

Patent Literacy

A Techno-legal Right for Scientific community

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Properties are of two types such as tangible and intangible e.g. House, Land, Cash etc are some examples of tangible property that can be touched but other type of property which can not be touched and also more precious than other types of properties. These kinds of properties are known as intellectual property (IP) or Industrial property. IP plays a key role in the transfer of technology and industrial growth (Fig 1). Now a day's piracy of IP has become international in character. And like other property IP is needed to protect by strong legislation at worldwide. Intellectual property includes right relating to as below

- a-New invention in the field of mankind
- b-Scientific discoveries
- c-Literary, artistic work and scientific work
- d-Industrial design
- e-Trademarks and service marks

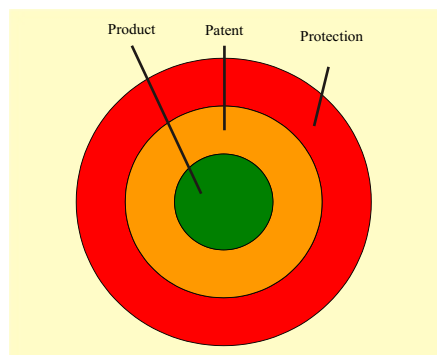


Fig.1- Industrial development and economic growth, 3Ps

Form of Protection of IP

There are different forms though which we can save our precious Intellectual property such as

- a-Patent
- b-Trademarks
- c-Design
- d-Know how
- e-Copy right

Important IP laws of India

IP protection is a terrestrial right of the owner and depends on IP nation law. For protecting these voluble properties India has strong legal system such as-

- a-Patent Act, 1970
- b-The copy right Act, 1957
- c-The Trade marks Act, 1999
- d-Geographical Indication of Goods (Registration and Protection) Act, 1999
- e-Design Act, 2000
- f-Plant Variety Protection and Farmer Right Act, 2001

Above these, Patent law is most important form of protection of IP in Research and Development sector

Patent

A patent is an exclusive right granted by the government to the patentee in respect of a new invention, which may be product or process. A patent is granted by the patent office in which you wish to protect your voluble invention. A patent cover every area of technology as pencil to helicopter.

Patent's type

There are different types of patent such as

- a-Ordinary Patent
- b-Patents of addition
- c-Convention application with priority date, claiming on the basis of filing in convention countries
- d-National phase application under PCT

Patentable in India

Under the Patent Act, the invention to be patentable should be technical in nature and meet the following criteria such as

- a-**Novelty:** The matter disclosed in the specification is not published in India or elsewhere before the date of filing patent application in India
- b-**Inventive step:** Invention is not obvious to a person skilled in the art in the light of the prior publication or knowledge or document
- c-**Industrial applicable:** Invention should possess utility for industrial development

What is not Patentable in India

Under the Patent Act, 1970 the following are non patentable inventions in India

- a-an invention which is frivolous
- b-an invention the primary or intended use or commercial exploitation of which could be contrary to public order or morality or which cause serious prejudice to human, animal, or plant life or health or to the environment

- c- mere discovery of a scientific principle
- d- mere discovery of any new property or new use of known substance
- e- Mere arrangement or re arrangement or duplication of known devices each functioning independently of one another in known way.
- f- A method of agriculture and horticulture
- g- Invention relating to atomic energy
- h- Topography of integrated circuits
- i- A presentation of information
- j- Method of playing game
- k- A mathematical or business method
- l- A computer programme per se
- m- Any process for the medical, surgical, curative, prophylactic or other treatment of human beings or any process for a similar treatment of animal to render them free of disease

Right of Patent owner

The owners of a patent have exclusive right. They can prevent others in the territory covered by the product from making, using, offering for sale, importing or selling without his or her permission. A patent owner may give permission or license others parties to use the invention on mutually term. A patent holder may also sell the patent right of the invention to other interested person and such other person may can use the invention like true inventor or patent owner.

Who can apply for patent

Under patent law in India, an application for patent can be made by the following persons

- a- True and first inventor of the invention
- b- By assignee of the true/ first inventor
- c- By legal representative

Writing Patent application in India

Writing patent applications scientists must keep some point in their mind such as

- a- Explain very clear the idea of new invention
- b- Title of invention
- c- Object of invention
- d- Complete description of invention
- e- Drawing (if any)
- f- Claim (this is very important part of patent application as claim is a techno legal document and it should be written by a techno legal person)

Patent forms

For applying a patent application in India one needs to file different forms for different purposes. Here are some important forms for filing patent application in India

- Form 1- Application for grant of a patent
- Form 1A- Application corresponding to an international application for grant of a patent
- Form 2- Provisional/ complete specification
- Form 3- Statement and undertaking under Sec- 8
- Form 4- Request for extension of time
- Form 5- Declaration as to inventor-ship
- Form 9- Request for publication

Form 18- Request for examination of application for patent

Filing a patent application in India

Filing a patent application in India is required some important documents, which are important for granting a patent in India.

