



Module-3

Introduction To Intellectual Property, Patents & Process of Patenting

Course Code: **BRMK557**

Teaching Hours/Week (L:T:P: S) :1:2:0:0

Total Hours of Pedagogy :25

Credits :02

CIE Marks :50

SEE Marks :50

Total Marks :100

Exam Hours :03

Course Objectives:

- CO1. To Understand the knowledge on basics of research and its types.
- CO2. To Learn the concept of Literature Review, Technical Reading, Attributions and Citations.
- CO3. To learn Ethics in Engineering Research.
- CO4. To Discuss the concepts of Intellectual Property Rights in engineering.

Module-3(8 Hours)

Introduction To Intellectual Property: Role of IP in the Economic and Cultural Development of the Society, IP Governance, IP as a Global Indicator of Innovation, Origin of IP, History of IP in India. Major Amendments in IP Laws and Acts in India.

Patents: Conditions for Obtaining a Patent Protection, To Patent or Not to Patent an Invention. Rights Associated with Patents. Enforcement of Patent Rights. Inventions Eligible for Patenting. Non-Patentable Matters. Patent Infringements. Avoid Public Disclosure of an Invention before Patenting.

Process of Patenting. Prior Art Search. Choice of Application to be Filed. Patent Application Forms. Jurisdiction of Filing Patent Application. Publication. Pre-grant Opposition. Examination. Grant of a Patent. Validity of Patent Protection. Post-grant Opposition. Commercialization of a Patent. Need for a Patent Attorney/Agent. Can a Worldwide Patent be Obtained. Do I Need First to File a Patent in India. Patent Related Forms. Fee Structure. Types of Patent Applications. Commonly Used Terms in Patenting. National Bodies Dealing with Patent Affairs. Utility Models.

Introduction To Intellectual Property

Intellectual Property Overview

- Intellectual Property (IP) is a unique form of property created by human intellect in arts, literature, science, and trade.
- It is intangible, contrasting with familiar tangible assets like land, houses, gold, and cars.
- Intellectual Property Rights (IPR) are legal privileges granted to creators/inventors, exchanged for disclosing creation processes.
- Special rights include use, sale, distribution, and the ability to restrict others from using the invention without permission.
- Excludes rights over physical objects embodying the creation, emphasizing intellectual creativity.

IP Branches

- IP comprises two main branches: "Copyrights and Related Rights" and "Industrial Property Rights."
- "**Copyrights and Related Rights**" cover creative expressions in literature and art, such as books, publications, architecture, wood/stone carvings, pictures, portrays, sculptures, music, films, and computer-based software/database.
- "**Industrial Property Rights**" encompass Patents, Trademarks, Trade Services, Industrial Designs, and Geographical Indications.

3.1. Role of IP in the Economic and Cultural Development of the Society

1. Creativity as the Keystone:

1. Crucial for societal progress.
2. Encouragement is a basic requirement for civilized societies.

2. Economic and Social Development:

1. Dependent on creativity.
2. Creativity drives economic and social advancements.

3. IPR as Incentivization:

1. IPR protects creators/innovators.
2. Acts as an incentive for continuous creation.
3. Motivates others to generate new and novel ideas.

4. Potential Negative Impact of Rigid IPR:

1. Rigid IPR practices can hinder societal progress.

Example: Impact on Farming Community:

- Compliance with TRIPS Agreement affects farmers.
- Inability to store seeds for the next crop.
- Multinational companies regulate seed prices, impacting majority of farmers.

To circumvent the negative impact of IPR, certain laws, exceptions and limitations associated with IPR have been enacted to maintain a balance between the interests of the creators/inventors and the community.

- **Farmers' Rights under PVP&FR Act, 2001:**

- Rights on seeds: Farmers entitled to save, use, share, exchange, or sell seeds.
- Right to protection against accusations of infringement shields farmers from legal consequences due to ignorance in using others' plant varieties.

Farmers' Rights under PVP&FR Act, 2001:

Objectives

- To establish an effective system for the protection of plant varieties, the rights of farmers and plant breeders and to encourage the development of new varieties of plants.
- To recognize and protect the rights of farmers in respect of their contributions made at any time in conserving, improving and making available plant genetic resources for the development of new plant varieties.
- To accelerate agricultural development in the country, protect plant breeders' rights; stimulate investment for research and development both in public & private sector for the development new of plant varieties.
- Facilitate the growth of seed industry in the country which will ensure the availability of high quality seeds and planting material to the farmers

Farmers' Rights under PVP&FR Act, 2001:

Rights under the Act

- **Breeders' Rights** : Breeders will have exclusive rights to produce, sell, market, distribute, import or export the protected variety. Breeder can appoint agent/ licensee and may exercise for civil remedy in case of infringement of rights.
- **Researchers' Rights** : Researcher can use any of the registered variety under the Act for conducting experiment or research. This includes the use of a variety as an initial source of variety for the purpose of developing another variety but repeated use needs prior permission of the registered breeder.

Farmers' Rights under PVP&FR Act, 2001:

Rights under the Act

Farmers' Rights

- A farmer who has evolved or developed a new variety is entitled for registration and protection in like manner as a breeder of a variety;
- Farmers variety can also be registered as an extant variety;
- A farmer can save, use, sow, re-sow, exchange, share or sell his farm produce including seed of a variety protected under the PPV&FR Act, 2001 in the same manner as he was entitled before the coming into force of this Act provided farmer shall not be entitled to sell branded seed of a variety protected under the PPV&FR Act, 2001;
- Farmers are eligible for recognition and rewards for the conservation of Plant Genetic Resources of land races and wild relatives of economic plants;
- There is also a provision for compensation to the farmers for non-performance of variety under Section 39 (2) of the Act, 2001 and
- Farmer shall not be liable to pay any fee in any proceeding before the Authority or Registrar or the Tribunal or the High Court under the Act.

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- **Copyright Act Exemptions:**

- Use of copyrighted material for education and religious ceremonies exempted from standard copyright rights.

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- **Patent Revocation and Exceptions:**

- Patents can be revoked for compulsory licensing by the government during emergencies or natural calamities.
- Inventions/creations not in the societal interest are not registered for IP rights.

- **Examples of IP Protections:**

- Cloning of human embryos banned for IP protection.
- Creation of super microbial pathogens, with potential harm to human lives, is prohibited.

Copyright Act, 1957:

- The Copyright Act, 1957 protects original literary, dramatic, musical and artistic works and cinematograph films and sound recordings from unauthorized uses. Unlike the case with patents, copyright protects the expressions and not the ideas. There is no copyright in an idea.
- The Copyright Act, 1957 provides copyright protection in India. It confers copyright protection in the following two forms: Economic rights of the author, and. Moral Rights of the author.

- India, endowed with vast biodiversity and genetic resources, faces the challenge of safeguarding its Traditional Knowledge (TK) amidst the influence of global innovations drawing upon these resources.
- Conflicting Intellectual Property Rights (IPR) policies pose concerns, necessitating robust legal infrastructure. To optimize benefits, initiatives like 'Make in India' and 'Atmanirbhar Bharat,' coupled with a streamlined approach to patents and trademarks registration, hold the key to harnessing the full potential of India's rich resources.

3.2. IP Governance

IP Governance in India

•Integral Component of Society:

- IP is integral component of human society, requiring dedicated agencies for guidelines, implementation, and enforcement.

•Indian Agencies for IP:

- DPIIT governs all IP categories (excluding Plant Variety and Farmers' Rights Act) under the Ministry of Commerce and Industry, GoI.
- Other organizations promoting the patent ecosystem in India include TIFAC, NRDC, and CIPAM.

3.2. IP Governance

- **International Framework – WIPO [World Intellectual Property Organization]**
- **Need for International Standards:**
 - Hassle-free global exchange of IP activities requires minimum international standards.
- **Role of WIPO:**
 - United Nations-established organization for international IP standards.
 - Governs international filing and registration through conventions (formal agreements) and treaties like Paris Conventions, Patent Cooperation Treaty (PCT), Rome Convention, Berne Convention.

