

PATENT

Definition of a patent

A patent is the grant of a property right to an inventor of an invention, issued by the Patent and Trademark Office. The term of a new patent in the US is 20 years from the date on which the application for the patent was filed in the United States (or, in special cases, from the date an earlier related application was filed) subject to the payment of maintenance fees. US patent grants are effective only within the US, US territories, and US possessions.

The right conferred by the patent grant is, in the language of the statute and of the grant itself, "the right to exclude others from making, using, offering for sale, or selling" the invention in the United States or "importing" the invention into the United States. What is granted is the right to exclude others from making, using, offering for sale, selling or importing the invention, not the right to make, use, offer for sale, sell or import the invention. Whether the patent owner himself can make, use, offer for sale, sell or import the invention is determined by the rights of others or other laws.

Protection under patent

A patent gives its owner (or patentee) a right to exclude others from making, using, offering for sale, selling or importing the invention.

The fact that a patent does not necessarily give the patent owner a right to make or use his own invention often comes as a surprise to many. In the real world, inventions don't usually exist by themselves, but are embodied in actual products. Multiple inventions are often embodied in a single product. For example, if a certain product or making thereof necessarily involves two inventions that are owned by two different patent owners, neither of the patent owners would have the right to make the product unless he receives a license from the other patent owner or designs a new product that does not use the other invention. In either case, each patent owner still has the right to exclude others from making or using his own invention.

That being the theory, the right of exclusion primarily serves as an instrument to benefit the patent owner, rather than a weapon to hurt others.

There are a number of protections a patent can bring to its owner:

(1) A patent prevents others from stealing your invention. This is a fundamental aspect of property rights. Regardless of whether and how you will use your invention, it is good to have an ability to stop others, if necessary, from using your invention without your consent and to your disadvantage. With a patent right, you may still decide to give it away to others if you want to, but no one can force you to do so.

(2) The right of exclusion conferred by a patent often in practice, although not in principle as mentioned above, translates to an exclusive right to make or use. For example, in a case where a new invention results in an entirely new product, the owner of the patent to the new invention practically has an exclusive right to make and sell the new product. More commonly, if a new invention results in an improvement to an existing product, and if the owner of the patent to the new invention already had the rights to make the existing product, which often is the case, he would now have an exclusive right to make a new product with improvement.

(3) In complex technological areas where cross-licensing is commonplace, patent rights are the currency to "purchase" other company's technologies.

(4) When sued by a competitor for patent infringement, having one's own patents is an effective "defensive bargaining" chip.

(5) Patents are also effective deterrents to competitors. Even in cases where a patent does not give its owner the right to make or use, the right of exclusion puts its competitors in a disadvantageous position, which often in turn translates to an advantage to the patent owner.

(6) Patents are a tangible measure of the return on the company's investment in research and development. This is a derived or secondary value of patents, but nevertheless an important one. For startup companies or individual inventors in particular, a patent portfolio can be the most effective way to demonstrate the strength and value of the company before a profitable product can be shown.

(7) Patents preserve the internally developed ideas and prevent them from leaving the company with the departure of certain employees. Often researchers or engineers develop new ideas that may not be closely related to their job duty. In such circumstances, the new ideas tend to be undisclosed unless the company encourages patent filings. When such employees leave the company, the undisclosed ideas will leave the company with them. In the worst cases, if the departed employee joins a competitor, the ideas may even be further developed and later become patent right by the competitor. Although there may be a question of genuine ownership of the patent in such conditions, undisclosed ideas are hard to trace.

(8) Even if the patent owner does not make a product, patent rights are valuable assets in their own rights because the patent owner may either sell the patent rights or license them to earn royalties. In fact, patented inventions have emerged as commercial products in their own, so much so that there are already creative companies whose core business is making and selling inventions.

The patent rights, particularly the right of exclusion can thus be extremely powerful and effective in the competitive commercial world, making patents the most important type of intellectual property. In technology industries, especially high-tech industries, the value of the patents owned by a company can be a large portion of the company's entire assets. For some companies, especially startup companies, an overwhelming majority of a company's assets may be in patents the company owns.

