

The History, Purpose and Benefits of Patents

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I. History.

Britain has the longest known continuous patent system. British patents can be traced to the 15th Century, when the British Crown began granting exclusive rights, called "Letters Patent," to certain manufacturers and traders. The Crown granted monopolies for the manufacture and sale of products such as soap, leather, glass, knives, starch, iron and paper. These "patents" were literally letters marked with the seal of the Crown and they granted an exclusive right to make and sell the item described in the letter for the period of time set forth in the letter. There was no novelty, non-obviousness, or other patentability requirement as there is today. Patents were often granted for inventions that were not new, usually to friends of the Crown or for the purpose of collecting revenues without direct taxation of British citizens. One of the earliest British patents, granted by King Henry VI to John of Utynam in 1449, was a 20-year monopoly for a method of making stained glass.

In 1624 the Statute of Monopolies was introduced, which established a patent term of 14 years (the duration of two seven-year British craft apprentice terms) to the "true and first inventor" of inventions that were *introduced* into Great Britain. Therefore, products known elsewhere, but that were introduced into Great Britain, could be patented. There was still no novelty or non-obviousness requirement. During the late 1700s patent applications were required to include a specification for the principles of operation of the invention. Patents began to be viewed as an intellectual property right, rather than a monopoly for friends of the Crown, and over time the concepts of novelty and non-obviousness were adopted.

The United States

"The patent system added the fuel of interest to the fire of genius."

Abraham Lincoln

Before the U.S. Constitution was adopted, there were patent laws in some states, such as Massachusetts (which granted an exclusive right for ten years for a process of making salt), and South Carolina, which passed the first patent statute in 1784. The British approach was followed in the American Constitution, which sets forth the basis for patent and copyright law in the United States. Article 1, Section 8, clause 8 of the Constitution, states: "Congress shall have the power . . . to promote the progress of science and useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries." The first Patent Act of 1790, entitled "An Act to Promote the Progress of Useful Arts," granted authority to Secretary of State, the Secretary of War, or the Attorney General, to grant patents on inventions for a term of up to fourteen years. Authorization by two of the three was required. Non-US citizens could not obtain U.S. patents.

Between the first Patent Act of 1790 and the second in 1793, only 55 patents were granted. The 1793 Act was drafted mainly by Thomas Jefferson, who at the time was Secretary of State. This Act included a definition of patentable subject matter and simplified the examination process.

The third Patent Act of 1836 created the Patent Office and a Commissioner of Patents to oversee the Office. It also permitted non-U.S. citizens to obtain U.S. patents. After this Act was granted, the current patent numbering system was instituted. U.S. Patent No. 1 was granted to U.S. Senator John Ruggles for a wheel traction system for locomotives.

In 1861, the term for utility patents was extended from 14 to 17 years. The 17-year period was based on the colonial apprentice-master relationship. In colonial America, the custom (adopted from Britain) was that an apprentice worked for a master for 7 years before he was qualified as a tradesman. It was also custom that the apprentice would

not practice a secret learned from the master for two apprenticeship periods (i.e., 7 + 7, or 14 years). When Congress adopted a 17-year patent term, it considered that the secret could have been developed at the beginning or end of the 14-year period, so the patent term was suggested to be 17½ years. The half year was then dropped for convenience. So, the newly-adopted patent term was two apprenticeship terms plus half the length of the apprenticeship itself, minus half a year, or 17 years from date of the *issuance* of the patent. This term remained in place until the General Agreement on Tariffs and Trade (“GATT”) in 1995 changed it to 20 years from the *priority filing date* of the patent application, which brought the United States into conformance with many other industrial nations.

Until 1880, a miniature model of each invention had to be submitted to the United States Patent Office. Some models are still in existence and are preserved at the Library of Congress in Washington, D.C.

The 1952 Patent Act provided the structure for modern patent law. In addition to the invention having to be useful and novel, it added the “non-obviousness” requirement. In 1982, the Court of Appeals for the Federal Circuit was established, which hears patent law litigation appeals from all federal district courts in order to create a consistent body of law governing patents.

