NAME: AGIAMAH BENJAMIN

MATRIC NO: 17/ENG05/005

SIGNATURE: O\_D

DEPARTMENT: MEACHATRONICS ENGINEERING

WHAT IS A **PATENT**?

1. A **patent** is a form of [intellectual property](https://en.wikipedia.org/wiki/Intellectual_property) that gives the owner the legal right to exclude others from making, using, selling and importing an [invention](https://en.wikipedia.org/wiki/Invention) for a limited period of years, in exchange for publishing an [enabling public disclosure](https://en.wikipedia.org/wiki/Sufficiency_of_disclosure) of the invention. In most countries patent rights fall under [civil law](https://en.wikipedia.org/wiki/Private_law) and the patent holder needs to sue someone [infringing the patent](https://en.wikipedia.org/wiki/Patent_infringement) in order to enforce his or her rights. In some [industries](https://en.wikipedia.org/wiki/Outline_of_industry#Major_industries) patents are an essential form of [competitive advantage](https://en.wikipedia.org/wiki/Competitive_advantage); in others they are irrelevant.

There are three different kinds of patents: utility patents, design patents and plant patents.

1. [*Utility Patents*](https://smallbusiness.findlaw.com/intellectual-property/utility-patents-overview.html)*:* The most common type of patent, these are granted to new machines, chemicals, and processes.
2. [*Design Patents*](https://smallbusiness.findlaw.com/intellectual-property/design-patents-overview.html)*:* Granted to protect the unique appearance or design of manufactured objects, such as the surface ornamentation or overall design of the object.
3. [*Plant Patents*](https://smallbusiness.findlaw.com/intellectual-property/plant-patents-overview.html)*:* Granted for the invention and asexual reproduction of new and distinct plant varieties, including hybrids (asexual reproduction means the plant is reproduced by means other than from seeds, such as by grafting or rooting of cuttings).

**Determining What is Patentable: The Basics**

For an invention to [qualify for a patent](https://smallbusiness.findlaw.com/intellectual-property/what-is-patentable.html), it must be both ["novel" and "non-obvious."](https://smallbusiness.findlaw.com/intellectual-property/idea-must-be-useful-novel-or-non-obvious.html) An invention is novel if it is different from other similar inventions in one or more of its parts. It also must not have been publicly used, sold, or patented by another inventor within a year of the date the patent application was filed. This rule reflects the public policy favoring quick disclosure of technological progress. An invention is non-obvious if someone who is skilled in the field of the invention would consider the invention an unexpected or surprising development.

Naturally occurring substances and laws of nature, even if they are newly discovered, cannot be patented. Abstract principles, fundamental truths, calculation methods, and mathematical formulas also are not patentable. A process that uses such a formula or method can be patented, however. For example, a patent has been granted for an industrial process for molding rubber articles that depends upon a mathematical equation and involves the use of a computer program.

A patent cannot be obtained for a mere idea or suggestion. The inventor must have figured out the concrete means of implementing his or her ideas in order to get a patent. A patent also will not be granted for an invention with no legal purpose or for an unsafe drug.

**Usefulness**

An inventor applying for a utility patent must prove that the invention is [useful](https://smallbusiness.findlaw.com/intellectual-property/patent-eligibility-requirements-faq.html). The invention must have some beneficial use and must be operable. A machine that will not operate to perform its intended purpose would not be called useful, and therefore would not be granted a patent. A useful invention may qualify for a utility patent only if it falls into one of five categories: a process, a machine, a manufacture, a composition of matter, or an improvement of one of these.

A *process* is a method of treating material to produce a specific physical change in the character or quality of the material, generally an industrial or technical process. A *machine* is a device that uses energy to get work done. The term *manufacture* refers to a process in which an article is made by the art or industry of people. A *composition of matter* may include a mixture of ingredients or a new chemical compound. An *improvement* is any addition to or alteration of a known process, machine, manufacture, or composition.

**Examples of Patentable Items**

These categories include practically everything made by humans and the processes for making the products. Examples of [things that are patentable](https://smallbusiness.findlaw.com/intellectual-property/is-your-invention-patentable.html) include:

* Computer software and hardware;
* Chemical formulas and processes;
* Genetically engineered bacteria, plants, and animals;
* Drugs;
* Medical devices;
* Furniture design;
* Jewelry;
* Fabrics and fabric design; and
* Musical instruments.

