# Need for Intellectual Property Rights in the field of Reverse Engineering

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# Abstract :

Intellectual Property Rights is the need for the hour especially in the field of reverse engineering where the ideas and new technology need protection. Most techniques requires protection through copyright, patent , trade secret and through layout designs of integrated circuits. In reverse engineering IPR provides security through various acts and laws which also support through fair justice by prevention of theft, infringements and piracy .

# **Introduction :**

Intellectual Property Rights are being overlooked in the field of engineering whereas it should be on priority, where various there are advancement in the field of technology with innovations and techniques require protection to prevent any theft.

# **Types of Intellectual Property rights :**

As per the TRIPs agreement, the intellectual property is classified as Copyright and Industrial property.

The industrial property is further classified as follows

- 1. Patents
- 2. Trademarks
- 3. Design
- 4. Trade secret

- 5. Layout designs of integrated circuits
- 6. Plant varieties
- 7. Geographical Indication
- 8. Traditional Knowledge

# Reverse Engineering :

The term "Reverse Engineering " often refers to back engineering or backward engineering in which the products is deconstructed to extract design information .

[3] Reverse engineering often involves deconstructing individual components of larger products to determine how a part was design, where one is capable to recreate without difficulty. Most organizations imply reverse engineering technique to purchase a replacement part of a original equipment manufacturer which is not an existing option [3].

# Copyright a need in reverse engineering :

In copyright, one is capable to copyright their source code which provides security that it can't be utilized by anyone else other than the author/owner who is the he first owner. In India copyright is granted to the author/owner for the period of 60 years for which if anyone require to use need to pay royalty to the owner for the duration. [4]The impact and culture on art artists, as well as the demand, acclaim, disdain these and for their work. of appropriation art has been and remains an important and vital art suggests type form, and certainly of the that promotes cultural progress[4].

# Patenting system in reverse engineering:

Patents are exclusive rights granted by the Patent office to secure one's invention for a certain period. In India as per the Indian Patent law, Patent office grants a period of 20 years from the date of filing the invention which the inventor is entitled for exclusive rights on their invention.

Many people fail to realize that in reverse engineering technique, patenting the technology plays an utmost important factor, where it provides security to the coding of the particular technique and provide fair justice through infringements protection .

Most people could seek conventional patent protection as well as through PCT for international patent protection.

#### Layout designs of integrated circuits in reverse engineering :

Integrated circuits play an pivotal role where one could register the layout of transistor, other circuitry elements through semiconductor integrated circuits. In India when an inventor creates a new layout design, it is capable to register when the design is new or original and not been commercially exploited in India or ant conventional country, need to be distinctive and distinguishable from the existing design registered.

A software engineer who has the requirement to perform a reverse engineering technique in a computer program related to the field of education and to reverse engineer a computer program has the utmost need and necessity to be protected by IPR laws regulated to the territorial laws as well as rules.

## **Conclusion :**

Therefore one should understand the art of invention and their advancement in the technology which need to be protected from those people who are ready exploit the creativity of one. IPR is territorial and one need to seek protection of their invention in their territory first before seeking international protection. In the field of reverse engineering one needs to pay utmost importance and treat it as the center of the research rather than understanding it as a part of the research as one's time and effort are invested to deconstruct the product maybe even for cyber security or hardware security to secure the piracy of the data.

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