Module 6 - Patent Rights

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The Basics of Patent Law in India

Similar to Trademarks, copyright, design and geographical indications, Patent is also an Intellectual Property which is protected under the Law and the rightful owner of the Patent can claim rights and authorities under the Law for a limited period.

In India, the Law of Patent is primarily governed by the Patent Act of 1970.

What is Patent?

The word "Patent" refers to a monopoly right over an invention.

Not all inventions are patentable nor it is essential to protect inventions solely through patent.

The final product that results from an invention may be protected through other forms of intellectual property rights.

What is the importance (objective) of Grant of Patent?

The importance (objective) of grant of Patent is to encourage scientific research and development, new technology, industrial progress and innovation.

Grant of exclusive privilege to own, use or sell the method or the product patented for limited period, stimulates new inventions of commercial utility.

After the expiry of the patent, the technology passes into the public domain.

Rights in a Patent

Prepared By
Dr.Swapna Raghunath,
Department of ECE,
GNITS, Hyderabad

Patent registration offers the owner the right to exclude others from using the invention for a limited period of time.

The monopoly over patented right can be exercised by the owner for a period of 20 years from the date of application of patent.

Patent confers the right to manufacture, use, offer for sale, sell or import the invention for the prescribed period.

What are the requirements for Grant of Patent?

The application for Patent shall be made at the Indian Patent Office.

Any person i.e. Indian or a Foreigner, individual, company or the Government can file a Patent Application.

The person applying for Patent shall be the **true and first inventor** of the invention proposed to be patented.

The patent application can also be made jointly.

The patent application shall primarily disclose the best method of performing the invention known to the applicant.

The applicant shall also define the scope of invention.

The invention desired to be patented shall be- new, should involve an inventive step and must be capable of industrial application.

A patent application can be made for a single invention only.

What Inventions are not Patentable?

1. Any Invention which is frivolous or which claims anything contrary to well established natural laws.
2. Inventions which are contrary to public order or morality.
3. An idea or discovery.
4. Inventions pertaining to known substances and known processes i.e. mere discovery of a new form of a known substance which does not enhance the known efficacy of that substance is not patentable.
5. An invention obtained through a mere admixture or arrangement.
6. A method of agriculture or horticulture.

Prepared By
Dr.Swapna Raghunath,
Department of ECE,
GNITS, Hyderabad

7. A process involving medical treatment of human and animals or to increase their economic value.
8. Plants and animals in whole or in part.
9. A mathematical or business method or a computer program *per se* or algorithms.
10. Subject matter of copyright protection like literary, dramatic, musical or artistic work.
11. Any scheme or rule.
12. Presentation of information
13. Topography of integrated circuits.
14. Traditional knowledge.
15. Inventions relating to atomic energy.

Infringement of Patent

Infringement of Patent primarily refers to intrusion or violation of the rights of a Patentee against which the Patentee has statutory rights.

The factors that are essential in determining infringement of a Patent are as under:

1. The infringement has to be determined with regard to what has been claimed as invention.
2. To determine whether the infringing activity violated any statutory rights conferred to the Patentee.
3. To determine the infringer i.e. the person liable for the infringement.
4. To determine whether the infringing act fell within the excluded acts of Government use, use of patented product or process for experiment or research, import of medicine or drug by Government and patents in foreign vessels and aircrafts.

Scope of Patent Rights

Geographical scope and content-related scope determine the range of your patent protection.

Geographical Scope

As soon as your patent is granted, you have the right to exclusively utilize your invention, issue licenses, and prohibit others from using your invention.

The invention is only protected in countries in which the patent is valid.

Prepared By
Dr.Swapna Raghunath,
Department of ECE,
GNITS, Hyderabad

For example, a German patent does not facilitate protection in the US market.

Only a US patent can protect your invention the United States.

Your patent attorney will advise you regarding the best patent strategy and will define with you in which regions a protection is necessary and reasonable.

Content-related Scope

Besides the geographical range, the scope of the patent content plays a major role in order to assess how strong your protection actually is.

First and foremost, this can be deduced from patent claims specified in your application filing documents.

The more far-reaching your claims, the stronger the protection of your intellectual property.

The number of claims and the phrasing of claims is very important.