**Applying for Patent Protection**

Unlike a copyright, a patent does not arise automatically; an inventor must [apply for a patent](https://smallbusiness.findlaw.com/intellectual-property/filing-patent-applications.html). The inventor must apply within one year of publicly disclosing the invention, such as by publishing a description of the invention or offering it for sale. An inventor, or his or her attorney, generally makes a preliminary patent search before applying for a patent to determine if it is feasible to proceed with the application. The application and a fee are submitted to the U.S. Patent and Trademark Office, where it is reviewed by a patent examiner.

If a patent is granted, the inventor must pay another fee, and the government publishes a description of the invention and its use. Only a patent attorney or patent agent may prosecute patents before the PTO. Before a person may be licensed as a patent attorney or patent agent, she must have a degree in certain technical or scientific fields.

Utility and plant patents last for 20 years from the application date; design patents last for fourteen years. If the owner of a utility patent does not pay maintenance fees, the patent will expire earlier. After a patent expires, the invention becomes public property and can be used or sold by anyone. For example, after the patent on Tylenol expired, other pharmaceutical companies began producing a generic version of the drug.

**Patent Infringement**

If an inventor thinks someone has used his or her patented invention without permission, he or she may bring a lawsuit against the infringer. If the court agrees, it may award the patent holder costs, attorney's fees, damages in an amount equal to a reasonable royalty, and an injunction (an order prohibiting another person from infringing the patent). An action for [infringement](https://smallbusiness.findlaw.com/intellectual-property/avoiding-patent-infringement-problems.html) can be time-consuming and costly, so infringement cases often are settled.

**Patent Law is Complicated: Contact an Attorney**

If you have an invention that you would like to have protected, it's a good idea to get acquainted with patent law and intellectual property law in general. With a patent, you can license to other companies or go into business yourself; but failure to properly register your patent can end your dreams. Make sure you contact a [patent law attorney](https://lawyers.findlaw.com/lawyer/practice/patents) if you need legal assistance patenting your novel invention.

1. WHAT IS **COPYRIGHT**?

Copyright refers to the legal right of the owner of [intellectual property](https://www.investopedia.com/terms/i/intellectualproperty.asp). In simpler terms, copyright is the right to copy. This means that the original creators of products and [anyone they give authorization to](https://www.investopedia.com/terms/l/licensing-agreement.asp) are the only ones with the exclusive right to reproduce the work.

[Copyright law](https://www.investopedia.com/articles/personal-finance/010715/worlds-top-10-law-firms.asp) gives creators of original material the exclusive right to further use and duplicate that material for a given amount of time, at which point the copyrighted item becomes public domain.

How Copyrighting Works

When someone creates a product that is viewed as original and that required significant mental activity to create, this product becomes an intellectual property that must be protected from unauthorized duplication. Examples of unique creations include computer software, art, poetry, graphic designs, musical lyrics and compositions, novels, film, original architectural designs, website content, etc. One safeguard that can be used to legally protect an original creation is copyright.

Under copyright law, a work is considered original if the author created it from independent thinking void of duplication. This type of work is known as an Original Work of Authorship (OWA). Anyone with an original work of authorship automatically has the copyright to that work, preventing anyone else from using or replicating it. The copyright can be registered voluntarily by the original owner if they would like to get an upper hand in the legal system in the event that the need arises.

Not all types of work can be copyrighted. A copyright does not protect ideas, discoveries, concepts, or theories. [Brand names](https://www.investopedia.com/terms/b/brand-identity.asp), [logos](https://www.investopedia.com/terms/l/logo.asp), slogans, domain names, and titles also cannot be protected under copyright law. For an original work to be copyrighted, it has to be in tangible form. This means that any speech, discoveries, musical scores, or ideas have to be written down in physical form in order to be protected by copyright.

In the U.S., original owners are protected by copyright laws all of their lives until 70 years after their death. If the original author of the copyrighted material is a corporation, the copyright protection period will be shorter.

