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**17/ENG02/045**

**COMPUTER ENGINEERING**

**Assignment Title:** ASSIGNMENT  
**Course Title:** Engineering Law and Managerial Economics  
**Course Code:** ENG 384

**Question**

Briefly discuss the following intellectual property protection methods.

1 Patent

2 Copyright

3 Trademark

4 Trade secret

* **PATENT**

A **patent** is a form of intellectual property that gives the owner the legal right to exclude others from making, using, selling and importing an invention for a limited period of years, in exchange for publishing an enabling public disclosure of the invention. In most countries patent rights fall under civil law and the patent holder needs to sue someone infringing the patent in order to enforce his or her rights. In some industries patents are an essential form of competitive advantage; in others they are irrelevant.

The procedure for granting patents, requirements placed on the patentee, and the extent of the exclusive rights vary widely between countries according to national laws and international agreements. Typically, however, a patent application must include one or more claims that define the invention. A patent may include many claims, each of which defines a specific property right. These claims must meet relevant patentability requirements, such as novelty, usefulness, and non-obviousness.

There are three types of patents:

1. **Utility patents** cover anyone who invents a new and useful process, article of manufacture, machine, or a composition of matter.
2. **Design patents** include an original, new, and ornamental design for a manufactured product.
3. **Plant patents** go to anyone who produces, discovers, and invents a new kind of plant capable of reproduction.

**Examples of Patents**

One of the most notable patents in the past 40 years was the personal computer filed in 1980 by Steve Jobs and three other employees of Apple Inc.

King C. Gillette patented the razor in 1904 and was dubbed a "safety razor."

**Copyright**

Copyright refers to the legal right of the owner of intellectual property. In simpler terms, copyright is the right to copy. This means that the original creators of products and anyone they give authorization to are the only ones with the exclusive right to reproduce the work.

**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, logos, 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.

* **Trademark**

A trademark is a recognizable insignia, phrase, word, or symbol that denotes a specific product and legally differentiates it from all other products of its kind. A trademark exclusively identifies a product as belonging to a specific company and recognizes the company's ownership of the brand. A trademark can be a corporate logo, a slogan, a brand, or simply the name of a product.

For example, if one considers 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, so no one else has rights to usage. A trademark protects words and design elements that identify the source, owner, or developer of a product or service.

* **Trade Secret**

A trade secret is any practice or process of a company that is generally not known outside of the company. Information considered a trade secret gives the company an economic advantage over its competitors and is often a product of internal research and development.

Trade secrets may take a variety of forms, such as a proprietary process, instrument, pattern, design, formula, recipe, method, or practice that is not evident to others and may be used as a means to create an enterprise that offers an advantage over competitors or provides value to customers.

Trade secrets are defined differently based on jurisdiction, but all have the following characteristics in common:

* They are not public information.
* Their secrecy provides an economic benefit to their holder.
* Their secrecy is actively protected.

As confidential information (as trade secrets are known in some jurisdictions), trade secrets are the "classified documents" of the business world, just as top-secret documents are closely guarded by government agencies. Because of the cost of developing certain products and processes is much more expensive than competitive intelligence, companies have an incentive to figure out what makes their competitors successful. To protect its trade secrets, a company may require employees privy to the information to sign non-disclosure agreements (NDA) upon hire.