The patent attorney can appraise how to phrase the claims of your application in order to distinguish your invention from the state of the art, while at the same time protecting your invention as deliberately as possible.

Licensing and transfer of technology

The technology transfer relates to voluntary or non-market transactions by which a firm gains access to technology developed in another country.

Strong IPR protection prevails in the developed countries having potential innovators to engage in innovate activities, thus boosting the economic growth.

Many countries are strengthening their IPR regimes to boost research and development, increase innovation and higher long run growth.

On the contrary, IPR holders engage in monopoly activities thus limiting consumer's choice.

The impact of IPR protection varies differently in different countries and depends on the level of development and domestic capacity for innovation.

Transfer of technology takes place through formal and informal channels.

Some of the formals channels include:

1. Trade
2. Licensing
3. joint ventures
4. franchising
5. foreign patenting

Prepared By
Dr.Swapna Raghunath,
Department of ECE,
GNITS, Hyderabad

6. foreign direct investment (FDI)

The informal channels include

1. Imitation
2. Technology spillover.

Intellectual Property and International Trade

International trade is a crucial channel for diffusion of technology.

The pricing structure of traded products is determined by the effectiveness of patent strength and creates competitive advantage for distribution and sale of goods and services.

Firms should encourage export of patented goods in foreign markets having strong IPR protection, thus increasing their revenues and profitability in the marketplace.

Majority of the high-tech firms prefer FDI (Foreign Direct Investment) and licensing in foreign markets and are least affected by IPR protection.

A stronger IPR protection may encourage import of high-tech and low-tech products and enable foreign firms to expand their trade volumes.

IPR and licensing

Licenses can be in the form of:

1. Fee
2. Royalty
3. profit-sharing

thus offering the right to produce or manufacture the product for a given period of time within a particular territory.

Firms producing low-tech products engage in licensing as compared to other channels such as FDI.

Stronger IPR protection can reduce licensing cost and provides greater market power to the licensor.

On the flip side, excessive IPR protection can lead to inadequate dissemination of knowledge and can further slower the growth of innovation.

Research and development is limited to developed countries and developing countries having the innovation capacity and development.

Prepared By
Dr.Swapna Raghunath,
Department of ECE,
GNITS, Hyderabad

Weak IPR can lead to absence of foreign firms marketing their products as they can be easily copied or imitated in the marketplace.

This is one the major reason for foreign firms investing heavily in R&D while pressing national government to strengthen the IPR regime so that they can market their goods and services.

Licensing a Technology

Technology transfer involves more than a license to a patent.

It means moving the technology from the inventor's laboratory into the licensee's laboratory.

This "hands-on" process involves the conveyance of know-how and technical ability more than a written description of experimental results.

The inventor must be actively involved in all stages of the process, from working with patent attorneys to assessing prospective licensing candidates.

In the early stages, the inventor must be able to build solid working relationships with scientists or technologists at the prospective licensee and maintain them over the early stages of company involvement with transfer.

Most university license agreements originate from a relationship the lead inventor has with industry.

Often companies will ask the university to provide them with a low-cost option to license the innovation or a free evaluation license to test the innovation in their laboratories before committing to the full license agreement.

The role of the Tech Transfer Office is to facilitate licensing transactions.

Each step in the licensing process is critical and follows a timeline that depends on many factors, some dependent on the inventor, some on the licensing office, and some on the commercial partner.

Patent information and databases

List of Patent Databases: https://wiki.piug.org/display/PIUG/Patent+Databases

Traditionally, patent information searches are done as a part of the application drafting process before filing patent applications, or while planning and preparing for patent litigation.

In the recent past, this traditional micro-level use of patent information has evolved into a much more strategic use of patent information, thanks to the development of customized computerized databases of patent information.

What is Patent Information?

It is the largest, well-classified and most up-to-date collection of technical documents on new and innovative technologies.

Patent information includes:

1. The content of published patent documents
2. Bibliographic and other information concerning patents for inventions, inventors' certificates, utility certificates and utility models.

So far, around the world around 40 million patents have been published in all possible technical fields.

To these around one million additional patent documents are added every year.

A patent document contains a wealth of information about the state-of-the-art in technological developments in that area of technology.

Bibliographic information is an essential means of identifying, locating and retrieving patent documents.