3.3. IP as a Global Indicator of Innovation

- **Importance of Intellectual Property in Innovation Index**
- **IP, a Key Indicator:**
 - Intellectual Property, particularly patents, is a vital component in evaluating a nation's innovation index. It serves as a key indicator reflecting the innovation landscape.
- **Inclusion in Global Rankings:**
 - Global ranking organizations incorporate IP, or a subset of IP, as a parameter to assess the Science, Technology, and Innovation (STI) ecosystem of a nation.
- **Example - Scimago 2020 Report:**
 - The Scimago 2020 report, an online portal ranking journals and countries using Scopus data, placed India 4th in 'Research Publications' but 50th in 'Intellectual Property Rights.'

3.4. Origin of IP

- **Historical Evolution of Intellectual Property**
- **Early Instances of IP:**
 - Originating around 500 BC in Sybaris, Greece, a rudimentary form of IP was practiced. Natives were granted a year's protection for creating "any new improvement in luxury."
- **Medieval Europe's IP Governance:**
 - Medieval Europe saw the emergence of a practical approach to IP governance.
 - In 1623, Britain passed Intellectual Property Legislation, allowing guilds to innovate and trade. However, public resentment led to the replacement with the 'Statute of Monopolies,' granting rights to the original creator/inventor for 14 years.
- **Strengthening Copyrights:**
 - The 'Statute of Anne' (1710) aimed at reinforcing copyrights. Authors gained rights for recreation and distribution of their work, with the option for renewal for another 14 years.
- **Global Adoption of IP Legislation:**
 - By the late 18th and early 19th centuries, nearly every country began enacting IP legislation to safeguard novel inventions and creations.

3.5. History of IP in India

3.5.1. Patents

- The history of the Indian patent system dates back to the pre-independence era of British rule. The first patent related legislation in India was Act VI of 1856, adapted from the British Patent Law of 1852.
- The objective of this legislation was to **encourage the inventions of new and useful manufactures**.
- The rights conferred to the inventor were termed as “**Exclusive Privileges**”. In 1859, certain amendments were made to the Act, such as:
 - Grant of exclusive privileges to useful inventions.
 - Increase of priority time from 6 months to 12 months.
 - Exclusion of importers from the definition of the inventor.

3.5. History of IP in India

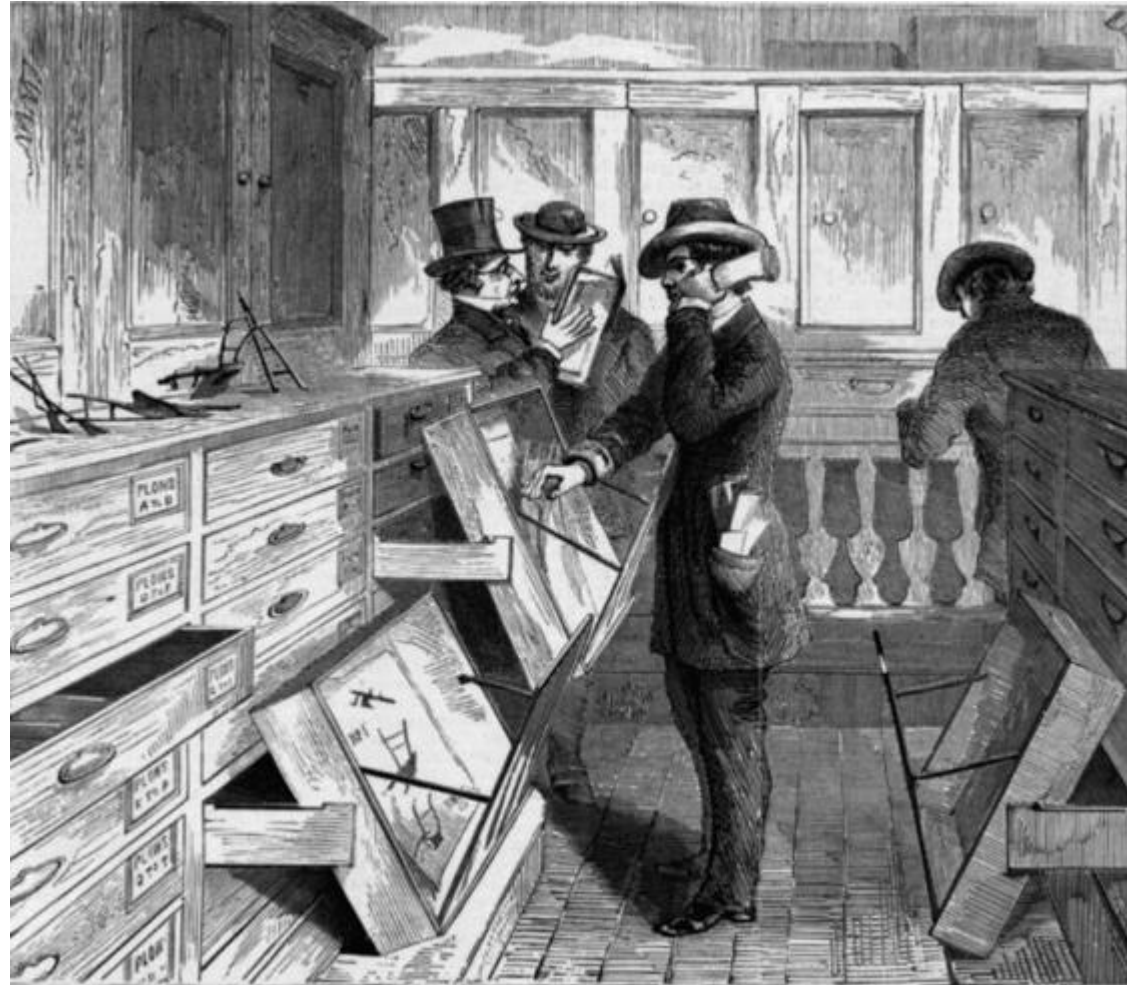
3.5.1. Patents

“ The world’s first patent was granted in 1790 to Samuel Hopkins in USA for the "making of pot ash and pearl ash by a new apparatus and process".

In India, the first patent (known as ‘Exclusive Privileges’ at that time) was awarded in 1856 to a civil engineer, George Alfred DePenning from Calcutta, for his invention, ‘An Efficient Punkah Pulling Machine’ ”

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3.5. History of IP in India

Punkah- is a type of fan.

In India, the punkhawallah or pankha wallah was the servant who operated the fan, often using a pulley system



3.5. History of IP in India

- A few years later, it was felt that ‘Designs’ could also pass the criteria of the invention and thus should be included in the Patent Act. The new Act was rechristened as —The Patterns and Designs Protection Act under Act XIII of 1872. This Act was further amended in 1883 (XVI of 1883) to include the provision of protection for ‘Novelty’ in the invention.
- At the beginning of the 20th century, all the earlier Acts related to inventions and designs were taken away with the introduction of ‘The Indian Patents and Designs Act, 1911’ (Act II of 1911).

3.5. History of IP in India

- ‘The Indian Patents and Designs Act, 1911’ (Act II of 1911)- In the Indian Sub-continent, the Patents and Designs Act was enacted in 1911 mainly on the basis of the principles laid down in the Statute of Monopolies, Patents, Design and Trade Marks Act, 1883 and Patents and Designs Act, 1907. Since enactment of the law, the concepts of patents and designs have undergone enormous development through decisions of courts around the world.
- The law covers subjects of copyright, enforcement of intellectual property rights, industrial designs, intellectual property regulatory body and patents (inventions)
- The formal of the act is divided among the following parts.
 - **Part I: Patents (Sections 3 to 42),**
 - **Part II: Designs (Sections 43 to 54),**
 - **Part III: General (Sections 55 to 81).**

3.5. History of IP in India

- In the next three decades, many amendments were introduced for reciprocal arrangements with other countries for securing priority dates. These amendments dealt with;
 1. Use of invention by the government.
 2. Patent of Addition.
 3. Enhancing the term of the patent from 14 years to 16 years.
 4. Filing of Provisional Application and submission of Complete Application within 9 months from the date of filing the application.