It was originally believed that only 1,000 inventions would ever be patented. In 1899 the Commissioner of the US Patent Office suggested closing the Office because everything that could be discovered already had been.

“Everything that can be invented has been invented.”

Charles H. Duell, U.S. Patent Office Commissioner, 1899

Was Commissioner Duell wrong? He made his decree before microwave technology, radio, transistors, integrated circuits, computers, software, cell phones, refrigeration, air travel, space travel, the internet, and a host of pharmaceutical, medical, and numerous other inventions were developed. In 2013 and 2014, over 600,000 patent applications were filed annually in the United States alone.

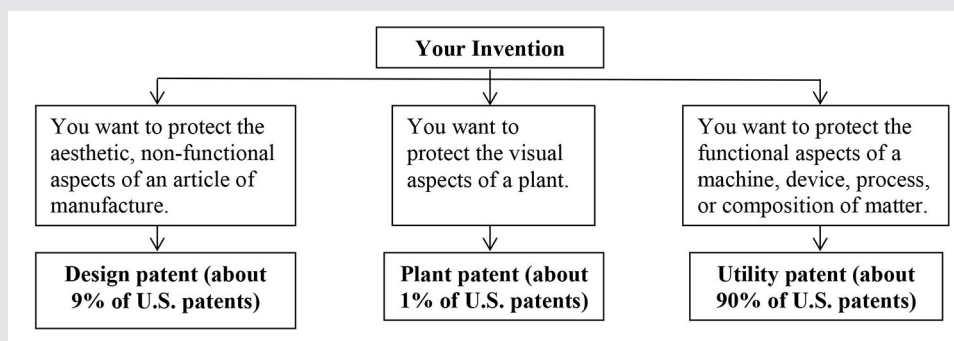
Today, all that is required to obtain a patent is to describe your invention in writing (and using figures if necessary to understand the invention), in sufficient detail to teach others how to make and use it. That paper patent can be worth millions, tens of millions, or hundreds of millions of dollars.

II. The Purpose and Benefits of Patents.

A patent is a document issued by the federal government that grants the right to exclude others from making, using, selling, offering to sell, or importing into the United States the invention it *claims*. The purpose of patents is to incentivize investment in inventions by providing inventors an exclusive right to their invention for a limited period. In exchange, the inventor must publicly disclose the invention so others can improve upon it and/or practice it once the patent has expired. The term for utility patents and plant patents is twenty years from the priority filing date of the application that matured into the patent. Design patents have a term of 14 years from the date of issuance.

A patent provides many benefits, including: (1) if you choose to manufacture the invention (or have it manufactured), a patent provides protection and time to establish manufacturing, marketing and sales channels; (2) you can potentially charge premium prices within the technology sector protected by the patent; (3) you have a tangible asset to attract business partners, investors and potential buyers to your product/service or company; (4) you can generate income by simply licensing or selling your patent; and (5) without patent protection, there is no legal barrier to entry and others are free to copy your invention.

The Main Types of Patents: Design, Plant, and Utility



III. Design Patents and Plant Patents.

Design patents cover a new, original, and ornamental design embodied in or applied to an article of manufacture. Plant patents cover new and distinct, invented or discovered, asexually reproduced plants, including cultivated sports, mutants, hybrids, and newly found seedlings, other than a tuber propagated plant or a plant found in an uncultivated state.

IV. Utility Patents, Which Usually Generate the Most Value.

The remainder of this article addresses utility patents. If practical for your invention, utility patents are usually the strongest and most valuable type of IP protection. Business buyers and investors often place a high premium on utility patents that are properly prepared to provide broad protection.

Utility patents cover the functional, or utilitarian, aspects of a new and useful process, machine, device, or composition of matter, or a new and useful improvement thereof. Examples include paints, games, manufacturing methods, machines, pumps, computer components, lasers, exercise equipment, batteries, pens, vacuum cleaners, mixtures of soil and plant parts, pharmaceuticals, fire arms, electrical connectors, medical devices, plants, shoes, daytime planners, tooth brushes, and packaging. Things that cannot be patented include those that (1) were not invented, even though you may be the first to discover them, such as naturally-occurring substances, scientific principles, or algorithms with no application to obtain a practical result; (2) are excluded by law, such as tax preparation methods and certain types of methods of doing business; and (3) are not considered to be new and non-obviousness, because of pre-existing products or methods.

