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FREQUENTLY-ASKED QUESTIONS ABOUT PATENTS

NOTICE: I cannot give you legal advice or act as your patent attorney until you have hired me by signing and returning an engagement agreement with payment. This document provides only general information about the patent process and my firm policies. Because this document summarizes complex laws and procedures, and because these laws and procedures sometimes change, I cannot guarantee that this information is complete and accurate. You should not act on this information without obtaining legal counsel from a registered patent attorney.

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• What is a patent?

A United States patent for an invention is a property right given to the inventor(s) by the U.S. federal government. A patent allows the inventor(s) to sue in civil court to exclude others from making, using, offering for sale, or selling the invention in the U.S., or from importing the invention into this country. A patent does NOT give the inventor(s) the right to make, use, sell, offer to sell, or import the invention. This distinction matters because one patented invention may include another patented invention belonging to a different inventor, who also has the same right to exclude. Rights to use such an "included" invention are usually licensed or purchased.

The U.S. grants utility patents, design patents, and plant patents. A utility patent may be granted for the invention or discovery of any new and useful process, machine,

manufactured article, or chemical composition. Utility patents may also be granted for new and useful improvements in existing processes, machines, articles, and compositions, provided that the improvements are not considered obvious extensions of existing technology. Patents are not granted for physical laws or mathematical algorithms, or for other things and processes already found in nature. The current term for a U.S. utility patent is twenty years from the date on which the patent's application was filed.

A design patent may be granted for a new and original ornamental design for a manufactured article, such as a hood ornament. While a utility patent protects the way an invention is used and works, a design patent protects the way it looks. It may be possible to obtain both utility and design patents for different aspects of the same invention. The current term for a U.S. design patent is fourteen years from the date on which the patent is granted.

A plant patent may be granted for the invention or discovery AND asexual reproduction of a distinct, new plant other than a tuber or a plant found in the wild. Means of asexual reproduction include cuttings, layering, budding, and grafting but do not include growth from a seed. The current term for a U.S. plant patent is twenty years from the date on which the patent's application was filed.

• Why obtain a patent?

A patent gives you a temporary monopoly on an invention. You can sue competitors who attempt to steal the benefits of your inspiration and hard work, forcing them to stop making, using, selling, or offering to sell your invention. Under some circumstances you can also collect substantial monetary damages.

For some inventors, a patent is the cornerstone of their own business enterprise. A patent gives them control over a portion or even the whole of their marketplace, providing them an opportunity to profit handsomely from their work. Smart investors often place great value on the intellectual property holdings of a company. A patent portfolio may greatly increase a company's stock price.

Other inventors prefer to sell or license the rights to their inventions. The exclusivity provided by a patent usually increases the sale price of the rights to an invention. If an inventor prefers to retain ownership of his or her invention, patent licensing provides a way to generate revenue from the invention without taking the risk inherent in starting a business.

• How do I know whether I should try to patent my invention?

You should get a patent if marketing your invention is likely to produce a net profit. To determine that, you need to do some preliminary market research. I do not

provide market research or marketing services, but I can point you to some useful resources.

The best resources will depend on the specific market. For example, if your invention is a device intended for consumers, visit outlets that might sell such a device. Check trade association publications for market sales figures and ads for similar products. Trade shows can be an excellent place to see what is available in a specific market. You can usually get into a trade show with a business card and a fee payment (check in advance, of course). A local library with a good business section may have publications targeted to your market, with trade show listings. You can also search online for trade show listings at http://www.tsnn.com/ or http://www.tsnn.com/ or http://www.tsnn.com/.

You may be able to obtain product information directly from manufacturers. In addition to helping you decide whether your invention is marketable, manufacturer information you obtain now may help you find a buyer or licensee later. However, when communicating with a manufacturer now, be careful not to disclose your invention. The time for that will come later. The local library may be helpful in finding manufacturers. Try business listings such as <u>http://www.thomasregister.com/</u> and <u>http://www.superpages.com/</u>. Try internet search engines like <u>http://www.google.com/</u>, <u>http://www.altavista.com/</u>, <u>http://www.hotbot.com/</u>, and <u>http://www.yahoo.com/</u>. Some manufacturers may have detailed product information on their websites. Others may require that you write for brochures or catalogs.