U.S. copyright law has experienced a number of amendments and changes that have altered the duration of copyright protection. The "life of the author plus 70 years" protection can be attributed to the 1998 Copyright Term Extension Act, (also known as the Mickey Mouse Protection Act or Sonny Bono Act), which generally increased copyright protections by 20 years.

## Copyright vs. Trademarks and Patents

While copyright law is not all-encompassing, other laws, such as [patent](https://www.investopedia.com/terms/p/patent.asp) and [trademark](https://www.investopedia.com/terms/t/trademark.asp) laws, may impose additional sanctions. Although copyrights, trademarks, and patents are frequently used interchangeably, they offer different forms of protection for intellectual property.

Trademark laws protect material that is used to distinguish an individual’s or corporation’s work from another entity. These materials include words, phrases, or symbols—such as logos, slogans, and brand names—which copyright laws do not cover. Patents cover inventions for a limited period of time. Patented materials include products such as industrial processes, machines, and chemical positions

1. WHAT IS **TRADEMARK**?

A **trademark** is a type of [intellectual property](https://en.wikipedia.org/wiki/Intellectual_property) consisting of a recognizable [sign](https://en.wikipedia.org/wiki/Sign_%28semiotics%29), [design](https://en.wikipedia.org/wiki/Design), or [expression](https://en.wikipedia.org/wiki/Expression_%28language%29) which identifies [products](https://en.wikipedia.org/wiki/Good_%28economics_and_accounting%29) or [services](https://en.wikipedia.org/wiki/Service_economies) of a particular source from those of others, although trademarks used to identify services are usually called [service marks](https://en.wikipedia.org/wiki/Service_mark). The trademark owner can be an individual, [business organization](https://en.wikipedia.org/wiki/Business_organizations), or any [legal entity](https://en.wikipedia.org/wiki/Juristic_person). A trademark may be located on a [package](https://en.wikipedia.org/wiki/Packaging_and_labeling), a [label](https://en.wikipedia.org/wiki/Label), a [voucher](https://en.wikipedia.org/wiki/Voucher), or on the product itself. For the sake of [corporate identity](https://en.wikipedia.org/wiki/Corporate_identity), trademarks are often displayed on company buildings. It is legally recognized as a type of [intellectual property](https://en.wikipedia.org/wiki/Intellectual_property). A trademark can be a corporate logo, a slogan, a brand, or [simply the name of a product](https://www.investopedia.com/articles/personal-finance/120415/trade-name-vs-trademark-know-difference.asp). For example, few would think of bottling a beverage and naming it Coca Cola or of using the famous wave from its logo. It is clear by now that the name "Coca Cola," and its logo belong to [The Coca-Cola Company (KO)](https://www.investopedia.com/markets/quote?tvwidgetsymbol=ko).

Trademarking, however, does contain some fuzzy boundaries because it prohibits any marks that have a “likelihood of confusion” with an existing one. A business cannot thus use a symbol or brand name if it looks similar, sounds similar, or has a similar meaning to one that’s already on the books—especially if the products or services are related.

### **Why Use a Trademark?**

Individuals and companies have products or services trademarked to protect the product from being used without the permission of the source company. Most countries have patent laws that are designed to protect against [copyright infringement](https://www.investopedia.com/terms/c/copyright-infringement.asp). In the United States, the [United States Patent and Trademark Office (USPTO)](https://www.uspto.gov/) serves this function.

Although most countries have agencies through which businesses can have their products trademarked, international copyright regulation is more complicated than in the U.S., as there exists no universally recognized patent office, rules, or consistency.

### **More About Trademarks**

A company or individual does not need to register a trademark to receive protection rights, but there are certain legal benefits to registering the mark with the USPTO. Trademark and [copyright](https://www.investopedia.com/terms/c/copyright.asp) law rarely overlap, but it can happen—for instance, when a graphic illustration is used as a logo, the design may be protected both under copyright and trademark law.

Trademarks can be bought and sold. Famously, [Nike, Inc. (NKE)](https://www.investopedia.com/markets/quote?tvwidgetsymbol=nke) purchased the instantly recognizable Swoosh logo in 1971 from a graphic arts student for a one-time price of $35. Trademarks also can be [licensed](https://www.investopedia.com/terms/l/licensing-agreement.asp) to other companies for an agreed-upon time or under certain conditions, which can result in crossover brands.