The front page of a published patent document generally displays bibliographic information such as:

1. the title of the invention
2. the date of filing
3. the priority date (the earliest filing date from within a family of patent applications)
4. the relevant technical field
5. the name and address of applicant(s) and inventor(s)
6. abstract
7. representative drawing
8. Patent specification

Prepared By
Dr.Swapna Raghunath,
Department of ECE,
GNITS, Hyderabad

9. Claims

The patent specification is the most important part of a patent document, as it enables a person to understand the claimed invention and the technical information contained in it.

The specification should disclose the invention clearly and precisely.

Preferably, it should be illustrated by examples to explain how to work or carry out the invention in practice so as to enable anyone skilled in the relevant art to be able to replicate the invention.

A specification of the invention includes the background of the invention, summary of invention, brief description of drawings (if necessary) and a detailed description of the invention.

The claims define the scope of legal protection.

While drafting claims, the applicant will draft them as broadly as possible.

In patent litigation, interpreting claims is the first step in determining whether the patent is valid and whether the patent has been infringed.

Merits and Shortcomings of Using Patent Information

In most countries, a patent application is published 18 months after it is filed.

So, there is always a time lag between the publication of patent application and the point in time at which the invention was made or completed.

Generally, however, patents are granted well before a product based on a patent is introduced in the market.

As such, the publication of a patent application, despite the time lag, is invariably the earliest point in time at which the relevant information becomes available to the public as the first published detailed and up-to-date information.

Since the invention has to be sufficiently clear and complete for it to be carried out by a person skilled in the relevant art, a patent document has much more detailed information about a technology than any other type of scientific or technical publication.

It is also a unique source of information, as it is estimated that, on average, some 70 % of the information disclosed in patents is never published anywhere else.

Analyzing Patent Information

There are two primary ways of analyzing patent information: qualitative and quantitative.

The qualitative method shows more closely the content of the individual patent documents.

Prepared By
Dr.Swapna Raghunath,
Department of ECE,
GNITS, Hyderabad

The quantitative method results in statistical processing.

These two methods have quite different objectives and different ranges of applications.

Patent analysis can be displayed by visual representation using bar graphs, polygonal line graphs, pie charts, radar charts and other charts/graphs, which are called 'Patent Maps'.

Visualization is an especially effective way of representing the results of this type of analysis.

Today, electronic databases, analytical software products and private service providers with their own proprietary value-added patent or technology databases are available for assisting in the analysis of patent information.

Availability of Patent Information

Databases on CD-ROM

Information technology allows accessing patent data in text and picture form on CD-ROM.

CD-ROM databases are very convenient for documentary searches.

Users need no outside connections, and can work with simply a CD-ROM driver plus a computer.

CD-ROM databases, however, have some drawbacks.

One problem is with their updating.

As on-line databases can be easily updated on a regular basis, the information on CD-ROM rapidly becomes out of date, at least for certain types of analysis.

It is also a problem to easily use CD-ROM databases to compile statistical series; hence, they are not yet suitable for statistical applications.

On-line Databases

Internet-based databases are on-line databases.

Anyone who has access to the Internet may be able to browse the full text of published patent documents via free of charge databases or commercial databases.

As access to these kinds of databases is not restricted across national borders, so users worldwide can very easily access patent documents from a computer connected to the Internet.

As of now, many national patent offices have launched free-of-charge patent information databases, which are open to the public.

For example, the Full-Text and Full-Page Image Database of the United States Patent and Trademark Office (USPTO) is one of the earliest and free online patent information services.

Another major on-line free patent database is esp@cenet®, which has some 30 million patent documents.

The free services work well for simple searches based on key words such as:

1. A known patent number
2. Name of the inventor(s) or applicant(s)
3. A key word in the title, etc.,

but are not a suitable tool for executing more complex investigations and legally motivated searches.

There are a number of private companies that have commercial databases.

These include **Derwent, Dialog, STN, Questel Orbit, Micropatent, WIPS**, etc.

Commercial services offer enhanced or value added patent information, based on the actual requirement of particular end users.

Commercial database hosts offer different types of clearing procedures or fees.

Some collect a flat fee in advance that expires after a certain period of time, while others calculate database usage time plus document royalties or have no time cost but slightly higher document royalties.

Reasons for Using Patent Information

Patent information is more than just technological or legal information.