In each information resource, look for devices that attempt to fill the same consumer need as your device, even using very different designs. Also, of course, look for devices with similar designs. If you find any, see who makes them, how they compare with your device, how they are distributed, and how much they cost. Is the market crowded, competitive, with low profit margins? Do one or two distributors control all of the outlets? Can your device be made cheaply enough to compete? How is your device different from or similar to your competitor's device? Is yours lighter, smaller, faster, quieter, safer, easier to use or fix, better looking, or better quality? Does your device have as much consumer appeal (whatever that means in your market)? Take good notes: you will have to disclose some of this information if you apply for a patent.

If you do not find any similar inventions, is it because you are looking in the wrong place? Or because no one else has thought of your invention? Or because it would cost more than most people would pay? Ask yourself honestly: if this was someone else's invention and you saw it on a store shelf, would you pay for it? How much? Answers to these questions can help you determine whether it is at least possible for you to make money, and to get a rough idea of how much.

Because the research just described can take considerable time and effort, there are many invention marketing firms that claim to do market research for inventors. Some may offer a legitimate service, but in recent years this has been a fertile area for scam artists. A common scam is a "report" on the marketing prospects of your invention. For a large amount of money, you receive a very thick, impressive-looking "report." However,

most of the "report" is in reality vague, generic boilerplate text that could apply to almost any invention, with a bit of word-processing to personalize it. It is often filled with inflated (and sometimes fabricated) industry sales figures that promise great wealth in your future. And while it might be interesting and even useful to know that a billion dollars worth of widgets similar to yours were sold last year, the REAL questions are whether you can get YOUR widget to market and whether many people would buy YOUR widget if you did.

I am not suggesting that everyone who promises invention marketing assistance is a con artist, but I AM suggesting that you be very careful in hiring such assistance. The USPTO and the attorneys general of several states have shut down and prosecuted some of the worst offenders, but that just makes room for newcomers. You can obtain more information on invention fraud from <u>http://www.inventored.org/caution/list/</u>.

• How do I know whether my invention is patentable?

You may obtain a utility patent for your invention if it is new, useful, and not obvious when compared to inventions already in the public domain. You may obtain a design patent if your design is new and original when compared to designs known to the public. In patent prosecution for electrical and mechanical inventions, "useful" essentially means "not useless." The real question is whether your invention is novel (new) and nonobvious. Very roughly speaking, it is novel and non-obvious if the underlying idea is not already available to the public. A reference or object that makes some or all of your invention publicly available is called prior art. If there is sufficiently old prior art that completely describes or embodies your invention, your invention is not patentable.

Finding prior art usually requires a search. When you apply for a patent, the USPTO will do its own prior art search. The USPTO is pretty good at finding prior patents. However, prior art can include magazine and newspaper articles, journal articles, operating manuals, marketing brochures, websites, stuff in the bottom of somebody's toolbox, you name it...any reference or object that describes or embodies your invention. Unfortunately, patent examiners (the Patent Office employees who actually evaluate patent applications) are not given the resources to thoroughly search non-patent references, so some patents are issued even when undiscovered prior art exists.

No search can guarantee discovery of all prior art, but a thorough search before application preparation can increase the probability of finding art that the examiner might miss. A more thorough (and expensive) search buys you a higher level of assurance.

You can specify a ceiling for the cost of a search. To choose an appropriate cost ceiling, you need to balance the expense of a thorough pre-examination search against the loss you may suffer if you develop, patent, and market your invention, and your patent is later invalidated. That does not happen often, but it is risky to ignore the possibility. If a search does locate prior art that makes your invention unpatentable, it is better to find out early in the process before you invest more time and money.