- After India got independence in 1947, many patent experts felt the need to review the Indian Patents and Designs Act, 1911, **keeping the national interest (economic and political) in mind.**
- A dedicated committee, chaired by a renowned **Justice Bakshi Tek Chand** (retired Judge of Lahore High Court), was constituted in 1949 to review the advantages of the patent system.



CONSTITUENT ASSEMBLY MEMBERS

Bakshi Tek
Chand

1883 -

- The committee submitted a plethora of recommendations, including:
 1. Misuse of patents rights needs to be prevented.
 2. There must be a clear indication in the Act that **food, medicine and surgical and curative devices** should be made available to the masses at the **cheapest rate** by giving reasonable compensation to the owner of the patent.
 3. Amendments in Sections 22, 23 and 23A of the Patent and Design Act, 1911 on the lines of the UK Patent Act.

3.5. History of IP in India

Further, In

- 1950: Recommendations introduced in Act XXXII.
- 1952: Amendment (Act LXX(70)) for compulsory licensing in specific areas.
- 1953: Bill based on amendments rejected.
- 1957: Committee formed under Justice N. Rajagopala Ayyangar to strengthen Indian Patent Law.

Service Term - May 4, 1968-December 31, 1975



3.5. History of IP in India

- **The Committee's Report released in 1959-** to seek inputs for further strengthening the **Indian Patent Law.**

The committee submitted its report to the government in 1959.

It comprised of two segments addressing a) General aspects of the patent laws, and
b) Bill rejected back in 1953.

Further,

- 1965: Revised patent legislation submitted to Lok Sabha.
- 1970: Introduction of Patents Act, superseding previous laws.
- After many hiccups, clarifications and modifications the Patents Act, 1970 was introduced, superseding all the previous laws related to the patents.
- However, the Indian Patents and Designs Act of 1911 remained applicable for designs only till 1994.

3.5. History of IP in India

- In 1995 India signed TRIPS(Trade-Related Aspects of Intellectual Property Rights)Agreement and got a transition period of 10 years (1995-2005) to make domestic laws compatible with the international treaty.
- In 1999, The Patents (Amendment) Act, 1999 was introduced providing for the filing of applications for ‘Product Patents’ in the areas of drugs, pharmaceuticals and agrochemicals (earlier, only ‘processes’ were protected under the Patent Act).
- The new Patent Act also included provisions for the grant of Exclusive Market Rights (EMRs) for the distribution and sale of pharma products on fulfilment of certain conditions.

The second amendment to the 1970 Act was made through the Patents (Amendment) Act, 2002 (Act 38 of 2002). This Act introduced new Patent Rules, 2003, thus replacing the earlier Patents Rules, 1972.

3.5. History of IP in India

- **The major amendments were:**
 - The protection term of 20 years for all inventions from the date of filing.
 - Scope of non-patentable inventions including Traditional Knowledge expanded.
 - Disclosure of source and geographical origin of biological material made compulsory.
 - Provisions concerning convention countries simplified.
 - Establishment of Appellate Board.
 - Compulsory license provisions strengthened.
 - Simplification of procedures.
 - Harmonization with Patent Cooperation Treaty (PCT) provisions.

3.5. History of IP in India

- **With the rapidly changing scenario of IPR at a global level, a need was felt to further amend the Patent Act, 1970.**
- **The highlight of the Patents (Amendments) Act 2005 were:**
 - Product patent for inventions in all fields of technology
 - New forms of known substances excluded to prevent evergreening of the patent..
 - Rationalization of the opposition procedure.
 - Introduction of pre-grant opposition by representation.
 - Introduction of post-grant opposition.
 - Compulsory license for export purposes.
 - Compulsory license for manufacture.
 - Extension of grace period from 6 months to 12 months for filing a patent, if published in government exhibition.

3.5. History of IP in India

- India is a member of all prominent *Conventions and Treaties* related to the facilitation of the inventors for international filing and protecting the rights over the inventions globally.
- **International Agreements**
 - The important international agreements to which India is a signatory party are TRIPS Agreement (1995), Paris Convention (1883), PCT (1970) and Budapest Treaty (1977) and many more
 - Focus on facilitating international filing and protecting global invention rights.

3.5. History of IP in India

- TRIPS Agreement (1995)- is an international legal agreement between all the member nations of the World Trade Organization (WTO).
- Paris Convention (1883)- signed in Paris, France, on 20 March 1883, was one of the first intellectual property treaties. It established a Union for the protection of industrial property.
- PCT(Patent Cooperation Treaty) (1970)- is an international patent law treaty, concluded in 1970. It provides a unified procedure for filing patent applications to protect inventions in each of its contracting states. A patent application filed under the PCT is called an **international application**, or **PCT application**.
- Budapest Treaty (1977)- is an international treaty signed in Budapest, Hungary, on April 28, 1977. It entered into force on August 19, 1980,^[5] and was later amended on September 26, 1980. The treaty is administered by the World Intellectual Property Organization (WIPO).

3.5.2. Copyrights and Related Rights

❖ Historical Evolution of Copyrights

- 15th century: Concept of copyrights originated.
- Need for copyright laws emerged with the invention of printers and copiers.

❖ Printing Revolution in Europe

- 15th and 16th centuries: Printing widely established in Europe.
- Initially, government allowed unrestricted printing, leading to the dissemination of sensitive information.
- Government responded by issuing licenses for printing.

3.5.2. Copyrights and Related Rights

❖ Phases of Copyrights Law in India

- British Raj era: First phase (1847) introduced copyrights, with a mandatory registration requirement.
- Second phase (1914): Indian Copyright Act based on the UK's Imperial Copyright Act (1911).
- Post-independence (1957): Copyright Act enacted, superseding the 1914 Act to align with the Berne Convention (1886).

❖ Post-Independence Amendments

- Copyright Act 1957 amended six times (1983, 1984, 1992, 1994, 1999, 2012).
- Amendments to comply with WIPO Copyright Treaty (WCT) and WIPO Performances and Phonograms Treaty (WPPT) in 1996.
- Digital environment-focused amendments, including penalties for circumvention, rights of management information, liability of internet service providers, statutory licenses for cover versions, and royalties for authors and composers.

3.5.2. Copyrights and Related Rights

❖ Key Copyright Law Aspects in Amendments

- Covering digital environment issues: Circumvention penalties, management information rights, internet service provider liability.
- Introducing statutory licenses for cover versions and broadcasting organizations.
- Ensuring rights to receive royalties for authors, music composers, and exclusive economic and moral rights for performers.
- Equal membership rights in copyright societies for authors and other right owners.
- Exception of copyrights for physically disabled individuals to access any works.

❖ International Involvement

India actively participates in major international Conventions/Treaties:

- Berne Convention (as modified in Paris in 1971).
- Universal Copyright Convention (1951).
- Rome Convention (1961).
- WCT, WPPT (1996).
- TRIPS Agreement (1995)

Summing Up the Key Points

Major Amendments in History of IP Laws

S.No.	Year	Historical Proceedings
Patents		
1.	1856	The Act VI of 1856 on the protection of inventions based on the British Patent Law of 1852.
2.	1859	➤ Rights renamed as 'Exclusive Privileges'. ➤ Time for the priority increased from 6 months to 12 months.
3.	1883	➤ The Patterns and Designs Protection Act ➤ Introduction of novelty in the invention. ➤ A grace period of 6 months for the disclosure of the invention.
4.	1911	➤ Renamed as 'The Indian Patent and Design Act' and brought under the management of 'Controller of Patents'.
5.	1930	➤ Introduction of Patent of Addition. ➤ Government can use the invention if required. ➤ The term of patent protection increased from 14 to 16 years.
6.	1945	➤ Filing of the provisional specification to secure the priority date. ➤ Provision of submitting complete specifications within 9 months.