1. WHAT IS A **TRADE SECRET**?

**Trade secrets** are a type of [intellectual property](https://en.wikipedia.org/wiki/Intellectual_property) that comprise [formulas](https://en.wikipedia.org/wiki/Formula), [practices](https://en.wikipedia.org/wiki/Best_practice), [processes](https://en.wikipedia.org/wiki/Business_process), [designs](https://en.wikipedia.org/wiki/Design), [instruments](https://en.wikipedia.org/wiki/Legal_instrument), [patterns](https://en.wikipedia.org/wiki/Pattern), or compilations of information that have inherent economic value because they are not generally known or readily ascertainable by others, and which the owner takes reasonable measures to keep secret.[[1]](https://en.wikipedia.org/wiki/Trade_secret#cite_note-:0-1) In some [jurisdictions](https://en.wikipedia.org/wiki/Jurisdiction), such secrets are referred to as [*confidential information*](https://en.wikipedia.org/wiki/Confidential_information).

A trade secret is information that

* is not generally known to the public;
* confers economic benefit on its holder *because* the information is not publicly known; and
* where the holder makes reasonable efforts to maintain its secrecy.

### **Comparison with trademarks**

Nations have different trademark policies. Assuming the mark in question meets certain other standards of protectibility, trademarks are generally protected from infringement on the grounds that other uses might confuse consumers as to the origin or nature of the goods once the mark has been associated with a particular supplier. Similar considerations apply to [service marks](https://en.wikipedia.org/wiki/Service_mark) and [trade dress](https://en.wikipedia.org/wiki/Trade_dress).

By definition, a trademark enjoys no protection (*qua* trademark) until and unless it is "disclosed" to consumers, for only then are consumers able to associate it with a supplier or source in the requisite manner. (That a company plans to *use* a certain trademark might itself be protectable as a trade secret, however, until the mark is actually made public.)

To acquire a [trademark rights under U.S. law](https://en.wikipedia.org/wiki/United_States_trademark_law), one must simply use the mark "in commerce" It is possible to register a trademark in the United States, both at the federal and state levels. Registration of trademarks confers some advantages, including stronger protection in certain respects, but registration is not required in order to get protection. Registration may be required in order to file a lawsuit for trademark infringement.

### **Comparison with patents**

To acquire a patent, full information about the method or product has to be supplied to the patent office and upon publication or issuance, will then be available to all. After expiration of the patent, competitors can copy the method or product legally. The temporary [monopoly](https://en.wikipedia.org/wiki/Monopoly) on the subject matter of the patent is regarded as a tradeoff for thus disclosing the information to the public.

One popular misconception held by many is that trade secret protection is incompatible with patent protection. It is typically said that if one applies for a patent one can no longer maintain a trade secret on the invention, but this is an oversimplification. In order to obtain a patent, the inventor must [disclose the invention](https://en.wikipedia.org/wiki/Sufficiency_of_disclosure), so that others will be able to both make and use the invention. Also, to obtain a patent in the United States, any preferencesmust likewise be disclosed.What is typically not appreciated though is that the critical time for satisfying this disclosure requirement is at the time the application is filed. In many if not most situations, improvements will be made to an invention even after filing of the patent application, and additional information will be learned. None of this additional information must be disclosed and can instead be kept as a secret. Virtually all patent licenses include clauses that require the inventor to disclose any trade secrets they have. Frequently it is this information not disclosed in the patent that is the most commercially viable. Thus, patent licensors should take steps to continue to maintain trade secrets as secrets, otherwise they will be lost. Accordingly, before disclosing any secrets not already protected by an issued patent the licensor will use a [non-disclosure agreement](https://en.wikipedia.org/wiki/Non-disclosure_agreement).

Compared to patents, the advantages of trade secrets are that a trade secret is not limited in time (it "continues indefinitely as long as the secret is not revealed to the public", whereas a patent is only in force for a specified time, after which others may freely copy the invention), a trade secret does not imply any registration costs, has an immediate effect, does not require compliance with any formalities, and does not imply any disclosure of the invention to the public. The disadvantages of trade secrets include that "others may be able to legally discover the secret and be thereafter entitled to use it", "others may obtain patent protection for legally discovered secrets", and a trade secret is more difficult to enforce than a patent.