

Patents – A legal form of protection for Intellectual Property

Intellectual property is imagination made real. It is an asset just like your home, your car, or your bank account. Just like other kinds of property, intellectual property needs to be protected from theft and misuse. ***Patents are a form of legal protection of intellectual property that provide exclusive rights to make, use, import, sell and offer*** for sale the invention for ***up to 20 years***.

✦ What is patentable

An invention is patentable if it meets three main standards in most legal jurisdictions.

The main elements required for patenting are that the invention be

- Novel

In the context of a patent application, an invention is considered novel when it is different from all previous inventions (called "prior art") in one or more of its constituent elements. When deciding whether an invention is novel, the PTO will consider all prior art that existed as of the date the inventor files a patent application on the invention. If prior art is uncovered, the invention may still qualify for a patent if the inventor can show that he or she conceived of the invention before the prior art existed and was diligent in building and testing the invention or filing a patent application on it.

An invention will flunk the novelty test if it was described in a published document or put to public use more than one year prior to the date the patent application was filed. This is known as the one-year rule.

- Non-obvious/involve an inventive step

To qualify for a patent, an invention must be non-obvious as well as novel. An invention is considered non-obvious if someone who is skilled in the particular field of the invention would view it as an unexpected or surprising development.

Knowing whether an invention will be considered non-obvious by the PTO is difficult because it is such a subjective exercise -- what one patent examiner considers surprising, another may not. In addition, the examiner will usually be asked to make the non-obviousness determination well after the date of the invention, because of delays inherent in the patent process. The danger of this type of retroactive assessment is that the examiner may unconsciously be affected by the intervening technical improvements. To avoid this, the examiner generally relies only on the prior-art references (documents describing previous inventions) that existed as of the date of invention

- Usefulness/susceptible to industrial application

An invention is useful if it provides some practical benefit, or helps people complete real world tasks. However, patents may be granted for inventions even if their use is merely humorous, such as a musical condom or a motorized spaghetti fork.

To fulfill this requirement, the invention must work -- at least in theory. Thus, a new approach to manufacturing superconducting materials may qualify for a patent if it has a sound theoretical basis -- even if it hasn't yet been shown to work in practice. But a new drug that has no theoretical basis and which has not yet been tested will not qualify for a patent. Only a utility patent requires an invention to be useful; to qualify for a design or plant patent, the other two types of patents obtained in the U.S., the inventor need not show utility.

✦ What is **not** patentable?

You can't patent a law of nature, such as a mathematical theorem, or a physical phenomenon or property, even if you are the first to discover or articulate it.

An idea, a discovery or an observation is NOT PATENTABLE by itself e.g., an explanation of what is happening in a particular chemical pathway is not enough. Although an invention may be founded on a discovery, the discovery itself is not patentable. A discovery may lead to a patentable invention if the discovery is accompanied by a description of how the discovery is used to form an invention that has a perceivable industrial applicability. The employment of the discovery that forms the basis of the invention must be clearly described. This is usually done in the examples section of the patent application. Similar considerations apply to ideas for inventions in as much as the idea has to be supported in the patent application by work that shows that the idea has a technical rather than merely theoretical basis. Patent Offices exclude mere ideas, discoveries and various other items from patentability.

Nor may patents be granted for inventions whose exploitation would be contrary to "ordre public" or morality (obvious examples being land-mines or letter-bombs).

Under European law The list of non-patentable subject-matter also includes methods of medical treatment or diagnosis, and new plant or animal varieties.

✦ Types of patents

○ utility patent

Issued for the invention of a new and useful process, machine, manufacture, or composition of matter, or a new and useful improvement thereof, it generally permits its owner to exclude others from making, using, or selling the invention for a period of up to twenty years from the date of patent application filing ++, subject to the payment of maintenance fees. Approximately 90% of the patent documents issued by the PTO in recent years have been utility patents, also referred to as "patents for invention."

○ design patent

Issued for a new, original, and ornamental design for an article of manufacture, it permits its owner to exclude others from making, using, or selling the design for a period of fourteen years from the date of patent grant. Design patents are not subject to the payment of maintenance fees.

○ plant patent

Issued for a new and distinct, invented or discovered **asexually** reproduced plant including cultivated sports, mutants, hybrids, and newly found seedlings, other than a tuber propagated plant or a plant found in an uncultivated state, it permits its owner to exclude others from making, using, or selling the plant for a period of up to twenty years from the date of patent application filing ++. Plant patents are not subject to the payment of maintenance fees.

- Reissue Patent

Issued to correct an error in an already issued utility, design, or plant patent, it does not affect the period of protection offered by the original patent.

- Statutory Invention Registration

- A statutory invention registration is not a patent. It has the defensive attributes of a patent but does not have the enforceable attributes of a patent. In other words, a person occasionally invents something solely for personal use (not for production or sale) and does not want to go through the effort and expense of obtaining a patent on the invention. At the same time, the inventor wants to prevent someone else from later obtaining a patent on a like invention. In that situation, the inventor can register a statutory invention and have it published. Once published, it cannot be claimed by another person.