



## REVIEW ARTICLE

**Patent - a brief scenario in India.**

Abhishek Parashar

National Bureau of Agriculturally Important Microorganisms (NBAIM), Mau-275103, India.

Received: May 18, 2016; Revised: June 5, 2016; Accepted: June 18, 2016

Available online: 1<sup>st</sup> July 2016

**Abstract:** Intellectual Property Right (IPR) is a lawful right given by government to inventors for their intellectual work. IP rights are necessary to prevent copying and misuse of original work. IP includes Patents, Copyrights, Trademarks, Plant varieties, Trade secrets, Industrial designs and Geographical indicators. In India in the year 2013-14 maximum numbers of applications filed and granted were for Trademarks. More than 42000 applications were applied for patent while only 10% (4200) got the approval. IIT tops the list in patent filing while CSIR is leading organization in getting maximum number of patent grants. Indian government has taken various initiatives to make the patenting process easier. Patent can be filed in all four metro cities. For international patenting, patent cooperation treaty (PCT) and convention application filing is done to protect the invention at international level and India is one of the member countries of these group. IP rights provide monetary benefit to inventors, further it creates environment of competition which is good for the growth of the economy. As India is a growing economy and competing with many countries out of which some are involved in reverse engineering and copying many of the original work, hence the role of IPR becomes even more crucial. It is also believed that IPR creates monopoly and could increase the price of essential commodities thus affecting poor people. All in all IPR is needs for today's world. A balance is required for its use to misuse which will only be made by making careful law and its effective implementation.

**Key words:** Intellectual Property Rights; Patent; Trademarks; Patent cooperation treaty.

**Introduction**

Intellectual Property Right (IPR) is a right given by government to inventors for their intellectual work<sup>1</sup>. The right is given for stipulated period of time after disclosure of work in public domain. The work can be of industrial, artistic, scientific or literally types. It includes Patents, Copyrights, Trademarks, Plant varieties, Trade secrets, Industrial designs and Geographical indicators.

**Patent:**

An invention that involves in new product formation or a process which has an inventive step and have commercial application can come in patent criteria<sup>1</sup>. Indian patent act was passed in 1970.

**Conditions for grant of patent:**

- **Novelty** - It should not be disclosed. To get the patent, work should not be found in prior art. Prior art information is scientific or technical information that is present before the date of filing application for grant of patent. Prior art has made patent filing and prosecution very fast; it gives information of latest trend in technology and avoid patent duplication & infringement.
- **Inventiveness** - Invention must have some skill involved in it,
- **Usefulness** - The work should have commercial application.

**\*Corresponding Author:**

Dr. Abhishek Parashar  
Research Associate (Molecular Biology Unit),  
National Bureau of Agriculturally Important Microorganisms (NBAIM),  
Mau-275103, India.  
Tel.: 9431737157  
E-mail: [nanotechabhi2005@gmail.com](mailto:nanotechabhi2005@gmail.com)

**Non-patentable items:**

Any invention which is against the law, morality or injurious to public, methods applicable in agriculture or horticulture, scientific principles or mathematical models, invention in the field of atomic energy, any method involved in medical, surgical or treatment of humans or animals, methods enhancing efficiency of machine and traditional knowledge cannot be patented.

**Process of patent filing:**

In India patent is filed by filling four application forms (Form 1, 2, 3 and 5) which together is send to patent office<sup>2</sup>.

- Form 1-** In this form, name of applicant, inventors is given. Also whether the application is filed as convention or in PCT (patent cooperation treaty) form has to be mentioned.
- Form 2-** In form 2, full descriptive information of work which will be applied for patent is given. It includes:
  - Provisional specification-** No patent application is applied on this basis and inventor must have to submit complete application in time bound manner (12 months) before the process of patent grant can start.
  - Complete specification-** Patent application can be applied on the basis of this application. It contains- title, field of invention, state of art in this field also known as prior art<sup>2,3</sup>, objective of invention (problem & solution), statement of



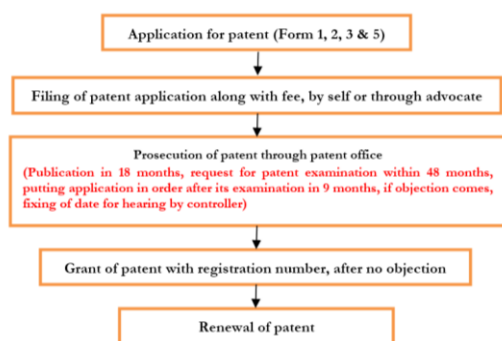
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invention, detail description of invention with drawing (also known as know how information), scope of invention and claims.

**iii) Form 3-** This form deals with whether the application is filed in foreign country or not.

**iv) Form 5-** Declaration as to inventorship, here both applicant and inventors give their approval that they are the true persons involved in this work.

