the range of attorney effort can make good sense depending upon the goals and expectations of the client. What is important is that the client understand in the beginning what the client is getting, and what the client is not getting, so there will be no unmet expectations at a later time.

There is also a potential for danger with use of the provisional application. Attorneys go through an important analysis of the invention when drafting claims. This analysis includes determining what essential component parts are the heart of the invention, and what details of the invention need to be described in the specification and shown in the drawings. When this analysis is omitted to save the cost of the complete application, it is possible that an element necessary to claim the invention precisely will not be sufficiently described and shown. The likelihood of this occurring increases as the complexity of the invention increases.

It is possible for a client to draft his or her own provisional application, and have an attorney look it over to ensure that it meets the statutory requirements of form before filing. This may be the best approach when a paper is about to be published, or a sale is foreseeable and time is of the essence. We charge our usual hourly rate for this service, but note that review of the substantive content of the application is

limited to the review we are instructed to make. This involves many situation-specific considerations. If you are considering this approach, please contact us so we can discuss your particular circumstances. Please also understand that a disclosure or description prepared by you and merely reviewed by us cannot be considered professionally equivalent to one prepared by us.

If an inventor seeks to prepare his own provisional patent application, it would be helpful for him to know how it will be used later so he can prepare it in a way that will maximize its value to him. A provisional application can be thought of as a "container" in which the invention and all the information needed to later prepare a complete (i.e. non-provisional) utility patent application is stored. If some information is not in the "container" (i.e., the application), that information will not get the benefit of the filing date of the provisional application. Therefore, it is desirable to put everything possible in the "container" (the application). There is no penalty for including too much but including too little can reduce legal rights.

In a provisional application, inventors should describe what the invention is, how it works and what it does. It is fine to include its advantages and say how much better it is than the prior art, but this is of lesser importance than describing its components and cooperation among components. Inventors should describe all the details and related alternatives. Drawings or photographs should be included if they assist in informing the reader about the invention. One should consider how to describe the invention to a young student, and that is how it should be described in a provisional application.

The invention should be described in a manner so that a person of ordinary skill in the same field could take the description and practice the invention without the necessity of undue experimentation. However, one need not describe what is already known to those of ordinary skill in the field.

10. Information Disclosure Statement

Rule 56 of the U.S. Patent and Trademark Office imposes a duty of candor and good faith upon everyone involved with a patent application. This duty is best met if the inventor furnishes to the patent attorney all publicly disclosed information relating to the new or unobvious portion of the invention. This is normally the closest prior technology. Copies of relevant publications should be filed in the United States Patent and Trademark Office in an Information Disclosure Statement before the application is examined by the U.S. Patent and Trademark Office. These are preferably included by the attorney with the non-provisional patent application. When included with the complete patent application, the cost is included in the estimate above for the patent application. Sometimes it is desirable to also file an Information Disclosure Statement in which relevant prior technology is discussed and distinguished from the invention. However, if that is desirable, you would be informed and any additional cost would be included in the estimate for filing the application.

11. Publication of a Patent Application

A utility patent application filed in the U.S. Patent and Trademark Office is published about 18 months after its filing date or priority date (for patent applications filed in other countries first), whichever is earlier. If a provisional application was filed, its priority date is its filing date. However, the applicant may request that the application not be published if he or she states that no patents will be sought in other countries. If an applicant who requests that an application not be published later decides to seek a patent in another country, the earlier statement to the contrary must be rescinded by communicating that rescission to the U.S. Patent and Trademark Office.

An advantage of publication is that the invention becomes available sooner as prior art against others. A disadvantage of publication is that the invention may be made public before the inventor knows whether he will receive a patent. There are also provisions for obtaining royalties from those who use the publication to copy the invention before a patent issues. Since many applicants eventually seek patents in another country, we do not request non-publication of the application unless clients request that we do so.

The publication of a patent application can have a significant impact in another way. Under U.S. law, the publication of an application may become prior art against any later filed patent application. The most common situation in which the publication of an application becomes a concern is when the applicant is working on improvements to the invention that was the subject of the first application. If the applicant later wants to file a second application claiming those improvements, the applicant must file within a particular time frame or else the first application will be prior art. The result of this is that if the earlier application becomes prior art, the improvement will have to be patentable over the invention disclosed in the first application.

Therefore, if an inventor has plans to file any other patent applications relating to the subject matter of the first patent application, he or she should inform us of those plans so that we can file any other patent applications as soon as is necessary.

12. Prosecution

The filing of a patent application does not assure the granting of a patent. The next step after filing a non-provisional application is usually to convince the U.S. Patent and Trademark Office to grant a patent on the invention. This is referred to as "prosecution" of a patent application.