7.	1949	Dedicated Committee formed under the leadership of Justice Bakshi Tek Chand for reviewing patent system as per the national environment.
8.	1950	➤ A working statement needs to be submitted at the Patent Office. ➤ Endorsement of the Patents with the words 'License of Right' on the application made by the government so that the Controller could grant the license.
9.	1952	➤ Provision of 'Compulsory License' in the areas of food, medicine and insecticide germicide. ➤ Process for producing substance or any invention relating to surgical or curative devices.
10.	1965	After incorporation of the recommendation submitted by the committee formed in 1949, a new bill was introduced in Lok Sabha but was not cleared.

11.	1967	➤ Again submitted to Parliamentary Committee. ➤ 1911 Act remained applicable for Designs.
12.	1970	➤ The Patent Act, 1970 passed by the Parliament Committee.
13.	1972	The Patent Act, 1970 came into force with the introduction of patent rules.
14.	1995	TRIPS Agreement was signed by India and got transition period 1995-2005 to make domestic laws compatible with TRIPS.
15.	1999	➤ Introducing the provisions for receiving the applications for the product patent in the field of pharmaceuticals and agro-chemicals (mail box)*. ➤ Provisions for the grant of EMRs for distribution and sale of pharma products on fulfilment of certain conditions. ➤ Grant of EMR subject to certain conditions. * after the amendments (1999) the product

			<i>patents related to the pharmaceuticals and agro-chemicals were kept on hold for examination till 2005. It is called a mailbox or black box.</i>
	16.	2002	The uniform 20-year term of the patent for all inventions. Disclosure of source and geographical origin of biological material made compulsory. Establishment of Appellate Board. Compulsory License provisions strengthened.
	17.	2003	The Patents Rules, 2003 were introduced.
	18.	2005	Product patent for inventions in all fields of technology including food, drug, chemicals and microorganisms. New forms of known substances excluded in order to prevent the ever-greening of the patent. Introduction of the pre-grant opposition. Introduction of post-grant opposition. Extension of grace period to 12 months.

Copyrights and Related Rights		
19.	1847	The concept of Copyrights in India was introduced. Validity - Lifetime+7 years but not more than 42 years in total.
20.	1914	Copyright Act, 1914 was introduced based on the Imperial Copyright Act, 1911 of UK.
21.	1957	Copyright Act, 1914 was replaced with Copyright Act, 1957 with minor modifications.
22.	1984	Penalty on second and subsequent conviction.
23.	1994	Registration of Copyright Society made mandatory.
24.	2012	To comply with international Treaties for copyrights protection in the digital environment. Right to receive royalties for authors and music composers. Exception of copyrights for physically disabled persons to access any work.
25.	2013	Copyrights Rules, 2013 introduced.

Trademarks		
26.	1940	Trademarks Registry established in India.
27.	1958	The Trade and Merchandise Marks Act, 1958 enacted as per TRIPS Agreement.
28.	1999	Amended to avoid duplicity and ensure securing proprietors' trade and goodwill.
29.	2002	Trademarks Rules introduced.
30.	2010	Amended to comply with Madrid Protocol for international filing. Provision for filing opposition of the registration within 4 months.
31.	2013	Trademarks Rules introduced.
Geographical Indications		
32.	1999	Being a member of the World Trade Organization (TRIPS), GI of goods (Registration and Protection) Act was introduced.
33.	2002	The Geographical Indications of Goods (Registration and Protection) Rules, 2002 was introduced.
34.	2003	The Geographical Indications of Goods (Registration & Protection) Act came into force.

Designs		
35.	1872	Patterns and Designs Protection Act introduced for the protection of new patterns and designs.
36.	1888	Amended as Invention and Design Act, 1888 for the protection of new inventions and designs.
37.	1911	Renamed as The Indian Patent and Design Act.
38.	2000	Design Act, 2000 was introduced; separated from the Indian Patent and Design Act.
39.	2001	Design Rules, 2001 introduced.

Semiconductor Integrated Circuits Layout Design (SICLD)

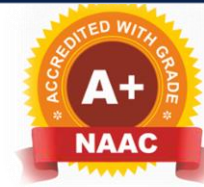
40.	2000	Semiconductor Integrated Circuits Layout Design (SICLD) Act 2000 introduced as a signatory of WTO.
41.	2001	SICLD Rules introduced.

Protection of Plant Varieties and Farmers' Rights (PPV&FR)

42.	1970	The Patent Act, 1970 excluded plants and animals in whole or in any part from patentability (in 1999 amendments).
43.	1991	Enactment of protection of new varieties of plants on <i>sui generis</i> basis on the lines of UPOV.
44.	2001	In line with TRIPS Agreement enactment of PPV&FR Act was introduced.

Biological Diversity		
45.	2002	The Biological Diversity Act, 2002 introduced on the lines of the Convention on Biological Diversity (CBD, 1992).
46.	2003	Establishment of National Biodiversity Authority. Designation of repositories under the Biological Diversity Act.
47.	2004	Biological Diversity Rules introduced.

Source: <http://www.ipindia.nic.in/history-of-indian-patent-system.htm>



3(B) CATEGORIES OF INTELLECTUAL PROPERTY

- Intellectual Property (IP) is a vast field comprising of technology-led inventions, work of artisans, novel Industrial Designs, unique brands of commercial items, and Traditional Knowledge being practiced continuously over centuries for the production of goods (carpets, textiles, food products, etc.)
- It has been divided into various categories such as
 1. Patents
 2. Copyright and Related Rights
 3. Trademark, Trade Secrets
 4. Industrial Designs
 5. Geographical Indications
 6. Semiconductor Integrated Circuits Layout Designs.

3.2.1 Patents

- A patent is an exclusive right granted for an innovation that provides a new way of doing something or offers a new technical solution to a problem.
- The exclusive right legally protects the invention from being copied or reproduced by others.
- Where as, the invention must be disclosed in an application in a manner sufficiently clear and complete to enable it to be replicated by a person with an ordinary level of skill in the relevant field..

KEY POINT

Invention is the creation of a new idea or concept.

Innovation is the process of translating an invention into commercial entity or widespread use.

3.2.2 Conditions for Obtaining a Patent Protection

- As per the Patents Act, 1970 in Section 2(1)(j)
- There is a set criterion which must be fulfilled for a product or a process to qualify for the grant of a patent. The criterion includes:
 1. **Novelty** – It should not be a part of ‘**State of the Art**’.

The innovation claimed in the patent application is new and not known to anybody in the world. The innovation is

- a) Not in the knowledge of the public,
- b) Not published anywhere through any means of publication and
- c) Not be claimed in any other specification by any other applicant.

3.2.2 Conditions for Obtaining a Patent Protection [Contd..]

2. **Inventive step** - Not obvious to the person (s) skilled in the art.

The innovation is

- a) Technical advancement over the existing knowledge,
- b) Possesses economic significance and,
- c) Not obvious to a person skilled in the concerned subject.

3. **Capable of industrial application** - For the benefit of society. The invention is capable of being made or used in any industry.

3.2.3 To Patent or Not to Patent an Invention

1. Once an invention has been developed, the inventor has to decide whether to deed the invention for personal benefits by the statutory laws of the country or put it in the public domain.
2. Only a very few of inventions are placed in the public domain without claiming any benefits.
3. In such case, anybody can deed the innovation for commercial or societal benefit without paying any money to the inventor.
4. If the owner of an invention wishes to seek monetary gains, he/she can choose to opt either of the two options, i.e. **Patenting or Trade Secret**

3.2.3 To Patent or Not to Patent an Invention [Contd..]

- ❖ If the inventor is absolutely sure of maintaining the secrecy of invention for a very long period (maybe 100 years or more) and the probability of reverse engineering of the technology is nil or very low, then the “**Trade Secret**” category is preferred.
- ❖ If the invention has a short life span or can be kept secret only for a small period of time (a couple of years or so) or the probability of reverse engineering is high once the invention is in the public domain, then the “**Patent**” category is preferred.