When developing a new product, comparative technological information may determine the success or failure of the product and, in turn, the success or failure of the company itself.

Some of the practical applications of patent information include:

A Tool for Creative Thinking

Patent information provides a source of technological information that can be used by researchers and inventors to find new solutions to technical problems.

Input for Licensing Strategy

When considering "licensing in" of technology owned by others, "licensing out" your technology or "cross-licensing" between two patent portfolio owners, you must collect reliable information on the target or key technology in order to take the right decision.

If the technology in question is valuable enough, it will generally be protected by a patent because of the intrinsic insecurity and difficulty of keeping it as a trade secret.

Therefore, the analysis of patent information provides you with valuable technical and business information regarding target or key technology.

Supporting Mergers and Acquisitions (M&A)

If a company wishes to acquire a specific technology along with other complimentary assets and has no idea where to obtain it, then it first needs to identify all the companies with relevant patents and related assets.

A patent search help to identify all of the patents related to the area of interest.

Once one or more potential target technologies/companies are identified, then the company can undertake additional patent analysis to narrow down its choices to decide which of the companies is the best merger or acquisition target.

Guiding Management of Research and Development (R&D)

In order to enter into a new business or to develop a new product, a company should be able to seize the overall image of the relevant technology field and accurately forecast the market needs.

Patents are often linked to research and development and can be considered as indicators of R & D output.

If one company has more patents than another does, then this suggests that the company has a stronger commitment to R&D.

Human Resources Management

It has been repeatedly shown that a small number of highly prolific inventors drive technological development and a much larger numbers of researchers produce only one or two patents in any laboratory or company.

Patent analysis, such as a co-inventor brainmap, can show the key inventors who are vitally important for the future of the company.

Prepared By
Dr.Swapna Raghunath,
Department of ECE,
GNITS, Hyderabad

Such brain maps can identify not only star inventors within a company, but key inventors in other companies, which is a useful analysis for headhunting and in developing an effective M&A strategy.

For those who work in R&D, patent information databases can serve as an inspiration and a tool for solving problems in their daily work.

Patent information databases provide information on competitor's activities.

One of the main advantages of the patent information databases is that it is the only source of information about some technical solutions.

In order to search patent information successfully, it is necessary to determine the symbol of International patent classification.

New Developments in IPR

Intellectual property rights are the rights given to persons over the creations of their minds and give the creator an exclusive right over the use of his/her creation for a certain period of time.

The Indian Trade and Merchandise Marks Act 1884, was the first Indian Law regarding IPR.

The first Indian Patent Law was enacted in 1856 followed by a series of Acts being passed.

They are Indian Patents and Designs Act in 1911 and Indian Copyright Act in 1914.

Indian Trade and Merchandise Marks Act and Indian Copyright Act have been replaced by Trade and Merchandise Marks Act 1958 and Copyright Act 1957 respectively.

In 1948, the Indian Government appointed the first committee to review the prevailing Patents and Designs legislation.

In 1957, Government appointed Justice Rajagobala Ayyangar Committee (RAC) to revise the Patent Law.

Rajagobala Ayyangar Committee submitted its report on 1959, the report tried to balance the constitutional guarantee of economic and social justice enshrined in the preamble of the constitution.

This report provided the process for Patenting of drugs.

This report outlined the policy behind the Indian Patent system.

The theory upon which the patent system is based on, i.e., an opportunity of acquiring exclusive rights in an invention, stimulates technical process in four ways.

1. Encourages research and invention.

Prepared By
Dr.Swapna Raghunath,
Department of ECE,
GNITS, Hyderabad

2. Induces an inventor to disclose his discoveries.

3. Offers award for the expenses of developing inventions.

4. Provides an inducement to invest capital in new lines of production which might not appear profitable.

Based on the Rajagobala Ayyangar Committee report, a Bill was introduced in the year 1965 and the bill was passed in the Lok Sabha but it lapsed in the Rajya Sabha and once again lapsed in Lok Sabha in the year 1966 due to dissolution of Lok Sabha.

But it was reintroduced in 1967 and passed in 1970; the draft rules were incorporated in Patent Act and passed in the year 1971.

The following steps are being suggested with particular reference to the situation in India regarding IPR in the national policy making.