Finding prior art may reduce your chances of obtaining a patent but strengthens any patent you do obtain. At the end of every utility patent you will see one or more claims. These claims effectively define how much of a given market a patent holder actually controls. If your patent has "broad" claims, you control more. If your patent has "narrow" claims, you control less. Patent attorneys and agents try to increase the value of your patent by drafting the broadest claims that the Patent Office will allow. The Patent Office will not allow any claim that could describe a device or method that is <u>already</u> described in prior art. The goal, then, is to write claims that are as broad as possible but avoid prior art. An attorney or agent can only avoid prior art that he or she knows about, so it is best to have a search done <u>before</u> filing an application.

A thorough search also protects your patent after it issues. The single most important reason for obtaining a patent is acquiring the right to sue someone to prevent them from making, using, selling, or offering to sell your invention. If you do sue someone for patent infringement, they will probably hire a patent attorney to defend them, and the patent attorney will almost certainly attack the validity of your patent. One of the most effective ways to do this is to find prior art that the examiner missed. Since an attorney defending an infringement suit can afford to do a far more thorough search than an examiner, a patent that relies entirely on an examiner's search is more vulnerable than a patent that relies also on a thorough pre-examination search.

You are not legally required to do a search, but for the reasons given above I strongly recommend that you do at least a basic search. If you are somewhat familiar with the patent system and your budget is tight, you can do your own searching with the USPTO patent search engine at <u>http://www.uspto.gov/patft/index.html</u>. A basic novelty search by a professional searcher will usually cost closer to \$800 and will produce better results. Whether or not you opt for a search, any relevant art that you know of <u>must</u> be disclosed to the Patent Office if you file a patent application. Failure to do so may invalidate any patent you obtain.

• How can I be sure that an attorney or agent will keep my invention confidential?

The professional responsibility rules of the United States Patent & Trademark Office and all state bars strictly prohibit attorneys from revealing client confidences like invention disclosure. To do so would likely mean being disbarred, sued, and prosecuted. If you have concerns about confidentiality you may call the USPTO's Office of Enrollment and Discipline at (571) 272-6081.

The patent searchers and technical artists I work with are experienced patent professionals with whom I have strict confidentiality agreements. Their livelihoods depend on their integrity.

• Can I tell anyone else about my invention?

The safest course of action is to tell no one about your invention except your patent attorney or agent until you have filed a patent application. Patents are awarded only for inventions that are not already known to the public, so revealing your invention to anyone except your patent counsel could prevent you from ever obtaining a patent. And, of course, another person who knows of your invention may file a patent application before you, and/or start producing knock-offs.

Disclosing your invention without having a patent application on file is a little like jumping off a cliff—you cannot change your mind once you have jumped, so you had better be sure that you will like the landing. At minimum, you would need to have written, signed, enforceable non-disclosure agreements with everyone who is NOT a patent attorney or agent.

Although a non-disclosure agreement may offer some protection, it is difficult to draft an agreement that covers every situation that may arise, and even more difficult to enforce such an agreement in the event of a dispute between the parties. You are in the strongest position if you have an application on file <u>before</u> you approach a potential buyer or licensee. If you are in a hurry, a provisional patent application (described below) may allow you to file sooner.

The U.S. gives you a one-year "grace period" between the date you disclose or sell your invention to the public and the date after which your invention can no longer be patented. However, most other countries offer NO grace period, so disclosure can instantly terminate potential patent rights in much of the world. You may not be thinking of international markets at this point, but if your invention does well in the marketplace, carelessness now may cost you dearly later.

Some inventors attempt to obtain financial backing or even sell their invention before filing a patent application. However, manufacturers are often wary of inventors who approach them with "an idea." A manufacturer who evaluates and rejects an inventor's idea runs the risk of later being sued by the inventor if the manufacturer markets anything that the inventor might imagine to have been derived from the idea, even if the manufacturer's product is basically different and/or was invented independently in-house. A company may therefore be unwilling to sign an agreement or evaluate an invention because it might then be hampered in its own development and marketing efforts. Consequently, some companies have a flat policy of refusing to even LOOK at independent submissions.