3.2.3 To Patent or Not to Patent an Invention [Contd..]

Some of the Scientific Inventions Examples

Trade Secret:

- 1.Coca-Cola Formula:** The formula for Coca-Cola is one of the most famous trade secrets in the world. The specific recipe and ingredients are kept confidential to maintain a competitive advantage in the beverage market.
- 2.Google's Search Algorithm:** Google's search algorithm is a complex and valuable trade secret. The exact details of how the algorithm works are not disclosed to the public, giving Google a competitive edge in the search engine industry.
- 3.KFC's Original Recipe:** The original recipe of Kentucky Fried Chicken (KFC) is a closely guarded trade secret. The blend of herbs and spices used to season the chicken is known only to a select few within the company.

3.2.3 To Patent or Not to Patent an Invention [Contd..]

Some of the Scientific Inventions Examples

2. Patent:

- 1. Penicillin (Alexander Fleming):** Fleming's discovery of penicillin, the first widely used antibiotic, was patented in 1945. The patent provided exclusive rights for the production of penicillin, allowing for controlled manufacturing and distribution.
- 2. Tesla's Electric Power System (Nikola Tesla):** Tesla held numerous patents related to alternating current (AC) electricity, electric power systems, and wireless communication. His inventions and innovations laid the foundation for modern electrical power distribution.
- 3. CRISPR-Cas9 Gene Editing Technology:** The revolutionary gene-editing technology CRISPR-Cas9, developed by Jennifer Doudna and Emmanuelle Charpentier, is protected by numerous patents. This technology allows precise modification of genes and has wide-ranging applications in medicine, agriculture, and beyond.

1. Exclusive Rights of a Patent Owner:

1. A patent owner holds the exclusive rights to decide the usage of the patented invention.
2. These rights encompass the commercial making, using, distributing, importing, or selling of the invention.
3. Others cannot engage in these activities without obtaining the patent owner's explicit consent.

2. Nature of Patent Rights: Negative Rights:

1. Patent rights are essentially negative rights, signifying the owner's authority to restrict others from utilizing the patented invention without prior permission.

3. Enforcement and Legal Recourse:

1. If unauthorized use or infringement occurs, the patent owner can take legal action.
2. Legal options include filing a lawsuit to stop the illegal use of the patent.
3. The patent holder may seek compensation for damages resulting from the unauthorized use, ensuring protection and value for their intellectual property.

3.2.5 Enforcement of Patent Rights

- Enforcement is the process of ensuring compliance with laws, regulations, rules, standards and social norms. Patent rights are usually enforced by the judicial courts.
- The Court of Law has the authority to stop patent infringement. However, the main responsibility for monitoring, identifying and taking action against infringers of a patent lies with the patent owner.

3.2.6 Inventions Eligible for Patenting

Patents may be granted for inventions/technologies in any field, ranging from a paper clip or ballpoint pen to a nanotechnology chip or a Harvard mouse (mouse with cancer genes).

3.2.6 Inventions Eligible for Patenting [Cont..]

Common Misconception:

- General Belief: Patents are only awarded for major scientific breakthroughs. But in Reality, the majority of patents are granted for incremental improvements over existing inventions.

In our daily life, we use many patented items, such as toothbrush, toothpaste, shoes, pen, eyeglasses, textiles, mobile phones, wrist watch, bicycle, scooter, car, television, cold drinks, beverages and many more. It is common that many products contain several inventions (patents) e.g. the laptop computer involves hundreds of inventions working together. Similarly, cars, mobile phones and televisions have many patented components.

3.2.7 Non-Patentable Matters

In the *Patent Act, 1970*, there are some exclusions (product and processes) that cannot be patented, such as:

1. **Invention contrary to public morality** - a method for human cloning, a method for gambling.
2. **Mere discovery** - finding a new micro-organism occurring freely in nature, laws of gravity.
3. **Mere discovery of a new form of a known substance** - use of aspirin for heart treatment. Aspirin was patented for reducing fever and mild pains.
4. **Frivolous invention** - dough supplemented with herbs, merely changing the taste of the dough, 100 years calendar, bus timetable.
5. **Arrangement or rearrangement** - an umbrella fitted with a fan, a torch attached to a bucket.
6. **Inventions falling within Section 20(1) of the Atomic Energy Act, 1962** - inventions relating to compounds of Uranium, Beryllium, Thorium, Plutonium, Radium, Graphite, Lithium and more as notified by the Central Government from time to time.

In the *Patent Act, 1970*, there are some exclusions (product and processes) that cannot be patented, such as:

7. **Literary, dramatic, musical, artistic work** - books, sculptures, drawings, paintings, computer programmes, mathematical calculations, online chatting method, method of teaching, method of learning a language as they are the subject matter of Copyright Act, 1957.
8. **Topography of integrated circuits** - protection of layout designs of integrated circuits is provided separately under the Semiconductor Integrated Circuit Layout Designs Act, 2000.
9. **Plants and animals** - plants and animals in whole or any part including seeds, varieties and species and essentially biological processes for the production or propagation of plants and animals are excluded from the scope of protection under patents.
10. **Traditional knowledge** - an invention which in effect is traditional knowledge or which is an aggregation or duplication of known properties of traditionally known components are also excluded.

3.2.8 Patent Infringements

- Once the patent is granted to the applicant, he owns the right to use the invention in any capacity.
- If any other uses the invention without the prior permission of the owner, that act will be considered an infringement of the invention.

Infringements can be classified into two categories:

1. **Direct Infringement** - when a product is substantially close to any patented product or in a case where the marketing or commercial use of the invention is carried out without the permission of the owner of the invention.
2. **Indirect Infringement** - When some amount of deceit or accidental infringement happens without any intention of infringement.
 - If such an unlawful act has been committed, the patentee holds the right to sue the infringer through judicial intervention.

3.2.8 Patent Infringements [Contd..]

Following reliefs are made available to the patentee:

- Interlocutory/interim injunction.
- Damages or accounts of profits.
- Permanent injunction.

It is to note that “Central government always holds the rights (Section 100 of the Patent Act, 1970, Rule 32 of the Patent Rules, 2003) to use the invention in the case of national emergency or other circumstances of extreme urgency after notifying the owner.”

3.2.9 Avoid Public Disclosure of an Invention before Patenting

- An invention that has been either published or publicly displayed cannot be patented, as the claimed invention will lose the “Novelty” criterion.
- Certain circumstances, the Patents Act provides a grace period of 12 months for filing a patent application from the date of its publication in a journal or presentation in a reputed scientific society or exhibition.
- Disclosure of an invention before filing a patent application is unavoidable, it is advisable to sign a Non-Disclosure Agreement (NDA) or any other confidential agreement to safeguard the interest.

Module-3

Introduction To Intellectual Property: Role of IP in the Economic and Cultural Development of the Society, IP Governance, IP as a Global Indicator of Innovation, Origin of IP, History of IP in India. Major Amendments in IP Laws and Acts in India.