Intellectual Property Rights are patents, copyrights, trademarks, geographical indicators, protection of undisclosed information, layout designs of integrated circuits, industrial designs and traditional knowledge that are recognized by the Trade Related Intellectual Property Rights agreement (TRIPS) and governed by the WTO (World Trading Organization).

Important IPR related matters to be addressed are:

1. Constitute an integrated single window National IPR commission to deal with IPR policy issues.
2. Integrate national technology planning with IPR and trends in international technology trade.
3. Implement a formal national IPR literacy mission
4. Set-up IPR training institutes to prepare technically qualified attorneys
5. Introduce an enabling national taxation policy to encourage innovation
6. Building of IPR portfolio and its utilization in technology transfer and trade
7. Urgently modernize the IPR administrative structures in the country
8. Improve infrastructure for access and effective use of IPR information.
9. Harmonize the patent classification system to ease and optimize processes in patent searching
10. Re-structure the judiciary and enforcement machinery for professional and speedy response to IPR issues
11. Training of corporate and institutional managers on effective management of IPR
12. Standardize models for valuation and audit of IPR

Prepared By
Dr.Swapna Raghunath,
Department of ECE,
GNITS, Hyderabad

13. Evolve national taxation polices of development, use and transactions linked to IPR.
14. Evaluation of an International Intellectual Property Regime

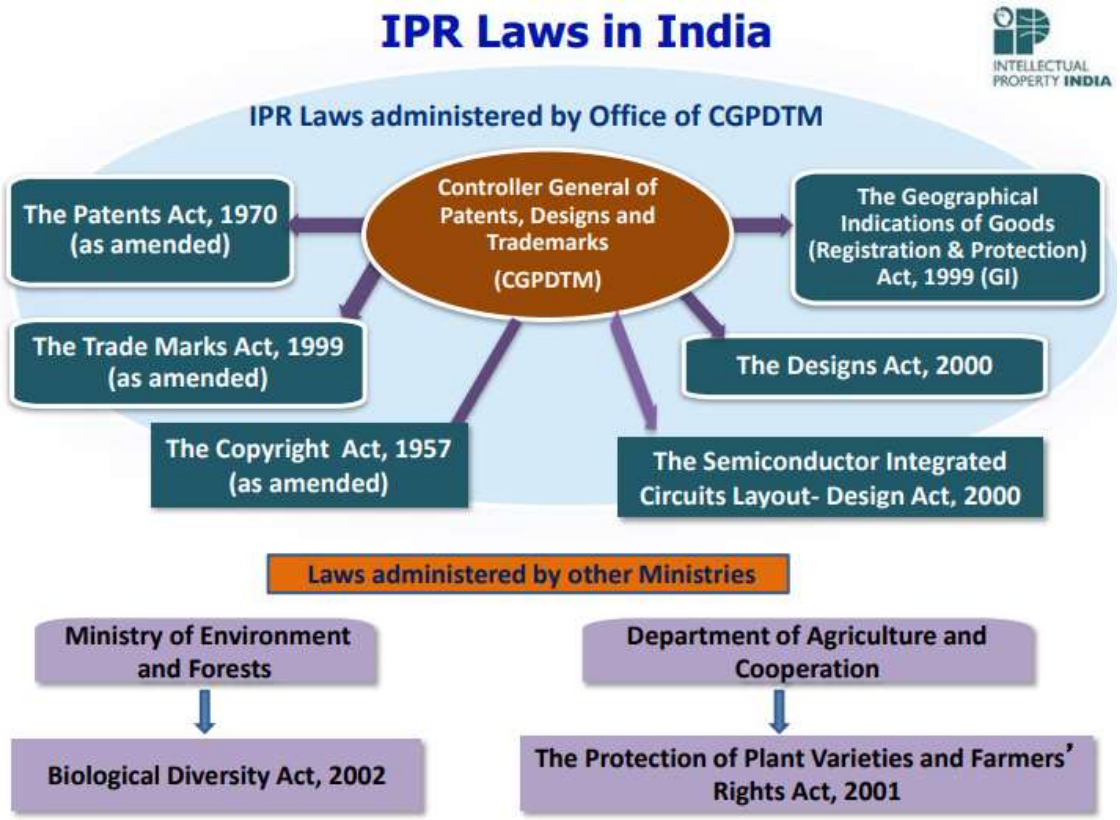
In 1998, India became a member of the Paris Convention.