If you've defined your idea well enough to formulate patent claims, the manufacturer can at least look to the claims to determine what it can and cannot do. On the other hand, a manufacturer who signs an agreement that essentially forbids it from disclosing or using your invention without clearly defining your invention opens itself to liability. A manufacturer or investor will also take you much more seriously if you own a property right in your invention.

• When should I start the patenting process?

Once you have determined that your invention has market potential you should start the patenting process immediately. As mentioned above, one of the many obstacles to obtaining a patent is prior art. If anyone finds prior art that was available before you conceived your invention, you cannot obtain a patent. Also, someone else may be working on the same invention, and if they file first, you may be out of luck. It is therefore very important that you get the earliest possible filing date, or priority date, by filing as soon as you have completed an application.

• How do I start the patenting process?

Patent law is complex and the patenting process can take many different paths, but the starting point is always the inventor's description of the invention. You are the expert on your invention. Your most important contribution to your utility patent application is a complete, logically-organized, written description of your invention in all its possible forms. A design patent depends entirely upon the drawings for its disclosure, so for a design patent application you must provide high-quality drawings or photographs that completely depict your design.

A complete description of a utility invention allows me to write better claims, which give your invention better protection. Also, a complete description reduces the amount of time I have to spend drafting the application, which in turn reduces my fee. Although collecting and recording this information can be a tedious task, it is critical to the strength of your patent.

If you are still working on your utility invention, you should establish the earliest possible conception date for your invention by recording every day's work in a <u>bound</u> notebook. The pages should be glued and/or stitched to eliminate any later suggestion that you added or removed pages. Make detailed entries, so that a stranger reading the notebook would understand what part of your invention you had figured out on that day. Of course, you should keep the contents of the notebook secret from anyone who is not legally obligated to keep your invention confidential.

Have your notebook entries witnessed regularly and often. This is best done by a trusted person who understands your invention, would make a convincing witness in court, is not a family member or a co-inventor, and has signed an enforceable non-disclosure agreement. Or, you could have the entries notarized. Do NOT waste your time mailing your invention description to yourself, even by registered mail. Envelopes can be opened and resealed, making them unconvincing evidence of your date of conception.

The invention-recording method just described is intended to provide evidence of the date on which you conceived your invention. That date matters in the United States because U.S. patent law awards a patent to the first inventor to conceive an invention,

whereas the rest of the world awards a patent to the inventor who files the first application. Also, proof of an early conception date can eliminate what would otherwise be troublesome prior art. However, no recording method can replace a patent application, provide an effective filing date for a patent application, or in any way stop the "grace period" on disclosure from running out. Further, even if you can establish an early date of conception, you also have to prove that after conception you exercised diligence in reducing the invention to practice. The laws relating to date of conception, diligence, and reduction to practice are too complex to summarize here. If you are attempting to establish a priority date earlier than the filing date of a patent application, you need the advice of a registered patent practitioner.

When you have completed the important parts of your invention, so that it could actually be made and used, you should move directly to writing a description. This description will ideally be complete and well-organized. However, it is easy to get "writer's block" if you try to organize your ideas before you have really expressed them, so if you get stuck, just write down everything you know about your invention in any order and worry about continuity and organization later.

For a device or system description it often helps to start with the most central component (if there is one...if not, just pick one) and work your way out to every other component. Identify and separately describe every individual part of your invention. Write down everything you know about every part. If you can, make a sketch, label the parts in the sketch with numbers, and refer to each part by number in your description. Then describe how the parts connect to each other, how they function, and how the whole device functions. Describe the environment in which the device functions. For example, if your invention is an improved water bed mattress, describe the frame, headboard, etc.