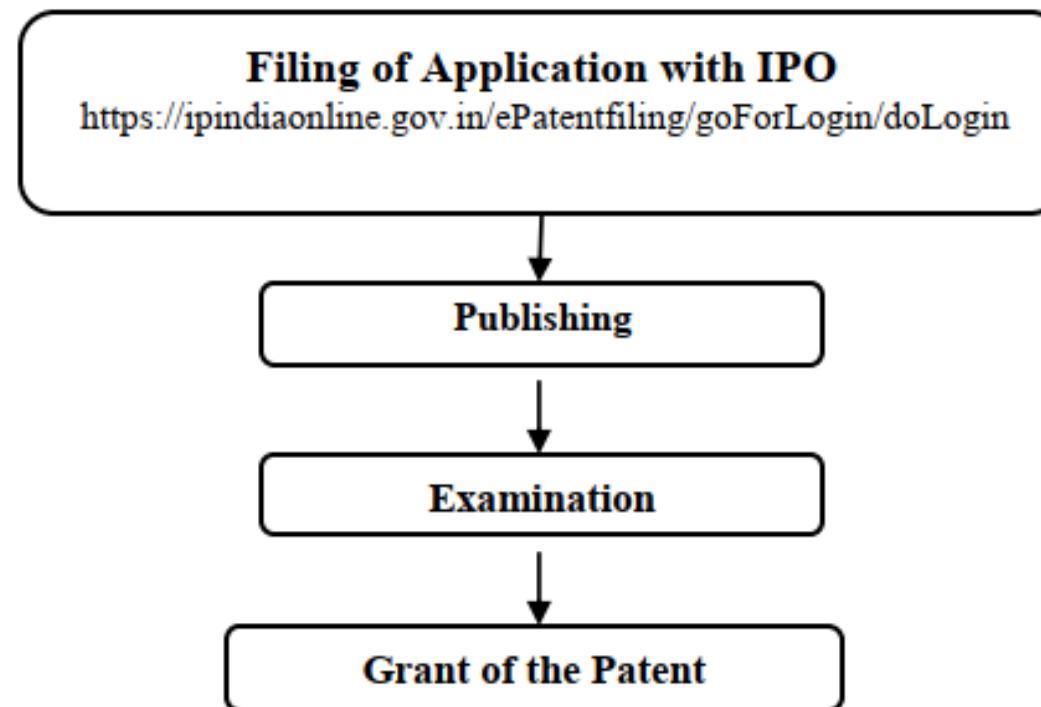
Patents: Conditions for Obtaining a Patent Protection, To Patent or Not to Patent an Invention. Rights Associated with Patents. Enforcement of Patent Rights. Inventions Eligible for Patenting. Non-Patentable Matters. Patent Infringements. Avoid Public Disclosure of an Invention before Patenting.

Process of Patenting. Prior Art Search. Choice of Application to be Filed. Patent Application Forms. Jurisdiction of Filing Patent Application. Publication. Pre-grant Opposition. Examination. Grant of a Patent. Validity of Patent Protection. Post-grant Opposition. Commercialization of a Patent. Need for a Patent Attorney/Agent. Can a Worldwide Patent be Obtained. Do I Need First to File a Patent in India. Patent Related Forms. Fee Structure. Types of Patent Applications. Commonly Used Terms in Patenting. National Bodies Dealing with Patent Affairs. Utility Models.

3.2.10 Process of Patenting

- In India, the process of grant of a patent is a lengthy procedure that may take anywhere 3-4 years or more. The major steps involved in this process are listed in figure 2.1.

Figure 2.1: Flow chart of major steps involved in the grant of a patent.



Process of Patenting involves

1. Prior Art Search
2. Choice of Application to be Filed
3. Patent Application Forms
4. Jurisdiction of Filing Patent Application
5. Publication
6. Pre-grant Opposition
7. Examination
8. Grant of a Patent

Process of Patenting involves

1. Prior Art Search:

- Before filing a patent, it is crucial to conduct a thorough prior art search to ensure the novelty of the invention.
- This search involves examining patent documents, scientific literature, and other public domain sources to determine if similar inventions already exist.
- Two main categories of databases used for prior art searches are Patents Databases and Non-Patent Literature (NPL), encompassing scientific journals, reports, magazines, and other non-patent documents

Process of Patenting involves

Patents' Databases

- Indian Patent Advanced Search System
(InPASS- <http://ipindiaservices.gov.in/publicsearch/>).
- Patentscope(WIPO- <https://www.wipo.int/patentscope/en/>).
- Espacenet(EU- <https://worldwide.espacenet.com/patent/>).
- USPTO(USA- <https://www.uspto.gov/>).
- Google Patents Advanced Search
(<https://patents.google.com/advanced>).
- Orbit Intelligence
(<https://www.questel.com/business-intelligence-software/orbit-intelligence/>).
- Derwent Innovation
(<https://clarivate.com/derwent/solutions/derwent-innovation/>).
- PROQUEST
(<https://about.proquest.com/search/?searchKeyword=patent+>).

Unpaid

Paid

Non-Patent Literature (NPL)

- Scholarly publications: Handbooks, Textbooks, Withdrawn Patents, Encyclopedias, Journals (IEEE, Research Gate, Springer, Wiley Online Library, etc.), Dissertations, NCBI's PubMed, Conference Proceedings, Technical Reports, Public Conferences, etc.
- Industry/trade publications: Industry reviews and public disclosures (Social media, YouTube, Books, Magazines, Datasheets, Blueprints, etc.).
- Others: Newspapers, Websites, Technology blogs, Researchers' websites, etc.

Process of Patenting involves

2. Choice of Application to be Filed

Once a decision has been made to patent the invention, the next step is, what kind of application needs to be filed i.e. provisional patent application or complete (Final) patent application - generally, the provisional patent application is preferred for the following reasons

- It is cheaper, takes less time, and involves fewer formalities.
- Any improvements made in the invention after the filing of the provisional application can be included in the final application.
- A provisional application allows you to secure a priority date for the patent applied.

Note: It is mandatory to file the complete patent application within one year of the filing of the provisional application otherwise, the application stands rejected

3. Patent Application Forms

As per the Patent Act, 1970 (Section 39) and the Patents Rules, 2003 (Rule 7, 54, 135 and sub-rule (1) of rule 20, the application for the grant of patent is filed using Form-1 (Fig. 2.2) and Form-2 (Fig. 2.3). The information sought in Form-1 is general in nature i.e.

Title of Application, Names of Applicant(s) and Inventor(s), Type of Application (Ordinary, Convention, PCT-NP (PCT- National Phase), Divisional, Patent of Addition, etc.). Whereas Form-2 seeks technical information and whether to file the provisional application or complete the application. For Provisional Application, only Description of the Invention and the Abstract is to be furnished. Whereas, Complete Application requires Description of the Invention, Abstract, Claims and the manner in which invention has to be performed.

3. Patent Application Forms [Contd..]

The 'Claims' of the patent are a very crucial part of the specifications as they define the actual boundary of the invention. 'Claims' specify what is actually claimed by the invention and what is being sought to be protected. It clearly describes what the patent does and does not cover.

Claims can be classified into two types

- a) Independent Claims (stand alone claim) and
- b) Dependent Claims (dependent on independent claim).

Visit Link to refer formats of FORM 1 and FORM 2 for filing the patent application

https://ipindia.gov.in/writereaddata/Portal/IPORule/1_10_1_patents-amendments-rules-2005.pdf

4. Jurisdiction of Filing Patent Application

India has four offices for filing patent applications (Table 2.1). The applications can be filed only in one of the offices based on the applicant's residence or domicile or place of business or origin of the invention. These are termed as jurisdictions to file patents.

Process of Patenting involves

Table 2.1: Jurisdiction to file a patent in India.

Region	States	Address
Northern	Haryana, Himachal Pradesh, Punjab, Rajasthan, Uttar Pradesh, Uttarakhand, Delhi and the Union Territory of Chandigarh, Jammu and Kashmir and Ladakh.	Intellectual Property Office Building Plot No. 32, Sector 14, Dwarka, New Delhi-110078 Phone: 011-28032491 Fax: 011-28034301 Email: delhi-patent@nic.in
Southern	Andhra Pradesh, Karnataka, Kerala, Tamil Nadu, Telangana and the Union Territories of Pondicherry and Lakshadweep	patent Office Intellectual Property Building G.S.T. Road, Guindy, Chennai-600032 Phone: 044-22505242 Fax: 044-22502066 Email: chennai-patent@nic.in
Western	Maharashtra, Gujarat, Madhya Pradesh, Goa and Chhattisgarh and the Union Territories of Daman and Diu & Dadra and Nagar Haveli	BoudhikSampada Bhawan, Antop Hill, S. M. Road, Mumbai - 400 037. Phone: 022- 24153651, 24148165 Fax: 022-24130387 Email: mumbai-patent@nic.in

Rest of India	Remaining States	Intellectual Property Office Building, CP-2 Sector V, Salt Lake City Kolkata-700091 Phone: 033-23679101, 033-23671987 Fax: 033-23671988 Email: kolkata-patent@nic.in
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Source: <http://www.ipindia.nic.in/jurisdiction-of-patent-offices.htm>

Process of Patenting involves

5. Publication –

- Once the patent application has been filed at the Regional Patent Office, the patent application is kept secret for 18 months in the Patent Office.
- After the expiry of 18 months (from the date of filing of the application or the priority claimed date, whichever is earlier), the application is published in the Official Journal of Patent Office

<https://www.ipindia.gov.in/journal-patents.htm>

- The purpose of publishing the application is to inform the public about the invention. The publication of an application is a mandatory step.

Process of Patenting involves

6. Pre-grant Opposition –

- If anybody has an objection to the invention claimed in the patent application, he can challenge the application by approaching the Controller of Patents within 6 months from the date of publication. It is termed as Pre-grant Opposition.
- Depending on the outcome of the case, the patent application may be rejected or recommended for the next step, i.e. patent examination.
- Patent application is kept secret for 18 months, but under special circumstances this period can be reduced when the patentee/applicant plans to sell or license the patent or seek an investor).
- For the above case, the applicant has to fill a Form-9 and submit it to the Controller General.

Process of Patenting involves

7. Examination –

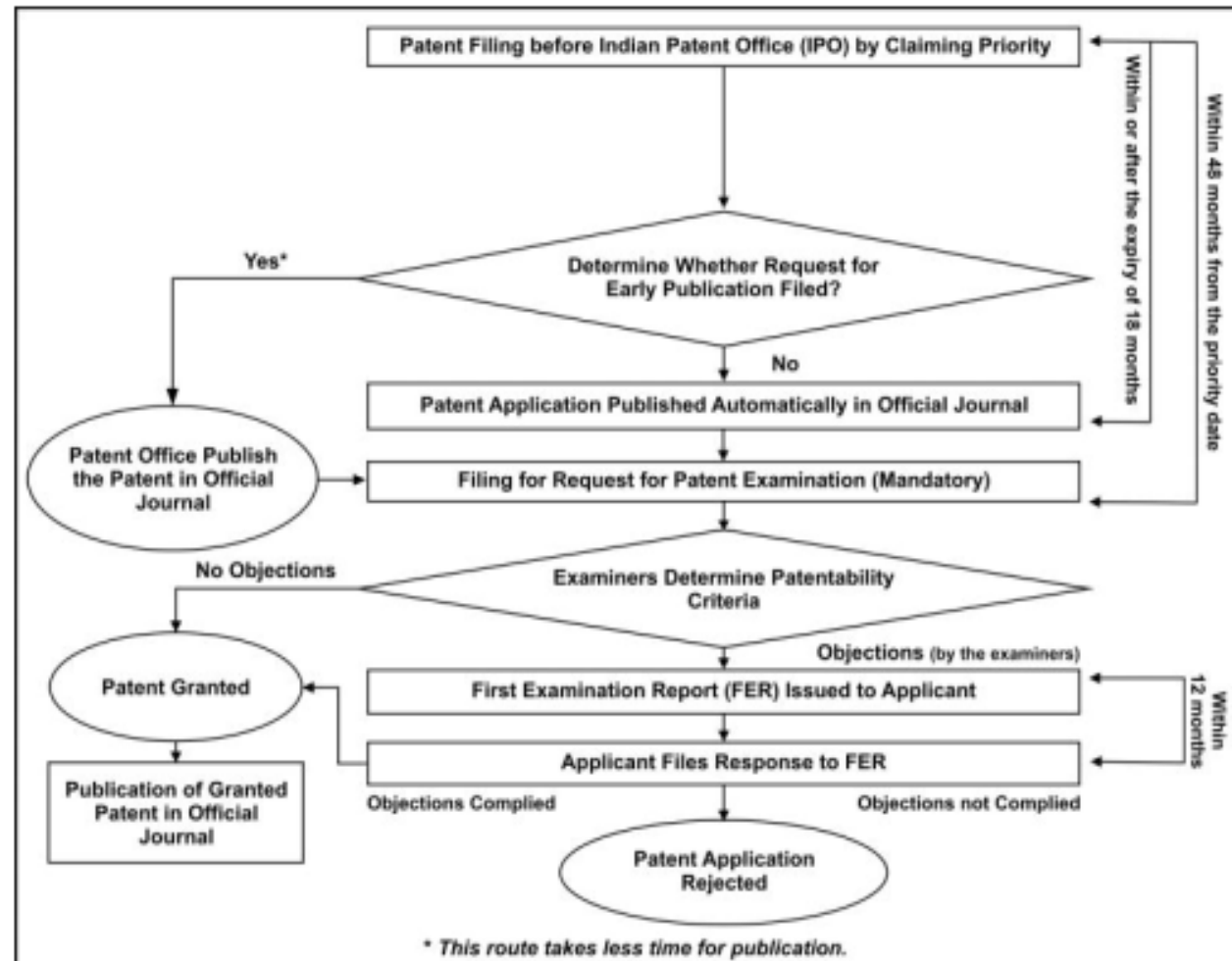
- Patent examination is a critical step in the process of grant of a patent. All the important criteria (novel, inventive step, etc.) are scrutinized by the professionals depending on the content of the invention.
- Usually, the examiner raises certain queries/doubts which need to be addressed by the inventors. Once the examiner is satisfied with the answers received from the inventors, the application is recommended for the grant of a patent.
- If the Patent Application is not examined under such case the applicant or his representative has to make a request for examination of the patent by filing Form-18A and submitting the same within 48 months from the date of filing of the application

Process of Patenting involves

8. Grant of a Patent –

- After fulfilling all the requirements for the grant of a patent, including all objections/queries raised by the Patent Examiner and the public at large, the patent is granted to the applicant.
- The granted patent is published in the Official Journal of the Patent Office.
- This journal is published every Friday and contains information related to patent applications published under section (u/s) 11A, post-grant publication, restoration of patent, notifications, list of non-working patents and public notices issued by the Patent Office.

Figure 2.4: Flowchart for the process of filing a patent application.



Source: <https://www.invntree.com/> (slightly modified)

9. Validity of Patent Protection –

- The patent protection is granted to an applicant for a limited period of 20 years starting from the date of filing of the application.
- Once a patent is granted for an invention in India, the next vital step is to ensure that it is renewed annually by paying Patent Renewal Fee as per Section 53, Rule 80 of the Indian Patents Act, till the expiry of the patent grant period.
- Non-payment of Patent Renewal Fee might result in the cancellation of the patent.

Process of Patenting involves

10. Commercialization of a Patent –

- The patent owner may grant permission to an individual/organization/industry to make, use, and sell his patented invention.
- A patent owner may grant a license to a third party for the reasons mentioned below:
 - ✓ *The patent owner may not have the necessary manufacturing facilities.*
 - ✓ *The manufacturing facility is not able to meet the market demand.*
 - ✓ *The patent owner wishes to concentrate on one geographic market; for other geographical markets, he may choose to license the patent rights.*

Process of Patenting involves

10. Commercialization of a Patent – [Contd..]

- Only the patentee has the right to licence or deal with the patent for any deliberations
- The patentee is required to furnish information (Form-27), on an annual basis relating to the commercialization/selling of the patent. It is called as “Working/Licensing of the Patent”.
- The licensing of a patent can be Exclusive or Non-exclusive.
- In an **Exclusive Licence**, the patent is sold to only one individual/organization for a fixed time period. During this time period, no other person or entity can exploit (Deed) the relevant IP except the named licensee.
- In **Non-Exclusive Licence**, a patentee can sell his patent rights to as many individuals/parties as he likes.

11. Need for a Patent Attorney/Agent

- Applicants can prepare their patent applications and file them without assistance from a patent attorney.
- However, given the complexity of patent documents, it is advisable to seek legal assistance from a patent attorney/agent when drafting a patent application.
- Furthermore, the legislation of many countries requires that an applicant, whose ordinary residence or principal place of business is outside the country, be represented by an attorney or agent qualified in the country (which usually means an agent or attorney who resides and practices in that country).

Process of Patenting involves

12. Can a Worldwide Patent be Obtained

- There is no such term as “**Universal Patent**” or “**World Patent**” or “**International Patent**” as the patent rights are territorial. An application for a patent must be filed with a Patent Office of the country in which one wishes to seek patent protection.
- But, this option becomes laborious, cumbersome, **time-consuming and expensive** if one wishes to file a patent application in many countries.
- To ease out this issue, many **Regional Offices** have been established which receive patent applications on behalf of a group of nations e.g. **European Patent Office** and **African Regional Intellectual Property Organization**.
- A single application is sufficient to cover many nations that are members of a particular regional office/organization.
- However, if one wishes to seek patent protection in several countries worldwide, it is preferred to file an international patent under **the Patent Cooperation Treaty (PCT)**.
- The only condition is that the applicant's country should be a member of PCT.
- **India**, along with over **190 nations**, is a member of PCT.

Process of Patenting involves

13. Do I Need First to File a Patent in India

- In general, Indian residents are required to file the patent application first in India. Subsequently, they may file for patent protection in other countries.
- However, this approval can be waived off under the following circumstances:
 - ❑ The applicant is not an Indian resident.
 - ❑ If 6 weeks have expired since the patent application was filed in India by an Indian resident.
 - ❑ If two or more inventors are working on an invention in a foreign country and one of the inventors is an Indian resident.
 - ❑ The invention does not have a potential market in India and hence does not wish to file the patent in India. In such a scenario, the Indian resident has to seek Foreign Filing Permission (FFP) from an Indian Patent Office.
 - ❑ In case of international collaboration, if one part of the invention originated in India and the inventor is an Indian resident, he has to seek permission to file the patent outside India.
 - ❑ If the invention is related to defense or atomic energy or utility model, the inventor/s needs to seek permission from the Indian Patent Office because inventions related to these domains are not the subject matter of patentability in India.

Process of Patenting involves

14. Patent Related Forms

- There are over 30 patent-related forms.
- Some of them are mentioned aside.

Table 2.2: List of important patent application forms.

Form No.	Title of Form
1	Application for a grant of a patent
2	Provisional/Complete specifications
7	Notice of opposition on grant of a patent
7A	For filing a representation opposing grant of a patent
17	Application for compulsory license
18	Request for examination of the application for patent
21	Request for termination of compulsory license
22	Application for registration of patent agent
27	Statement regarding the working of the patented invention on a commercial scale in India
30	Miscellaneous form to be used when no other form is prescribed

Source: http://www.ipindia.nic.in/writereaddata/Portal/IPORule/1_70_1_The-Patents-Rules-2003-Updated-till-23-June-2017.pdf

15. Fee Structure

As per the *patent Act, 1970 and The Patents Rules (1972)*, the requisite fee has been specified based on the type of form/s to be submitted to the Office (Table 2.3). Electronically filed applications are 10% cheaper than physical filing.

Table 2.3: Fee for obtaining a patent via electronic filing.

Item	Natural person/ startup (₹)	Small entity alone or with a natural person /startup (₹)	Others alone or with natural person/ startup/ small entity (₹)
Provisional/Complete Specifications	1,600	4,000	8,000
Request for Early Publication	2,500	6,250	12,500
Request for Examination	4,000	10,000	20,000
Express Request For Examination	5,600	14,000	28,000
Renewal Fees (Annually)			
3 rd to 6 th Year	800	2,000	4,000
6 th to 10 th Year	2,400	6,000	12,000
11 th to 15 th Year	4,800	12,000	24,000
16 th to 20 th year	8,000	20,000	40,000

Source: http://www.ipindia.nic.in/writereaddata/Portal/IPOFormUpload/1_11_1/Fees.pdf

16. Types of Patent Applications

1. **Provisional Application** - A patent application filed when the invention is not fully finalized and some part of the invention is still under experimentation. Such type of application helps to obtain the priority date for the invention.
2. **Ordinary Application** - A patent application filed with complete specifications and claims but without claiming any priority date.
3. **PCT Application** - An international application filed in accordance with PCT. A single application can be filed to seek patent protection and claim priority in all the member countries of PCT
4. **Divisional Application** - When an application claims more than one invention, the applicant on his own or to meet the official objection on the ground of plurality may divide the application and file two or more applications. This application divided out of the parent one is known as a Divisional Application. The priority date for all the divisional applications will be the same as that of the main (the Parent) Application (Ante-dating).

16. Types of Patent Applications [Contd..]

- 5. Patent of Addition Application** - When an invention is a slight modification of the earlier invention for which the patentee has already applied for or has obtained a patent, the applicant can go for 'Patent of Addition', if the modification in the invention is new. Benefit - There is no need to pay a separate renewal fee for the Patent of Addition, during the term of the main patent. It expires along with the main patent.
- 6. Convention Application** - If a patent application has been filed in the Indian Patent Office, and the applicant wishes to file the same invention in the one or more Convention countries (e.g. Paris Convention) by claiming the same priority date on which application was filed in India, such an application is known as Convention Application. The applicant has to file Convention Application within 12 months from the date of filing in India to claim the same priority date.

17. Commonly Used Terms in Patenting

Table 2.4: Commonly used terms in the domain of patenting.

S. No.	Term	Definition
1.	Inventor	Creator of an invention
2.	Applicant	Organization/individual/industry that files a patent application or applies for a patent
3.	Patentee	A person/organization who owns the patent (granted)
4.	Licensee	Organization/individual/industry which obtains a license of the patent from the Patentee for commercialization purpose
5.	Assignee	A person in whose name patent has been assigned legally
6.	In force	The applicant is paying the annuity (renewal fee) for the patent to keep it alive (Active Patent)
7.	Working of a Patent	The selling of a patent to an individual/party for commercial exploitation is called as working of a patent
8.	Patent Specification	Patent specification is a written description of the invention and the way of representation and process of making and using the same
9.	Priority Right	A 'Priority Right' or 'Right of Priority' is a time-limited right, activated by the first filing of an application for a patent

10.	Priority Date	The claimed date on which the first application for the invention is filed
11.	Patent Claims	Claims can be defined as the scope of the protection conferred by a patent, or the protection sought in a patent application. The purpose of the claims is to define which subject matter is protected by the patent
12.	National Phase Application	An application filed to obtain patents in different countries simultaneously based on a single International/PCT application
13.	Patent Revocation	The revocation means cancellation of the patent due to certain reasons, such as lack of patentability or wrongfully obtaining a patent
14.	Restoration of Patent	Once a patent has been ceased (e.g. due to non-payment of the fee) it can be restored within a permitted period by paying the requisite fee

18. National Bodies Dealing with Patent Affairs

There are many departments/organizations/bodies dealing with various aspects of patents, namely,

- The Indian Patent Office (IPO),
- Department for Promotion for Industry and Internal Trade (DPIIT);
- Technology Information, Forecasting and Assessment Council (TIFAC)
- National Research Development Corporation (NRDC).

19. Utility Models

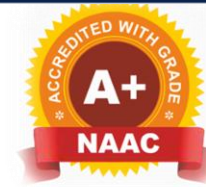
- In many cases, a **new invention** involves an incremental improvement over the existing products, but this technical improvement is **not sufficient enough** to pass the criterion of Novelty and Non obviousness set aside for the grant of a patent.
- Such small innovations can still be legally protected in some countries and termed as ‘**Utility Models**’ or ‘**Petty Patents**’ or ‘**Innovation Patents**’.
- In such case, the criterion of **Novelty and Non-obviousness** are **diluted** or relinquished. But the requirement of industrial application or utility is the same as that for patents.
- Utility Model is a helpful tool for **Micro, Small and Medium Enterprises (MSME)** since the grant of a Utility Model is usually less rigorous process and involves minimal cost.
- The life of the Utility Model is less as compared to the patents.
- It varies from **7-15 years** in different countries.

19. Utility Models

- Nearly 80 countries, including France, Germany, Japan, South Korea, China, Finland, Russian Federation and Spain, provide protection for Utility Models under their IPR laws. India till date does not recognize utility patents.
- If these small patents are recognized under IP protection in India, it will catapult the number of patents (filed and granted) on annual basis.



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