How to preserve patent rights

Seeking assistance of competent legal counsel, forming an effective patent strategy, and increasing IP awareness and intelligence are the keys. In addition, companies and individual inventors should be always aware of the following points and make a habit of practicing the best advice in order to preserve patent rights and avoid pitfalls:

(i) Keep secret of your invention. This may very well be the number one cause for losing patent rights. In many countries, the moment you make your invention public, you lose any rights to apply for a patent, unless a patent has already been applied for based on the invention. In the US, the situation is slightly different but still very strict. The US has a one-year grace period after making a public disclosure of an invention. Specifically, once the invention is disclosed, you must file an application for patent within one year, or you lose the right for patent protection. In order to preserve broader patent rights that include foreign countries as well as US, it is good practice not to rely on the one-year grace as the first choice. Instead, always file a patent application before making any public disclosure of an invention. If a public disclosure has already been made, a US patent application must be filed within the one-year period.

Exactly what constitutes a public disclosure of the invention is a rather complicated legal question, but it is advisable to always remain on a safer side by not telling others anything about the invention. Committing a public disclosure doesn't require you go in an open space to make a loud announcement to everyone about the invention. Under certain circumstances, a disclosure to just a single person could constitute a public disclosure. The more you tell others about the invention, the greater danger there is. As a rule of thumb, if what you have divulged is enough for someone of ordinary skill in the art (the technical field of the invention) to readily understand your invention,

you have made a disclosure of the invention. Even if you haven't disclosed the entire invention, you may have lost a part of the invention to the extent that it has been disclosed.

A discussion about an invention with someone under explicit or implied secrecy is not a public disclosure and will not put the invention in jeopardy. For example, an inventor can discuss with a co-worker about an invention without fearing that a public disclosure has been made, as long as the discussion is understood to be work related and confidential. If an outsider (even if it is a relative of yours) is present, it is absolutely necessary to either not discuss about the invention or, if you have to discuss about it, make it explicit (in writing if possible) that the discussion is under secrecy.

(ii) Don't you demonstrate or use your invention in public before patent filed. Like public disclosure, any public use of an invention may also trigger the one-year period. Although experimental use is not considered public use in US patent law, caution is always advised.

(iii) Don't sell your invention before patent file or agreement reached. Like public disclosure and public use, a commercial sale or an offer for commercial sale of the invention may also trigger the one-year grace period. What constitutes a commercial sale or an offer for commercial sale is again a quite complicated legal question (to an extent that it required a recent US Supreme Court case to decide this question). This article does not attempt to explain this issue in detail. It is however important to remember that if you have made a definite offer to sell a product that embodies an invention; the on-sale bar is triggered even if you did not tell the buyer the nature of the invention. Many people who have a rudimentary understanding of patent law often reason that if the sale activities do not constitute a public disclosure of the invention, you would be safe. This is incorrect. The on-sale bar is not an example of public disclosure bar. Rather, it is a separate legal bar that is used for preventing inventors from unjustifiably exploiting his invention beyond what the patent terms may permit.

Although a gray area, under certain circumstances even an offer for licensing the invention or a discussion with a potential investor to attract investment may trigger the on-sale bar. It is possible to have licensing or investment related discussions or negotiations with another party without triggering the on-sale bar, but extreme caution must be taken before you step into this uncertain terrain. If you have to do so, it is important that you consult with an attorney versed in patent law.

(iv) Keep clear written records of inventions. Written records make the best evidence for proving an invention date. If you feel the idea is important enough, sign the record with presence of a witness. (The witness should be under either implied or explicit secrecy agreement.) In the fast pace of today's invention making, it is often a matter of a few months or even days to decide who has made an invention first. In the US, although the person who files a patent application first has the advantage of a prima facie invention date, it is ultimately a question of who has made the invention first. Whenever a dispute arises, the one who has a better proof of an earlier invention date prevails.

(v) File patent applications as early as possible. If unsure whether it is worth the effort or money to file a regular patent application, file a provisional patent application, which has a minimal cost. A provisional patent application, although does not confer any patent rights in itself, establishes a priority date and gives one year for the applicant to decide whether a none-provisional (i.e., regular) patent application should be pursued eventually.

Difference between an invention and a patent

A patent is not the same as a "certified invention."

Precisely understanding the difference between an invention and a patent is not merely a matter of nomenclature. It relates to the very foundation of the legal protection of intellectual property. A misunderstanding in this respect may lead to a grossly and strategically wrong policy of either a company or an individual for patent protection.

The confusion between an invention and a patent is common. Many loosely equate the two. An inventor who receives a patent on his invention tends to automatically equal the patent to the invention. After all, the title says exactly what he has invented; the abstract summarizes what he has invented; and the specification even provides details on what he has invented. But unbeknownst to the patentee, what he got from an badly prepared patent may seriously mismatch what he has invented.