If you can, explain how and why your device is different from and better than existing, similar devices. Include any experimental data and material specifications you may have. Be sure to describe the simplest, most stripped-down version of your device that will still produce a desirable result. Eliminate as many parts as you can. Also, be sure to describe the version that produces the best results, and any design variations that might be useful. Imagine how someone else might try to "design around" your patent, producing the result you want with a slightly different design. Also, try to imagine how someone might produce a different desirable result using your design.

If your invention is a method or a process, you should identify and separately describe every step in the process. Describe every order in which the steps could be performed. Describe what the process consumes and produces. Describe the environment in which the process is performed. If you can, sketch a process or flow diagram. Label the steps in the diagram with numbers and refer to each step by number in your description.

If you can, explain how and why your process is different from and better than existing, similar processes. Include any experimental data you may have. As with a device, be sure to describe the simplest, most stripped-down version of your process that

will still produce a desirable result. Eliminate as many steps as you can. Also, be sure to describe the version that produces the best results, and any variations that might be useful. Imagine how someone else might try to "design around" your patent, producing the result you want with a slightly different process. Also, try to imagine how someone might produce a different desirable result with your process.

Regardless of the nature of your invention, the description you submit with your patent application must "teach" your invention so thoroughly that a person with "ordinary skill" in that field of technology can make and use your invention just from reading your patent. The amount of knowledge that passes for "ordinary skill" varies with the technology and can be hard to define with precision. Also, remember that an ultimate purpose of your patent is to persuade a jury with no technical background that your invention really is new, useful, and non-obvious. So even if your patent counsel and the patent examiner understand your description, a jury that does <u>not</u> understand could invalidate your patent. For these reasons, it is best to err on the side of thoroughness in your description.

Once you have assembled the most complete description that you can reasonably provide, send your description to your patent counsel, who will then make any changes in the description that are necessary to strengthen your patent or comply with Patent Office rules. Your counsel will draft claims, assemble formal drawings and other required parts, and, on your instructions, file your application.

The Patent Office will normally publish your application eighteen months after filing. However, if you do not plan to apply for a patent outside the U.S. and do not wish to have your invention publicly disclosed before a patent issues, you may request at the time of filing that the Patent Office withhold publication. A non-publication request saves you a \$300 publication fee.

• What if I do not have any drawings of my invention?

Although drawings are not an absolute requirement for every patent, the Patent Office always requires them for design patents and usually requires them for mechanical and electrical inventions. If you are not able or do not wish to provide drawings, a professional draftsperson can create them. Drawings cost from about \$45 to over \$100 per sheet, depending on complexity.

A common practice for utility patent applications has been to file an accurate selfdrawn sketch with the application. The Patent Office notes that you have filed an informal drawing and will require a formal drawing before issuing a patent. However, as long as your sketch can be understood clearly and contains every element you claim, the examiner will consider your application. If and when the examiner indicates that you can obtain a patent, you can then pay for professional drawings. Note, however, that this practice may conflict with the recent change in U.S. patent law allowing the Patent Office to publish your application at eighteen months after filing. Since many patents take

longer than eighteen months to issue, you will have to supply formal drawings prior to eighteen-month publication if you wish to avoid having your informal drawings published with your application.

With design patent applications, the drawings ARE the disclosure, so any inadequacy in the drawings may result in a rejection that can be answered only by filing a new (and necessarily later) application. For this reason, it is crucial in a design patent application that you file high-quality drawings or photographs showing every element of your invention WITH your application.

• What is a provisional patent application?

A provisional application is available for a utility invention and is essentially a description of your invention that you put on record with the U.S. Patent Office to establish a priority date. Used properly, a provisional application can provide you with an earlier filing date than you could have obtained if you waited to complete a regular application. It also entitles you to put "Patent Pending" on your invention. It is less expensive than a regular application and does not require claims, an oath, or formal drawings. The current USPTO filing fee for a provisional application is \$100 for an independent inventor.

However, a provisional application by itself will not give you enforceable patent rights. The Patent Office does not examine a provisional application. Therefore, the fact that you have filed a provisional application in no way guarantees that you will be able to obtain a U.S. patent. It merely establishes an early priority date IF you file a regular application within a year of filing the provisional application. And, for the provisional application to be worth anything, your written description of your invention has to be just as complete as the description you would file with a regular application. Use the guidelines described above to write the description for a provisional application.