In 1960 the World Intellectual Property Organization was created.

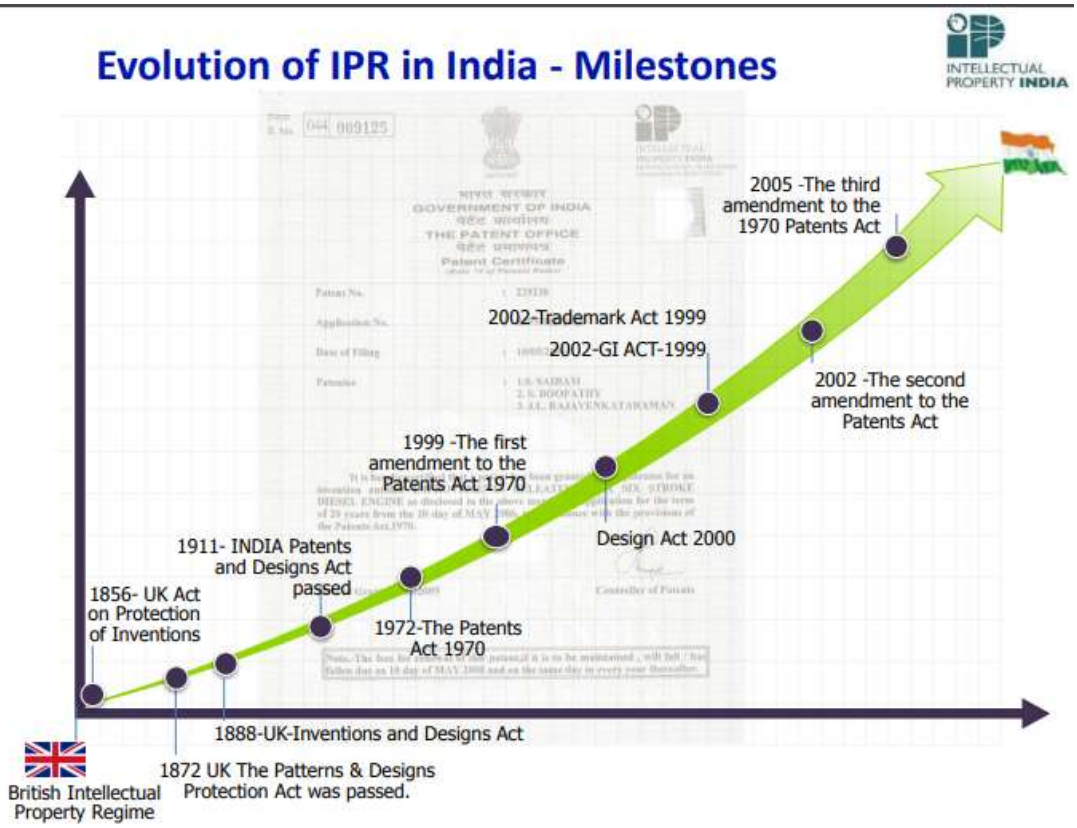
It governs the Paris and Berne Convention.

In 1967 World Intellectual Property Organization (WIPO) was established by these conventions.

In 1977 World Trade Organization (WTO) was created and become an important international organization for the development and understanding of IPR; successor to the General Agreement on Tariffs and Trade.



Prepared By
Dr.Swapna Raghunath,
Department of ECE,
GNITS, Hyderabad



Prepared By
Dr.Swapna Raghunath,
Department of ECE,
GNITS, Hyderabad

Evolution of IPR Laws in India

PATENT

YEAR	HIGHLIGHTS
1856	British implemented the first patent statute in India "On Protections of Inventions, provided certain exclusive privileges to inventors for a 14-year term.
1888	Inventions and Designs Act introduced to consolidate and amend previous legislations- 1872 Act for designs and 1883 Act for patents in conformity with amendments in the UK law.
1911	Enactment of the Indian Patents and Designs Act, 1911 . Establishment of Patent Office & The Controller of Patents; Increase in term of patent from 14 years to 16 years; Product Patents in all fields of technologies.
1970	Patents Act 1970; only Process patents for food, drugs, agrochemicals, alloys. 7 years term for food, drug and 14 years term for others; Compulsory license provisions.
1999	TRIPS Obligations; Filing of application for Product Patents in areas of drugs, pharma and agro-chemicals allowed as mailbox applications; EMR.
2002	Introduction of 18 months' Publication; Examination of applications by request; Establishment of Intellectual Property Appellate Board; Uniform term of 20 years irrespective of the field of invention.
2005	Product patents introduced in areas of drugs, pharmaceuticals and agrochemicals; Pre/Post- grant Opposition system.