Many also misunderstand the process from an invention to a patent. Many mistakenly think that getting a patent is to get an invention "certified" by the government, and that a patent is like a "certified invention." In other words, if you ask someone to briefly describe what he thinks is involved in the process of getting a patent, the likely answer is like this: an inventor makes an invention and reports his discovery to the government, which, if also likes the invention, in turn grants a certificate called "patent" to the inventor. This is perhaps the biggest misunderstanding of the nature of a patent and what a patent does. This is the primary reason why many people persistently believe what a patent attorney does is to beautify the inventor's "invention report" so that the government likes it better and becomes more inclined to grant a certificate (i.e., a patent). These people are probably not very far from having a feeling that there may be some sort of a "conspiracy" between the government and patent lawyers to warrant that somehow the government and the lawyer can both get paid.

A patent is not a "certified invention."

First, a patent is not a certificate of any kind. A patent carries a presumption of validity but is always subject to challenge. A patent owner's confidence in his patent does not go beyond the actual quality of the patent, and the quality is at least partially determined by the professional who prepared the patent. Just because one has received a patent on a certain invention doesn't mean that he is guaranteed a piece of property. A poorly prepared patent may be found invalid, and in such a case the inventor would have given to the public everything that's described in the patent but received nothing in return.

Second, even if a patent did "certify" for something, that "something" would still not necessarily be the same as the "invention" the inventor has in his mind. An inadequately prepared patent might be valid but only protect a part of the invention and fail to protect the whole invention.

The difference between an invention and a patent may be illustrated by an analogy of a "land of ideas." Suppose there is a rule that allows someone who has discovered a piece of land (a territory) to own the piece if he can build a fence around the territory. In this analogy, an invention would be a piece of land (a territory), while a patent would be the fence built around the territory. With this analogy, it is readily seen that an invention cannot protect itself and does not in itself serve as an instrument of protection of any sort. An invention is protected by a corresponding patent. The above being a starting point, we will further discuss why the quality of a patent matters and why who prepares a patent matters.

Difference made by the quality of a patent

The patent quality matters because a patent in essence is an agreement for a "deal" bargained for between the patent owner and the government, and the quality of the patent determines how favorable the deal is for the patent owner.

As discussed previously, a patent is not a mere "permit" or a "certificate" issued to the patent applicant by the government. The difference between a bargained-for agreement and a permit or a certificate is critical. If you are applying for a certificate from the government for certain accomplishment of yours, it probably matters little who applies for the certificate for you and how the certificate is issued, because the certificate is a mere seal of the accomplishment and, once issued, carries its full force of what it does. But a patent is not a certificate of invention. A patent is a bargained-for agreement between the patent applicant and the government. Accordingly, the goal of a patent applicant is to strike the most favorable deal possible, rather than simply have a piece of paper that is entitled "patent."

The problem is compounded with patents in that frequently the patent owner can't determine, or doesn't have time to determine what kind of a deal he has got. (To a large extent, the person who prepared the patent is in a much better position to know the answer to that question.) This creates a situation in which the patent owners tend to seriously misunderstand and significantly underestimate the importance of the quality of a patent based on a superficial knowledge. As said, one of the reasons is that a patent often creates a strong illusion to let a patent owner automatically, and mistakenly, equal the patent to the invention.

Proper appreciation of the quality of patents thus takes an educated and a sophisticated patent owner. An ultimate test for the quality of a patent is litigation in which infringement disputes arise and are settled contentiously, often in a court through a trial. Those who have some experience or knowledge of patent litigation know that the quality of a patent is critically important. This is not only true in the sense that the quality of the underlying invention matters, but also in the sense that for a given invention, the quality of the patent determines the scope of the protection. Unfortunately, many patent owners learn the lesson the hard way - through litigation, often when it is too late.

With an understanding of the difference between an invention and a patent, it is easier to appreciate the importance of the quality of a patent. In our land-and-fence analogy, the quality of a patent matters because the patent fence must satisfy the following conditions in order to be valid and of any value:

- (1) The patent fence must be built to meet the "construction codes" imposed by the law in order to be valid; and
- (2) The patent fence must fit the land to confer proper scope of protection.