- a- Application form in duplicate (form 1 or 1A)
- b- Provisional or complete specification in duplicate
- c- Abstract of the invention in duplicate
- d- Drawing in duplicate (if need)
- e- Priority document (if priority date is claimed) in convention application
- f- Declaration of inventor ship
- g- Power of attorney (if filed through patent agent)
- h- Fee (to be paid in cash / by cheque / by demand draft)

Jurisdiction place for patent

An Indian resident can file application for patent at appropriate office in which jurisdiction he resides and has main place of work

Mumbai : For state of Maharashtra, Gujarat, MP, Goa, Daman & Div and Dadar & Nagar Haveli

Chennai: The State of Andhra Pradesh, Kerala, Tamil Nadu, Mysore, Pondicherry, Laccadive, Minicoy and Aminidivi islands

New Delhi: State of Haryana, HP, J&K, Punjab, Rajasthan and UP, Chandigarh, Delhi

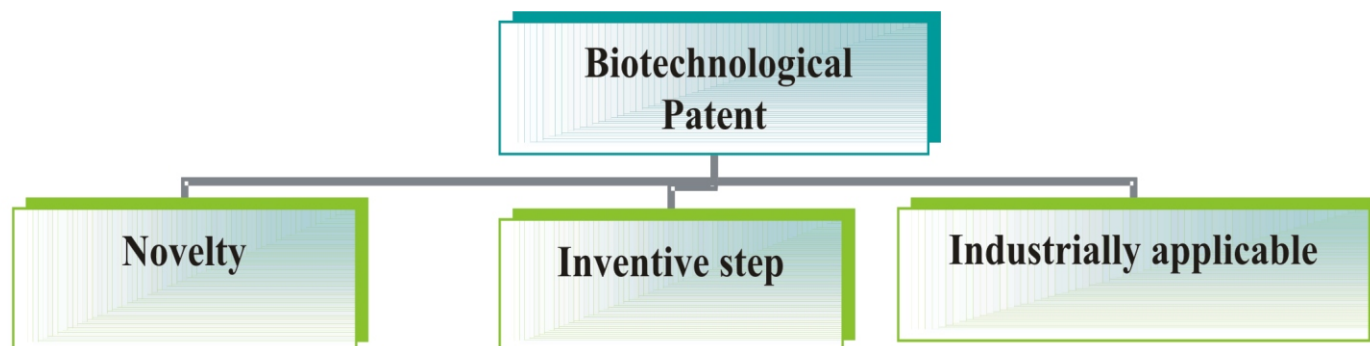


Fig.2- Prima facie requirement for granting biological patent (Patent Act, 1970)

Kolkata : (Head office): Rest of India

Patentability of biotechnological invention

Biotechnology in recent year has created unprecedented opportunities not only for the humankind but also industrial development. It has become the world fastest growing technology.

Today a number of research institutes (public and private) are working in the area of modern biotechnology with strong scientific research system in country. But due to the emergence of modern biotechnology, one of the most important issues has been raised in legal characterization and Intellectual Property Protection (IPP) (Fig 2). Invention such as genetic engineering, microbiology, medical invention and biotechnological invention that may be patentable by Indian patent law, 1970 can be categorized as-

- A- The living entities of natural origin such as animal, plant in whole or any part thereof are not patentable in India
- B- Terminator gene technology and microorganisms are not patentable in India
- C- The biological materials such as organs, tissues, viruses etc and process of preparing thereof are not patentable in India. But biotechnological materials such as recombinant DNA, plasmid and process of manufacturing thereof are patentable
- D- Gene sequences, DNA sequences without having disclosed their function are not patentable. But the process relating to microorganism or producing chemical substances using such microorganisms are patentable
- E- The process of cloning human being or animals are not patentable

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

The Protection of Plant Varieties and Farmers Right Act, 2001 (53/2001) provides legal

right to farmers and plant breeders. It extends to the whole of India. According to article 27.3 (b) of TRIPs, that the members shall provide for the protection for plant variety whether by patenting or by an effective sui generis system or by any combination thereof. The main objective of this Act-

- A- To stimulate investment for research both in public and private sectors for development new plant varieties for economic growth and development
- B- To stimulate and facilitate the growth of seed sector in India for good quality seeds and planting materials to Indian farmers.
- C- To recognize role of farmers as cultivator and safeguard the traditional rights of the farmers

Registrable Varieties in India

Under this Act, a new variety shall be registered if it conforms to the criteria of Novelty, Distinctiveness, Uniformity, Stability (NDUS). The certificate of registration issued under this Act shall be valid for nine years for trees and Vines and six years for other crops and may be renewed for remaining period of time after on payment of fees.

Farmers Right

A farmer shall be entitled to save, use, sow, resow, exchange, share, or sell his farm produce including seed of a variety protected under this Act in same manner as he was entitled before the coming into force of this act but farmer shall not be entitled to sell branded seed of a variety protected under this Act.

Conclusion

Economic growth of any nation depends upon innovation development and it is not important whether the invention is a simple thing or a large machine. An issue relating to IPR in India remains largely controversial; this is because of the fear that the newly stipulated IPR is likely to adversely affect the farmer's communities as well as human being. India needs to implement strong patent

legislation though new amendments in patent law. Encourage science graduates to pursue law for better understanding for IPR related issues and inclusion of the same in the curriculum law college to facilitate filing international patent applications. India needs techno-legal person in the field of IPR. Patent related activities in India are expected to rise dramatically in the near future and can be serviced only if adequate competent and technically qualified trained patent attorney are available. The awareness of patenting will not only encourage the scientist to avoid duplication of routine type of work but also to do meaningful research for mankind and economic growth of a nation. It's the need of the hour that India should spread patent literacy through fast mode action and organized patent literacy camps in all public and private research institutes.

About the Authors

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Author is well known bioresearch worker and has six years research experience. His area of interest is Plant Pathology, Biotechnology and Intellectual Property Rights. He is writing articles and papers for National (Current Science, Indian Phytopathology, Modern Kheti etc) and International (GEN, USA) magazines and journals and also member of Indian Phytopathological Society, New Delhi and Indian Society of Mycology and Plant Pathology, Rajasthan

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