Some countries have more limited patentable subject matter than the United States and do not permit, for example, patents for (1) many software-implemented methods, (2) surgical procedures, or (3) methods of playing games (although a physical game structure can be patented).

The Standards for Obtaining a Utility Patent

There are three basic standards for obtaining a utility patent: (1) your concept must be an *invention*, which means that you can describe it in sufficient detail to teach others how to make and use it; (2) your invention falls within the legal scope of patentable subject matter; and (3) your invention is both (a) novel, which means that no prior product or method is exactly like it, and (b) nonobvious, which means that a hypothetical person with knowledge of all known products and methods that predate your invention, and faced with the same problem solved by your invention, would *not* consider your invention to be an obvious solution to the problem. Non-obviousness is a subjective and complex standard. Attorneys and inventors sometimes spend years and tens of thousands of dollars arguing with the USPTO over whether an invention is non-obviousness and patentable.

What Often Prevents People From Obtaining a Patent?

Talking about your invention or otherwise disclosing it without a confidentiality (or non-disclosure agreement (NDA)) is often the death knell for patent protection, at least in most of the world. Any disclosure made without at least an understanding of confidentiality (for example, between you and a business partner), or most preferably, a written and signed NDA, would be considered a public disclosure. At least prior to filing a patent application protecting the invention, it is always safer to execute a written NDA with each person to whom your invention is disclosed.

It is Usually Best to File a Patent Application Before Prototyping

A working prototype of your invention is not required to apply for or obtain a patent. In fact, it is usually better to file a patent application *before* building a prototype, because if a prototype is built, the details of the prototype's structure and method of manufacture may have to be disclosed in your U.S. patent application. This is called the "best mode" requirement. If you file a patent application *prior* to building a prototype, details of the invention developed after filing your patent application need not be disclosed, and could instead possibly be protected as a trade secret. You could then potentially have patent protection covering the broad aspects of your invention, *and* trade secret protection for later-developed details of the commercial embodiment.

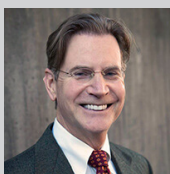
Utility Patent Value is Determined by the Patent's Size and Location, Much Like a Parcel of Land

A patent creates a barrier preventing legal entry into the technology sector defined by the patent's claims. The patent owner has the right to operate exclusively within that sector and to stop any trespass (called "patent infringement") into it. This means the patent owner can exclude others from making, using, selling, offering to sell, or importing products or services covered by the patent. The value of a patent is based largely on the same factors that determine the value of a parcel of land, namely its size and location. For a parcel of land, its size is determined by physical boundaries and its location is determined by factors such as proximity to shopping, its school district, or the view from the backyard. The "size" of a patent, which is also called the "scope" or "breadth" of a patent, is determined by the words used in the patent, particularly in the claims, to describe the invention. A patent's "location" is the inherent market value of the invention being protected. As with a parcel of land, the larger the "size" of a patent and the more desirable its "location," the more valuable the patent, and the greater the potential revenue from monetizing the patent.

The patent owner may protect the patented invention regardless of whether the owner makes or sells it. ***That is the power of a patent - its mere existence can monopolize a technology sector.*** You can generate profits by licensing, selling, or enforcing rights in the patent without ever providing products or services, or dealing with vendors, customers, employees, or regulatory agencies.

Conclusion

A patent is a temporary, government-granted, exclusive right to an invention, and if properly prepared to capture broad scope, can be extremely valuable. Before filing a patent application, keep your invention a secret, and execute an NDA with anyone to whom it is disclosed. And, if practical, file your application before building a prototype.



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David Rogers practices patent, trademark, trade secret and unfair competition law, including litigation, patent and trademark preparation and prosecution; trademark oppositions, trademark cancellations and domain name disputes; and preparing manufacturing, consulting and technology contracts.