After filing, the application will be in the U.S. Patent and Trademark Office backlog for at least several months and perhaps as long as three years or longer, but typically for about one to two years. Then one of the several thousand patent examiners in the Patent Office will issue an "Office Action" stating whether

they will grant a patent and explaining their position. Usually the Patent Office examiner rejects some or all of the claims on the first Office Action even though they may eventually allow them. The patent attorney will respond to that Office Action to convince the Patent Office to grant a patent or to modify the application or both. There may be two or even three such "Office Actions" by the Patent Office and "Responses" by the attorney. The attorney and the patent examiner may talk by telephone or personally in the Patent Office. All of these communications between the examiner and the attorney are part of the prosecution of the patent application. Hopefully, it will end with the allowance of the application as a patent, which is our typical experience. If a patent is allowed, it will issue within six months or so of the end of prosecution; if it does not, an appeal can be taken.

It is difficult to estimate the cost of the services of your attorney for such prosecution. This cost varies widely with different inventions and different patent examiners because we cannot anticipate what any given examiner will do or what we must do in response. The cost of prosecution may be as low as \$500.00 or as high as \$10,000.00. Most often, total prosecution cost is approximately in the range of \$3,000.00 to \$6,000.00. In the unusual event that an appeal is necessary and a client wishes to appeal to the Board of Appeals or the Court of Appeals, the cost would be significantly greater.

13. Advancement Of Prosecution

The Rules of the U.S. Patent and Trademark Office permit a patent application to be advanced for prosecution by submitting a fee and a petition for acceleration. The Office intends acceleration to permit completion of examination within a year. Another basis for acceleration is the advanced age or poor health of the inventor. Any other basis places limits on the application, requires that a search be performed and requires the preparation and filing of an accelerated examination support document. The document requires an extensive analysis and discussion of the patent application and the prior art, and therefore causes a substantial increase in the cost of the application.

It is not always desirable to receive a patent as soon as possible. Ordinarily inventors do not need a patent as long as there is no infringer, unless it has value in marketing. Inventors may want to use the usual delay in the Patent Office to evaluate the commercial value of the invention or to maintain other options before they incur the cost of prosecution or issuance of the patent.

14. Issuing a Patent

The final substantive step is to issue the patent application as a United States Patent. If the U.S. Patent and Trademark Office is convinced during prosecution that the inventor should be granted a patent, it will send the attorney a "Notice of Allowance and Issue Fee Due". It is then necessary to pay to the U.S. Patent and Trademark Office an issue fee for printing the patent and a publication fee. The current (2015)

issue fee plus related services total approximately \$1,400.00 for a large company and half that amount for others. All U.S. Patent and Trademark Office fees are set by Congress and consequently can be expected to be increased from year to year. A few months after payment of the issue fee, the inventor will receive the Letters Patent of the United States.

15. Maintenance Fees

After the issuance of the patent, the last step is the payment of maintenance fees. Maintenance fees must be paid to keep the patent enforceable. The current (2015) fee schedule for a large company is approximately \$1,600.00 before the fourth anniversary of the patent, approximately \$3,600.00 before the eighth anniversary and approximately \$7,400.00 before the twelfth anniversary of the issuance of the patent. The maintenance fees are half those amounts for small companies and individuals.

Please bear in mind that Congress and the U.S. Patent and Trademark Office increase fees essentially annually, so the cost can be expected to rise accordingly.

16. Foreign Patents

Patents may be obtained in most foreign countries. There are several treaties in existence which allow inventors to obtain a legal filing date in the foreign countries which is the same as the filing date in the United States. The treaties can be important because most foreign countries prohibit a patent if the invention was publicly disclosed before the legal filing date.

To obtain a US filing date in foreign countries, inventors must file applications and take other required actions within the time limits set by the treaties. Because the first such time limit is one year from the U. S. filing date, inventors can postpone any consideration of foreign filing for nearly a year from your U. S. filing date without loss of rights. We ordinarily send a letter to clients before the one year deadline expires, but we also suggest that clients mark their own calendar to inquire about it about 10 months after the U. S. filing date if they believe they might be interested in obtaining any foreign patents.

Most foreign countries do not have the one year grace period which the U. S. law provides (see the last paragraph under "8. Filing a Complete ("Non-Provisional") Utility Patent Application" above). Therefore, if an inventor thinks foreign patents may be of interest, he is contemplating making an invention public, and he has not yet filed a patent application, we would recommend he contact us before making the invention public.

Foreign filing can be expensive and the costs and estimates are subject to variations in currency exchange rates. We can provide cost estimates so that inventors can determine whether to file for foreign patents based upon anticipated costs.

17. Conclusion

The process for obtaining a patent is complex, and is a significant investment. Inventors can assist patent attorneys if they have some knowledge of the steps normally taken when a patent is sought. Additionally, it is very important to us that a client be well informed about anticipated events and expenses. Please feel free to ask questions of us at any time.