TRADEMARKS

Till 1940	No specific legislation for Trademarks, Common Law to resolve issues
1940	Trademarks Act & Registry
1958	Trade and Merchandise Act
1999	New Act in view of TRIPS agreement, new developments in trading practices- service, well-known marks registered
2013	Introduced provisions of Madrid Protocol

DESIGNS

1872	Patterns & Designs Act
1888	Consolidated as Inventions & Designs Act
1911	Renamed as Indian Patents & Designs Act
1970	Patents Act was separated from Designs Act
2001	Design Act 2000

Geographical Indications

1999	Geographical Indications of Goods (Registration & Protection) Act, 1999

Prepared By
Dr.Swapna Raghunath,
Department of ECE,
GNITS, Hyderabad

COPYRIGHT	
1914	Indian Copyright Act was enacted for the first time in 1914 primarily based on the U.K. Copyright Act, 1911.
1957	After Independence the Comprehensive Copyright Act was enacted in the year 1957 to consolidate the laws related to copyrights in India.
1994	• definition of "Literary work" consistent with definition of "Computers" and "Computer Programmes". • harmonizing with Rome Convention, 1961 by providing protection to rights of Performers. Producers of Phonograms and Broadcasting organizations. • the concept of Registration of Copyright Societies for Collective Management of the rights.
2012	▪ The copy Right (amendment) Act 2012 notified on 8-6-2012. ▪ provisions in conformity with the WIPO Treaty and WIPO Performances and Phonograms Treaty. ▪ Definition of "Copyright" as Exclusive Right , author of a work is the first owner of copyright.
Semiconductor Integrated Circuit Design Layout	
2000	Semiconductor Integrated Circuits Layout Design Act was enacted in 2000 to provide protection for semiconductor IC layout designs

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Administration of Patent System

The **Indian Patent Office** is administered by the Office of the

Controller General of Patents, Designs & Trade Marks (CGPDTM).

This is a subordinate office of the Government of India and administers the Indian law of Patents, Designs and Trade Marks.

Patent administration

The CGPDTM has five main administrative sections:

- Patent Office
- Designs Registry
- Trademarks Registry
- Geographical indications Registry
- Rajiv Gandhi National Institute of Intellectual Property Management (NIIPM)

Prepared By
Dr.Swapna Raghunath,
Department of ECE,
GNITS, Hyderabad

Patent Information System

The patent office is headquartered at Kolkata with branches in Chennai, New Delhi and Mumbai, but the office of the CGPDTM is in Mumbai.

The office of the Patent Information System and National Institute for Intellectual Property Management is at Nagpur.

The Controller General (CG), who supervises the administration of the Patents Act, the Designs Act, and the Trade Marks Act, also advises the Government on matters relating to these subjects.

Under the office of CGPDTM, a Geographical Indications Registry has been established in Chennai to administer the Geographical Indications of Goods (Registration and Protection) Act, 1999.

The Indian Patent Office has

Patent Examiners,

Assistant Controllers,

Deputy Controllers,

1 Joint Controller, and

1 Senior Joint Controller, all of whom operate from four branches.

Although the designations of the Controllers differ, all of them (with the exception of the Controller General) have equal authority in administering the Patents Act.

An Indian Patent Examiner is mandated to search for prior art and for objections under any other ground as provided in the Patent's Act, then to report to the Controller, who has the power to either accept or reject Examiners' reports.

Modernisation

The Indian Patent Office has implemented a modernisation program according to an Indian govt website.

Efforts have been made to improve the working of the Patent Offices within the resources available.

The problem of backlog is also being attacked through 50% higher monthly target for disposal of patent applications per Examiner.

E- Filing of Patents & Trademarks is made possible.

Prepared By
Dr.Swapna Raghunath,
Department of ECE,
GNITS, Hyderabad