Simply put, because an invention is the piece of "land" while a patent is a "fence" that protects the land, one may have discovered a great piece of land but fail to protect it. You might say there is nothing new in that statement because if one does not apply for a patent, of course the invention is not going to be protected. But that is not the point that is being demonstrated here. The point here is that one may have made a great invention and obtained a patent for it but still fail to receive proper patent protection because of the poor quality of the patent that was applied for. To understand the above point, consider what could make the quality of a patent inadequate. First, a patent may be of inadequate quality if it fails to meet the "construction codes" of the government for the "patent fence." Such a patent may be found invalid when under attack. An invalid patent is much worse than just being worthless, much worse than just a waste of money, and worse than a waste of an invention. Receiving a patent that ends up being invalidated is much like spending a huge amount of money to assist your competitors to take advantage of you. This is so because an invalid patent may be invalid as a legal document and thus useless to its owner, it is nevertheless always a valid publication, and the only thing such a publication does is to teach your competitors how to practice your invention to your disadvantage (something that wouldn't happen had you not applied for that patent in the first place).

Second, a patent may also be of inadequate quality if the "fence" does not fit the "land" and therefore does not confer proper protection. That the patent "fence" must fit the invention "land" is very basic requirement in patent law. If the fence is too big, the government is not going to allow it, because the inventor is asking for more than what he has discovered and is entitled to. Even if such a fence is allowed at first, it is always subject to challenge, and can be brought down any time by someone else who can convincingly prove that the fence does not fit. If the fence is too small, it wouldn't provide enough protection. A fence that is too small is not a problem for the government, but the inventor (or the real owner of the patent) is the one stands to lose. This is further discussed in the following section.

Furthermore, according to the patent law, which are the rules for "patent fence," once the fence is built there are only limited ways and within a limited period of time to amend it. For instance, if the fence was too big in first place and was challenged later, with some exceptions the patent owner

may not be able to rebuild it to retrofit the invention. In such a case, if the fence is brought down, the patent owner can't just say "all right, I'll back up a bit and take less than what I had asked for." Where there is no chance for renegotiation, the patent owner loses all protection of his invention.

Difference between a strong patent and a weak patent

A strong patent is more than just a strong invention. Improperly prepared and prosecuted, a wonderful invention could result in a weak or useless patent. Because a patent is a "deal" bargained for between the patent owner and the government, a strong patent is a superb bargain for the patent owner struck between the government and the patent owner. A weak patent is a lousy bargain for the patent owner.

A strong patent makes it hard for the competitor to get over or design around the invented technology without licensing the patent, while a weak patent leaves doors open for others to copy the technology without infringing. In a worst case, a weak patent may essentially do nothing but teaching others how to copy the technology without infringing.

It must be made clear that a premise for a strong patent is firstly a strong invention. This article therefore describes the quality of a patent in a relative sense only. No one can craft a strong patent out of a weak invention. It is rightly so, for otherwise the patent law may be unjust to the public. As a Chinese saying goes, a skilled wife can't make bread without flour. In our "land and fence" analogy, even a quality fence does not offer meaningful protection without a good piece of land to be protected in the first place.

A strong invention is characterized by both the scope of the invention and the strategic position of the invention on the technical map of making a product. But a strong invention does not necessarily result in a strong patent. In the land-and-fence analogy, a good piece of land may end up with little protection if the fence does not measure up to it.

Sometimes a patent owner might follow this rationale to justify using professional services of lesser quality and lower costs: Sure it would be nice to be able to protect everything, but it may be a good cheap option to get just a part of the "land" protected. It's not all, but at least it's a piece of that, and likely even most of that. This is where our "land and fence" analogy lacks and needs to be further expanded. In all practical sense, the patent "fence" is really not to protect the land itself but to protect a "treasure" hidden either in the land or in a land on another side of the reach. This is because as far as a patent right is concerned, it is really not a right for the patent owner to enjoy the land itself, but instead a right to exclude others from passing through the land. Speaking in commercial terms, the "treasure" is a product. A partial fence or broken fence is often no fence at all because although it may protect part of the land, it leaves open a certain route for an intruder (that is, a competitor) to access the "treasure," which is the only thing that really matters in the end. For the intruder, it matters relatively little what particular route is available as long as it provides him an access to the treasure. For the land owner, once the treasure becomes accessible to others, the protection loses its meaning even though he still possesses a part of the land.

The difference between a strong patent and a weak patent is therefore far more critical than a proportional and quantitative difference. When a patent becomes the subject of an infringement lawsuit, the difference between a good patent and a bad patent is whether the patent owner takes all or loses all. It is a peculiar nature of patent lawsuits that the outcome of the entire case, no matter how much money is at stake, is typically determined on certain subtle details in the patent description and claim language. The alleged infringer either infringes the patent claim or not, and accordingly the patent owner is either awarded all the damages or nothing. The jury or judge is not going to afford 90% of the damages to the patent owner because the patent claim covers 90% of the alleged infringer's product.