After filing of complete specification, patent office publishes the work within 18 months from the date of filing and gives 48 months' time for its examination which will be done by the patent analyst with some charges on request of inventor. After examination the application is put in public domain for its objection. The whole process further takes at least 9 months' time. If objection comes, a date is fixed for hearing which will be done by controller of examination. After clearing of objection application is granted for patent or else rejected. In most cases patent is given for 20 years with every year renewal is required<sup>2</sup>, (Figure 1). Regional patent offices in India are in Chennai, Mumbai, Delhi and Kolkata where patent application can be filed. Kolkata is the head office.

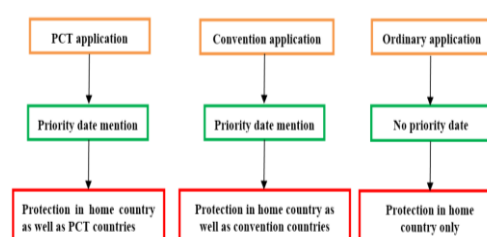


**Figure 1:** Patent filing process

#### Types of Patent:

**i) Patent cooperation treaty (PCT)-**For international patenting PCT filing is done to protect the invention at international level. The treaty came into force in 1978 and India is part of this group<sup>4</sup>. By PCT, a single patent application filing and its grant gives the lawful right of protection to inventor for his or her work in as many as countries that are part of it. In PCT, first the application is filed in home country where international search is done by patent office of that country. If in search, prior art information of said work is not available then second opinion is taken through international preliminary examination which is more exhaustive in nature. In the next step also known as national phase, application is filed separately to other countries which are part of PCT for seeking patent in those countries, within 30 months of time from the date of priority. However, in India it is 31 months (Figure 2).

**ii) Convention Application-**Filing application in convention form gives an applicant protection of his or her work in its home country as well as in those countries that are part of Paris convention. Also, convention application gives priority date to applicant. Once the priority date has been given to applicant, other persons working on same problem cannot be able to get the patent for their work. Within 12 months of time from the date of priority, applicant must file application for patent for his or her work to other convention countries where the worker wants to get protection of his or her work. This is an advantage of filing application in convention form as compared to ordinary application, where priority date has not been mentioned (Figure 2).



**Figure 2:** Types of patent

#### Revocation of patent-

- Against the national law,
- Novelty is missing,
- Obtaining ownership wrongly,
- Duplication of work,
- Work is not fully describing in application,
- Using traditional knowledge for invention,
- Secretly commercialization of work before the grant of patent.

#### IPRs status in India in 2013-14

In India in the year 2013-14 maximum number of applications filed and granted were for Trademarks. Out of 42000 applications that were filed for patents, only 4200 got the approval<sup>5</sup>. Maximum number of patents filing and grant were from chemical branch as compared to biotech, computer science, food science and drugs. IIT filed the maximum number of applications for patents (342 applications), while CSIR tops the list for maximum number of applications that were granted patents (98 applications)<sup>5</sup>.

#### Benefits and drawbacks of patent

There are both pros & cons of this law. This law provides exclusive legal rights to the inventor to derive benefit from his invention. Under this law inventor is entitled to prevent others from using, making and selling his inventions for a period of twenty years. This provides the patentee an exclusive legal basis to receive payment from whosoever wishes to use his invention in any form. Patents have become one of the greatest competitive assets to ensure the future of the

business and critical in determining the winner & looser in business competition. On the other side it can make person selfish and less sensitive for society. There is also possibility of increase in price of important commodity like medicines (cancer drugs) making it beyond the reach to poor peoples.

### Examples of patent

Digital twin spark ignition system (DTSi), a patented technology developed by Bajaj is being used in motorbikes and according to company it makes machine more fuel efficient<sup>6</sup>. In 1970, Anand chakrabarty developed oil eating bacteria through genetic modification and got its patent. This is the first example of patenting live organism in world. Oil eating bacteria (*Pseudomonas* bacteria) has the potential to degrade hydrocarbons at oil spill sites and is very helpful in controlling environmental pollution<sup>7</sup>. Patent of basmati rice by RiceTec Company was a controversial patent and Indian government fought for its revocation, as it is long being used by Indian as a food material. In 2001 most of the patent claim on basmati was withdrawn by the company<sup>8</sup>. Basmati now comes under geographical indicator. In recent years India has also prevent the patenting of anticancer drug (Gleevec) by Novartis Company in India. The drug was tried to be patented in India on the basis of its advanced version which is beta crystalline type having better physical efficacy. However Supreme Court of India in 2005 gave the decision that new version of drug has no enhanced therapeutic efficacy for patient as compared to older version of drug.

### Conclusion

Creativity, industry and enterprise need protection and encouragement. Intellectual Property Right (IPR) seeks to provide all these. