

Introduction To Intellectual Property

Module - 3

- **Intellectual Property (IP)** refers to intangible assets created by human intelligence, creativity, or imagination, which have commercial value. There are several types of IP, and each protects different kinds of inventions or creations:

1.Trademarks: Protect symbols, logos, or signs that distinguish one company's goods or services from another's.

1.Example: The Nike "swoosh" logo is a trademark that identifies Nike products.

2.Patents: Provide legal protection for inventions, granting the inventor exclusive rights to use, sell, or manufacture the invention for a limited time and in a specific geographic area.

1.Example: A patent for a new type of engine that improves fuel efficiency.

3.Industrial Designs: Protect the unique visual design or shape of a product, preventing others from copying it.

1.Example: The design of an iPhone's sleek, rounded edges could be protected as an industrial design.

4. Copyrights: Protect original works of authorship like books, music, software, or artworks, giving the creator exclusive rights to reproduce and distribute their work.

1.Example: A software developer's code for a new app is protected by copyright.

- Unlike other forms of IP, **copyright** usually does not require registration, while patents, trademarks, and industrial designs must be registered with a government body for legal recognition and protection.

What is Intellectual Property (IP)

- Intellectual Property (IP) is a special category of property created by human intellect (mind) in the fields of arts, literature, science, trade, etc.
- IP is intangible (i.e. invisible and indivisible) differs from the tangible property, such as land, house, gold and car.

What is Intellectual Property (IP) Rights?

- The rights are given to the creator/inventor in exchange for revealing the process of creation/invention in the public domain.
- The inventor is conferred with the special rights to use, sell, distribute, offering for sale and restricting others from using the invention without his prior permission

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

- The economic and social development of a society is largely dependent on creativity.
- The protection provided by the IPR to the creators/innovators for encouraging them to create more and motivates others to create new and novel things.
- IPR may have a negative impact on the progress of society.
- For example, compliance with the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement has affected the farming community as they are unable to store seeds for the next crop.
- To circumvent the negative impact of IPR, certain laws limitations associated with IPR have been enacted to maintain a balance between the interests of the creators/inventors and the community.

- For example, farmers' rights under the **Protection of Plant Varieties and Farmers' Rights (PVP&FR) Act**, 2001 entitles them to many privileges, such as *Rights on seeds* provides rights to the farmers to save seeds, use seeds and share, exchange or sell seeds to other farmers.
- The use of copyrighted material for education and religious ceremonies is exempted from the operation of the rights granted in the Copyright Act.
- A patent can be revoked in favor of compulsory licensing by the government during an emergency or a natural calamity.
- If an invention/creation is **not in the interest of society**, it is **not registered** by the government for grant of any rights associated with IP.
 - For example, cloning of human embryos is banned for IP protection.

- India is enriched with massive biodiversity and genetic resources and their use is embodied in what is referred to as Traditional Knowledge (TK).
- The concern is to protect TK and genetic resources, which are rapidly coming under the governance of sometimes conflicting IPR policies.

IP Governance

- In India, many organizations/agencies deal with various aspects of IP.
- The governance of all categories of IP, except the Plant Variety and Farmers' Rights Act, is carried out by the Department for Promotion of Industry & Internal Trade (DPIIT) under the aegis of Ministry of Commerce and Industry, Gol.
- The government to promote patent-ecosystem (patent awareness, patent filing and patent commercialization) in India Technology Information Forecasting and Assessment Council (TIFAC), National Research Development Corporation (NRDC) and Cell for IPR Promotion and Management (CIPAM), etc.

- In order to create a hassle-free exchange of IP related activities amongst all the nations, it is imperative to have minimum standards of rules and regulations pertaining to all aspects of IP including rights, empowerment, exceptions, etc.
- The **United Nations (UN)** has established an organization called the **World Intellectual Property Organization (WIPO)**.
 - This agency is at the forefront of imparting knowledge about IP and governs international filing and registration of IP through various Conventions and Treaties like Paris Conventions, Patent Cooperation Treaty (PCT), Rome Convention, Berne Convention, etc.

IP as a Global Indicator of Innovation

- IP, especially patents, is considered as one of the important cogs in assessing the innovation index of a nation.
- The global ranking organizations always have IP or a subset of IP as one of the parameters for understanding and grading the Science, Technology and Innovation (STI) ecosystem of a nation.
 - For example, the Scimago (publically available online portal which ranks journals and countries based on the data taken from Scopus) 2020 report ranked India at 4th position in the parameter of a number of Research Publications', and 50th position in the parameter of Intellectual Property Rights'
- The global ranking can be improved by sensitizing the teaching and scientific communities about the importance of IP and creating infrastructure for the same in the institutes of higher learning.

Origin of IP

- There is no official record of the origin of IP, IP was being practised around 500 Before the Common Era (BCE) in Sybaris, a state of Greece.
 - The natives of Sybaris were granted a year's protection for using their intellect to create —any new improvement in luxury.||
- A practical and pragmatic approach for IP governance started taking shape in medieval Europe.
- In 1623, Britain passed an Intellectual Property Legislation which entitled guilds (association of artisans or merchants) to create innovations and bring them to market for trade purposes. This legislation brought a lot of resentment amongst the public.
- Statute of Monopolies', which gave the rights to the original creator/inventor for 14 years
- Statute of Anne', was passed by the British parliament in 1710.
- By the end of the 18th century and the beginning of the 19th century, almost every country started laying down **IP legislation to protect** their novel inventions and creations.

History of IP in India

- Patents

Patents (The Patents Act, 1970) :-

For granting patent following conditions are essential :-

- Novelty**
- Non-obviousness**
- Utility**
- Enablement**

Prior Art, Public Domain, Public Use :-

.....Prior art something which is already known to mankind. Anything which is already known in general or to specific group of person, whether in the same country or abroad, cannot be patented

- 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
- 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.
- 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
- With the introduction of The Indian Patents and Designs Act, 1911' (Act II of 1911 for **inventions and designs**).

Many amendments were introduced:

- Use of invention by the government.
- Patent of Addition.
- Enhancing the term of the patent from 14 years to 16 years.
- 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.
- The committee(chaired by a renowned Justice Bakshi Tek Chand (retired Judge of Lahore High Court)) 1949, submitted of recommendations, including:
 - Misuse of patents rights needs to be prevented.
 - 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.
 - Amendments in Sections 22, 23 and 23A of the Patent and Design Act, 1911 on the lines of the UK Patent Act.

- **Copyrights and Related Rights:**

- The concept of copyrights started way back in the 15th century.
- These rights starts only after invention of printers and copiers.
- The government had allowed without any restrictions for printing this leads to spreading government informations.
- 3 phases in India:
 - 1st phase, the concept of copyrights was introduced in 1847 through an enactment during the East India Company's regime.
 - 2nd phase enacted the Copyright Act of 1914 based on the Imperial Copyright Act (1911) of the UK
 - 3rd The Copyright Act 1957 was enacted, superseding the Indian Copyright Act, 1914, in order to suit the provisions of the Berne Convention (1886).

- **Trademarks**

- The first statutory law related to Trademarks (TM) in India was the Trade Marks Act, 1940, which was carved out from the Trade Marks Act, 1938 of the UK.
- The previous act rechristened as Trade and Merchandise Marks Act, 1958.
- Four decades later, this Act was repealed by the Trade Marks Act, 1999.

- **Geographical Indications**

- India, as a member of WTO, enacted the Geographical Indications of Goods (Registration and Protection) Act, 1999.
- It came into force with effect from 15th September 2003.
- Geographical Indicators have been defined under Article 22 (1) of the WTO Agreement on TRIPS.

- **Trade Secrets**

- Although India has no specific Trade Secrets Laws, Indian courts have upheld Trade Secrets protection under various statutes.
- Including contract law, Copyright law, the principles of equity and the common law action of breach of confidence (which in effect amounts to a breach of contractual obligation).

- **Semiconductor Integrated Circuits and Layout Designs**

- India being a member of the WTO also passed an Act called the SICLD Act, 2000. This Act is TRIPS compliant and fulfils the conditions of the TRIPS agreement (Articles. 35 to 38) concerning the protection of SICLD.

- **Plant Varieties:**

- The Indian Patents Act, 1970 excludes —plants and animals in whole or any part thereof other than microorganisms from patentability.
- To comply with the mandate of Article 27.3 (b) of TRIPS, India adopted the PPV&FR Act, 2001 as a *sui generis* regime protecting not only new plant varieties but also farmers' rights.

- **Traditional Knowledge:**

- To protect TK now, it has been recognized as IPR under TRIPS Agreement.
- The Government of India has created a digital library termed as Traditional Knowledge Digital Library (TKDL) as a repository of 2,50,000 formulations of various systems of Indian medicine.

- **Industrial Designs**

- The need to protect Industrial Designs (ID) was recognized in the 18th century and the Indian legislation enacted the Patterns and Designs Act' in 1872 for the first time.
- The Act was replaced by the British Patents and Designs Act in 1907, which later became the basis for the Indian Patents and Designs Act, 1911
- The Indian Patents and Designs Act, 1911, remained in force for designs only.
- In the year 2000, a dedicated Act for the ID was passed, which came into force in 2001.

- **Biodiversity Conservation**

- In 1927 the Indian Forest Act' and later on the Wildlife Protection Act, 1972' was enacted to provide legal protection to biodiversity
- In 1988, the National Forest Policy' was passed, which brought revolutionary changes in the conservation and management of biodiversity.
- To protect the environment and biodiversity in India include Mining and Mineral Development Regulation Act, 1957
- Water (prevention and control of pollution) Act, 1974.
- Forest Conservation Act, 1980; Biological Diversity Act, 2002
- Scheduled Tribes and other Traditional Forest Dwellers (recognition of rights) Act, 2006;
- National Biodiversity Action Plan, 2009;
- National Environment Policy, 2006 and a few more.

Major Amendments in IP Laws and Acts in India

- In order to fill the gaps existing in the IP Laws and Acts and also to introduce new guidelines/directions based on the current scenario (socially and politically), each nation keeps on updating the concerned IP Laws and Acts.
- Teams -----Notes

Patents

- **A patent** is an exclusive right granted for an innovation that generally provides a new way of doing something or offers a new technical solution to a problem.
- **Conditions for Obtaining a Patent Protection:**
- The criterion encompasses:
 - **Novelty:** *Not part of 'State of the Art'.*
 - 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.
 - **Inventive step - *Not obvious to the person (s) skilled in the art.***
 - The innovation is a) a technical advancement over the existing knowledge,
 - b) possesses economic significance and,
 - c) Not obvious to a person skilled in the concerned subject.
 - **Capable of industrial application - *For the benefit of society.*** The invention is capable of being made or used in any industry.

- **To Patent or Not to Patent an Invention :**

- An invention has been developed, the inventor has to decide whether to exploit the invention for personal benefits as provided by the statutory laws of the country or put it in the public domain.
- Miniscule of inventions are placed in the public domain without claiming any benefits.
- The owner of an invention choose from either of the two options, i.e. **patenting** or **Trade Secret** to seek monetary gains.
- 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 then the **‘patent’ category** is preferred.

- **Rights Associated with Patents:**

- According to **court law** a patent **owner** has the right to **decide** who may or may not **use** the patented invention.
- The **patent protection** provided by the law states that the **invention** cannot be commercially made, used, distributed, imported, or sold by others without the **patent owner's consent**.
- The patent rights are **negative rights** as the owner **is restricting others** from using the patent in any manner without his prior permission.
- The patent holder may choose to **sue party** to **stop illegal use of the patent** and also ask for compensation for the unauthorized use.

- **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.
- The main responsibility for monitoring, identifying and taking action against infringers of a patent lies with the patent owner.

• 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).
- The majority of patents are **granted to inventions** displaying an **improvement** over the existing invention.
- For e.g. **penicillins** (an antibiotic that kills microbes) the patent awarded to a single molecule and its derivatives.
- 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.
- Similarly cars, mobile phones, laptops and televisions have many patented components and involves hundreds of inventions working together

- **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. (betting)

- 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.
- 7. Literary, dramatic, musical, artistic work** - books, sculptures, drawings, paintings, computer programmers', 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

- **Patent Infringements**

- If anyone 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:
 - **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.
 - **Indirect Infringement** - When some amount of deceit or accidental infringement happens without any intention of infringement.
- If any type of infringements happen the patentee holds the right to sue the infringer through judicial intervention.

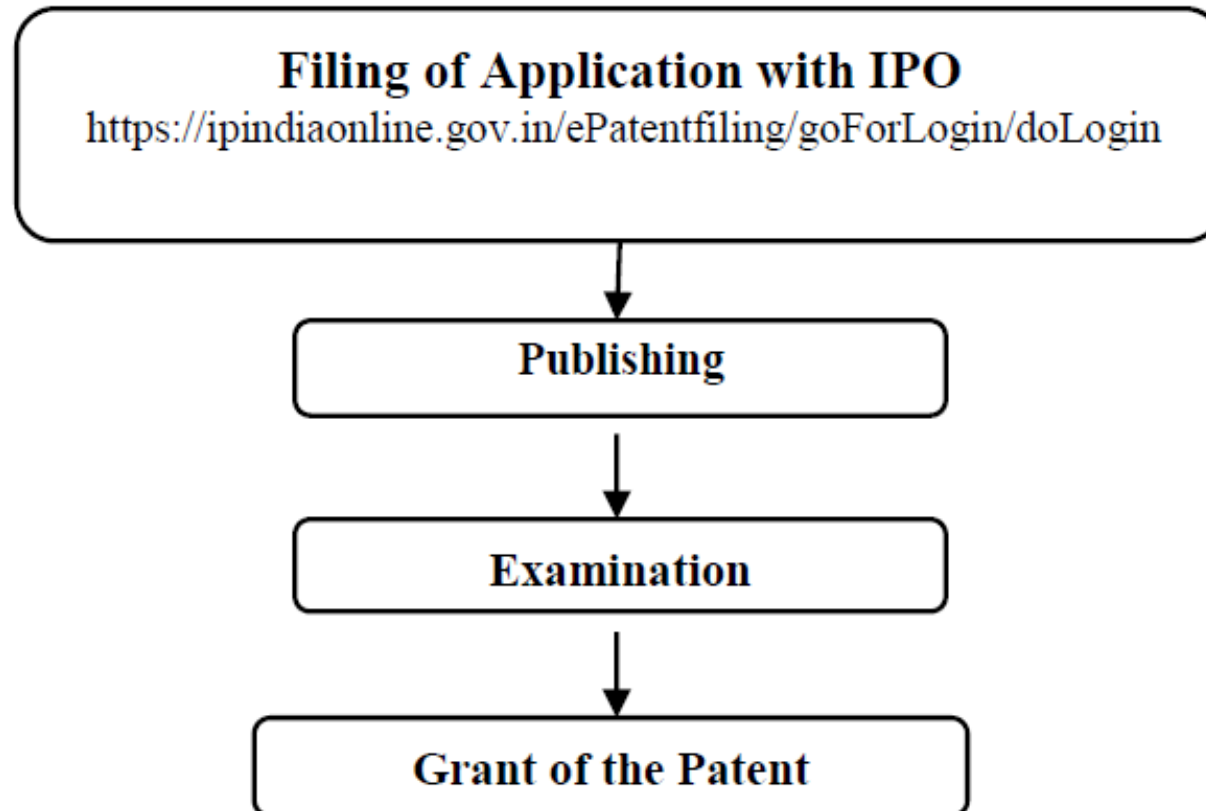
- Following reliefs are made available to the patentee:
 - Interlocutory/interim injunction.
 - Damages or accounts of profits.
 - Permanent injunction
- The Central government always holds the rights (Section 100 of the Patent Act, 1970, Rule 32 of the Patent Rules, 2003) to use the invention in the case of national emergency or other circumstances of extreme urgency after notifying the owner.

- **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.
- In that condition 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.
- For e.g. selling your invention to a potential investor or a business partner who would like to know complete details of the invention in order to judge its commercial value.

Process of Patenting

- The process of grant of a patent is a lengthy procedure that may take anywhere 3-4 years or more

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



The **process of patenting** involves several steps to protect an invention legally. Here's a simplified breakdown:

- 1. Invention Creation:** The first step is developing a unique and useful invention, which can be a product, process, or method. The invention must be new, non-obvious, and useful.
- 2. Patent Search:** Before applying for a patent, it's important to conduct a **patent search** to ensure the invention hasn't already been patented. This helps verify the novelty of the invention.
- 3. Patent Application Preparation:**
 1. The application typically includes a **detailed description** of the invention, including drawings or diagrams if necessary.
 2. The applicant must draft **claims**, which define the scope of protection sought.
 3. It's often beneficial to hire a **patent attorney** because patent applications require specific technical and legal knowledge.

4. Patent Filing: The patent application is submitted to a government patent office (e.g., the USPTO in the U.S. or the European Patent Office in Europe). There are two main types of applications:

- 1. Provisional Patent:** Provides temporary protection for one year, allowing the inventor to further develop the invention before filing a full patent.
- 2. Non-Provisional Patent:** A full application that begins the formal examination process.

5. Patent Examination: The patent office reviews the application to ensure the invention meets the requirements of novelty, non-obviousness, and industrial applicability. During this stage, the office may issue **office actions**, asking for clarifications or amendments to the application.

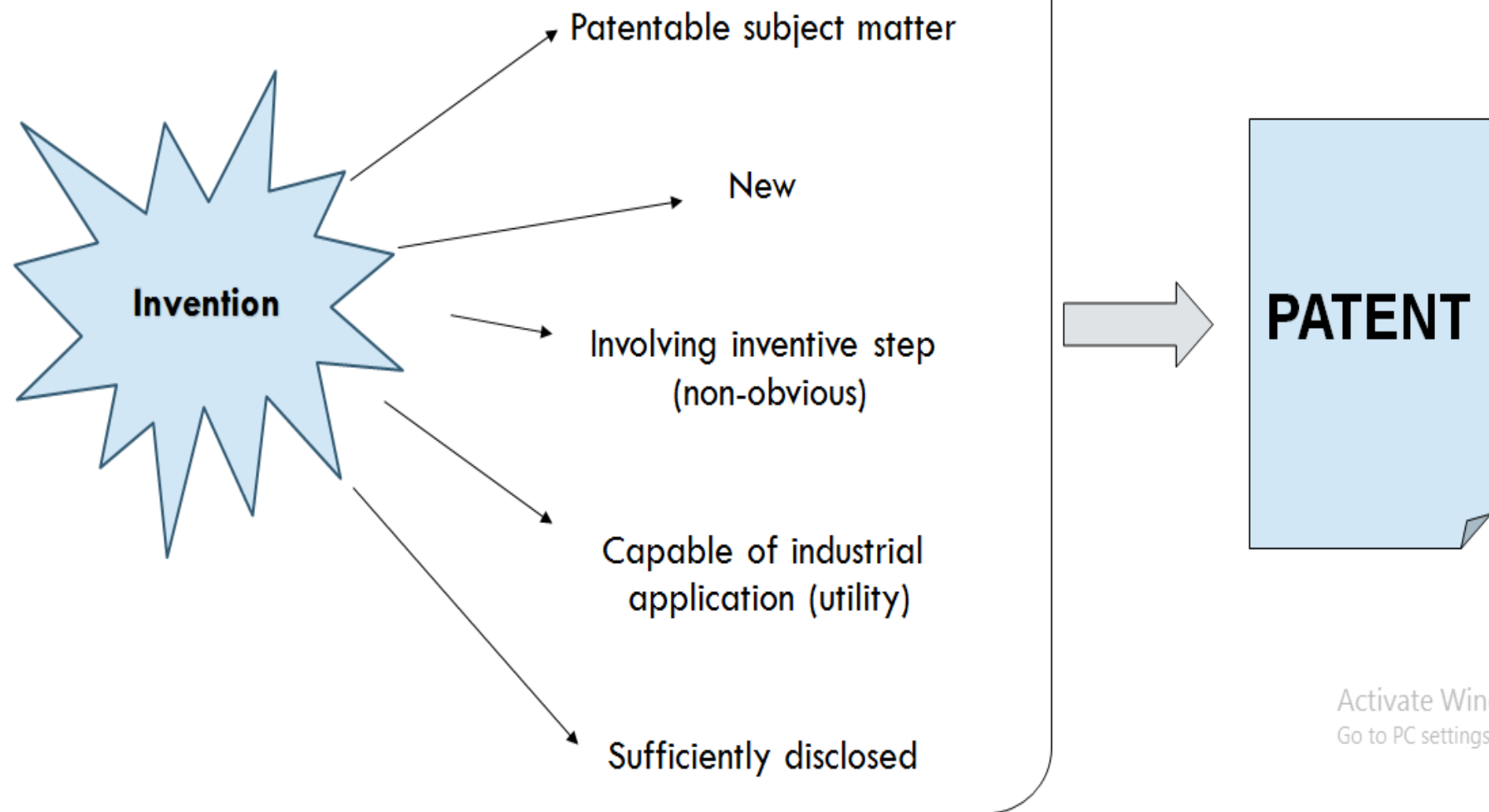
6. Patent Grant: If the application meets all the requirements and any issues are resolved, the patent office grants the patent, providing exclusive rights to the inventor for a limited period (typically 20 years from the filing date).

7. Patent Maintenance: After the patent is granted, the inventor must pay regular maintenance fees to keep the patent in force. Failure to pay these fees can result in the patent expiring before the 20-year term is up.

Example:

- If someone invents a new type of energy-efficient light bulb, they can file a patent application to protect their invention. After going through the patent search, filing the application, and addressing any issues raised by the patent examiner, they receive a patent that prevents others from making, using, or selling their invention without permission.

WHAT CAN BE PATENTED?



□ **Prior Art Search:**

- The prior art search is carried out on the parameters such as novelty, patentability, state of the art, infringement, validity and freedom to operate.
- The databases for prior art search fall in two categories i.e. Patents Databases and NPL

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+>).

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.

❑ ***Choice of Application to be Filed:***

- After decide to patent for invention the next step is, what kind of application needs to be filed i.e. **provisional patent application** or **complete (Final) patent application**.
- 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.

❑ ***Patent Application Forms:***

- As per the Patent Act, 1970 (Section 39) and the Patents Rules, 2003 (Rule 7, 54, 135 and subrule (1) of rule 20, the application for the grant of patent is filed using **Form-1** and **Form-2**.
- 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.).
- **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
- For **Complete Application**’ requires Description of the Invention’, Abstract’, Claims’ and the manner in which invention has to be performed.

❑ ***Jurisdiction of Filing Patent Application:***

- India has four offices for filing patent applications:
 - **Northern**
 - **Southern**
 - **Western**
 - **Rest of India**
- 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
- For a foreign applicant, the address for service in India or place of business of his patent agent determines the appropriate Patent Office for filing a patent application.
- In the case of joint applications, all the applicants are bestowed with equal rights and consideration.

❑ **Publication:**

- After 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 the application is published in the Official Journal of Patent Office (<http://www.ipindia.nic.in/journalpatents.htm>)
- The purpose of publishing the application is to inform the public about the invention.
- The publication of an application is a mandatory step.

❑ ***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.
- Depending on the outcome of the case, the patent application may be rejected or recommended for the next step, i.e. patent examination.

❑ ***Examination –***

- Patent examination is a critical step, has consider important patent criterions.
- 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, 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.

❑ ***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.

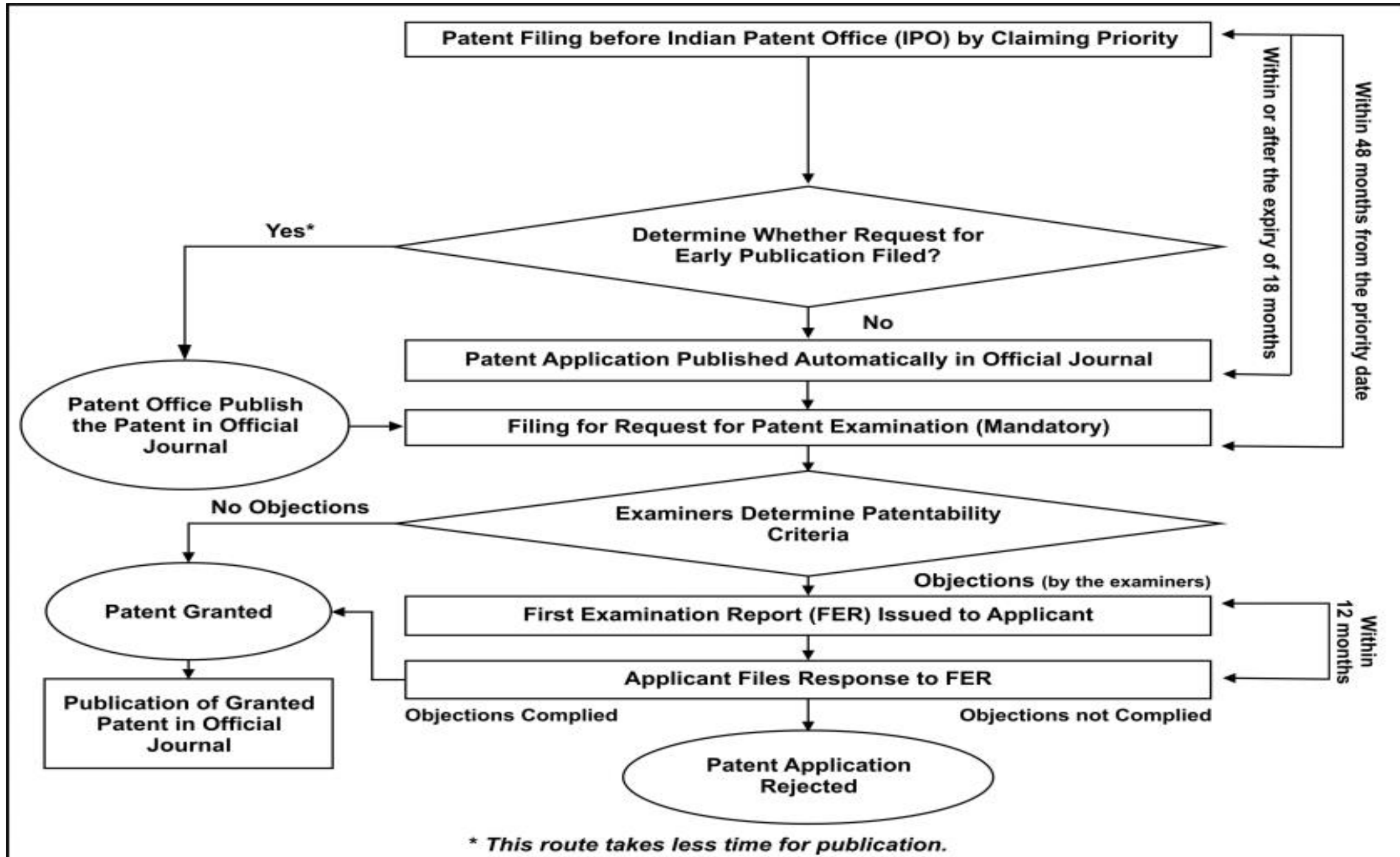
❑ ***Validity of Patent Protection:***

- The patent protection is granted to an applicant for a limited period, generally 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.

❑ ***Post-grant Opposition:***

- Once the patent has been granted by the Patent Office, it still can be challenged by anyone within one year from the date of publication of the grant of the patent.
- The granted patent can be challenged either via a Patent Office or in a Court of Law.
- The patent office consider some aspects as follows:
 - The applicant for the patent wrongfully obtained the invention or any part of the invention.
 - The invention claimed has been published before the priority date.
 - The invention claimed was publicly known/used before the priority date.
 - The invention claimed is obvious and does not involve an inventive step.
 - The subject of the claim is not patentable as per Chapter II of the Patent Act, 1970.
 - The details/specifications of the invention do not sufficiently and clearly describe the invention.

Flowchart for the process of filing a patent application.



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 has a decent job e.g. university professor and has no desire or aptitude to exploit the patent on his own.
 - 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.

- **Working/Licensing of the Patent’.**

The validity of the granted patent is for 20 years (from the date of filing a patent application), but the patentee is required to furnish information (Form-27), on an annual basis relating to the commercialization/selling of the patent.

- The licensing of a patent can be **exclusive or non-exclusive:**

- **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 the relevant IP except the named licensee

- **Non-Exclusive Licence:**

- A patentee can sell his patent rights to as many individuals/parties as he likes.

Compulsory Licensing:

- The patentee is not able to commercialize his patent within three years from the date of the grant of a patent and other person can apply for permission to use that invention.
- Following conditions has to be fulfill to get the compulsory licensing
 - Reasonable requirements of the public concerning the patented invention have not been satisfied.
 - The patented invention is not available to the public at a reasonable price.
 - The patented invention is not worked in the territory of India.

- **Need for a Patent Attorney/Agent:**
- It is good to seek legal assistance from a patent attorney/agent when drafting a patent application.
- 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.

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.
- To ease out issue of the filing of patent many Regional Offices have been established which receive patent applications on behalf of a group of nations.
- A single application is sufficient to cover many nations that are members of a particular regional office/organization.
 - e.g. European Patent Office and African Regional Intellectual Property Organization
- If file an international patent under the Patent Cooperation Treaty (PCT) can get the patent in several countries worldwide.
- 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

- **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.
- Prior approval following some 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. 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

- Patent Related Forms

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

- **Fee Structure**

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](http://www.ipindia.nic.in/writereaddata/Portal/IPOFormUpload/1_11_1/Fees.pdf)

- **Types of Patent Applications**

- **Provisional Application**

- A patent application filed when the invention is not fully finalized and some part of the invention is still under experimentation.

- **Ordinary Application**

- A patent application filed with complete specifications and claims but without claiming any priority date.

- **PCT Application**

- An international application filed in accordance with PCT.

- **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

- **Patent of Addition Application**

- If the modification in the invention is new for which the patentee has already applied for or has obtained a patent, the applicant can go for 'Patent of Addition'.

- **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

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

Commonly Used Terms in Patenting:

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

- **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) and
 - National Research Development Corporation (NRDC).

- **Utility Models**

- a new invention involves an incremental improvement over the existing products, but this technical improvement is not sufficient enough to pass the stringent 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'**
- Utility Model is a helpful tool for Micro, Small and Medium Enterprises (MSME) since the grant of a Utility Model.