Provisional patent applications have sometimes been used by con artists to defraud inventors. A common scheme has been to advertise a U.S. patent application for around \$100. The con artist accepts whatever documents the inventor sends, without any review. The con artist then fills out a provisional application form, writes a check for the provisional application fee, and sends everything to the Patent Office, pocketing the difference between the application fee and the inventor's payment. If the description is not adequate to later support a regular patent application, the inventor has wasted the fee. Worse, the inventor may delay filing a regular application, believing that the provisional application provides protection, only to later find that the opportunity to obtain a patent has been irretrievably lost.

• How long will it take to get a patent?

Difficult to predict. For a utility patent, the whole process usually takes at least 12 months, more typically two years. However, patents for some areas of technology may take several years. Also, some applications meet with more resistance from the Patent Office, and require several years of arguments and continuations.

• How much will it cost?

As an example, an average preparation fee for a basic utility patent application might be about \$4500. In addition, the Patent Office's utility filing fee for a small entity is currently \$500. Drawings might cost \$200-400. A reasonably thorough search might cost \$750. Altogether this would total about \$6050 to finish and file. However, actual costs vary considerably. Preparation fees may vary between \$2000 and \$10,000 depending on the complexity of your invention and the quality of the description you provide. You can provide your own drawings, if they meet Patent Office standards, and you can skip the search (not recommended). If you do not plan to file a patent application outside the U.S., a non-publication request when you file will save you a \$300 publication fee later. A design patent usually costs between \$1000 and \$1500 as filed.

Once a patent application is filed the Patent Office responds with up to three office actions. Each office action may contain one or more rejections or objections. In order to overcome rejections and objections and to continue to seek a patent, the applicant must make a complete response to each office action. Because an office action response may range in complexity from a trivial correction to many pages of carefully-researched legal arguments with extensive claim amendments, the resulting fees may vary from a few hundred dollars to several thousand.

If the Patent Office allows your claims and decides to issue you a utility patent, you will have to pay an issue fee of \$700. Finally, once you have a patent, the Patent Office will charge you a maintenance fee of \$450 at 3.5 years, \$1,150 at 7.5 years, and \$1,900 at 11.5 years. If these payments are made in a timely manner, your utility patent will remain in effect for twenty years from the date your application was filed. No maintenance fees are required for a design patent.

• Once I have applied for a patent, how do I get my invention to market?

Your basic choices are to do it yourself, license to one or more manufacturers, or sell your rights completely. Doing it yourself means taking on all of the risk and responsibility of starting a manufacturing (and, perhaps, distribution) company. If all goes well, you make the most money this way, but if business is poor, you can lose your shirt. High risk, potentially high reward or severe loss. Do you want to be an entrepreneur as well as an inventor?

Many inventors prefer to license their inventions to existing manufacturers. Licensing allows you to retain ownership of your invention while others take the risks of manufacturing and marketing. Usually, you get a royalty on what they sell, although licensing deals can be configured in an almost endless number of ways. You do have to keep track of what your licensees owe you, which can be a chore or an additional expense. Licensing generally offers much lower risk with a somewhat smaller potential reward.

Complete sale of rights usually gets you more in the near term than licensing. If the invention does poorly in the market, you suffer no further loss. However, if the invention does well, you gain nothing more. Complete sale might or might not be the best long term deal. Some people choose this option simply because they want to get as much money out of the invention as is immediately possible, so they can move on to the next project without having to keep track of licensees.

Approach manufacturers you have identified as making products that would complement or compete with your product. Also, find companies that compete with those manufacturers. A competitor who does not have a product like yours may be aching for shot at that market segment.

Choosing a marketing path can first be a what-do-I-want-to-do-with-my-life question, then a business question, then a legal question. I will be glad to explore your options with you after your application is filed.

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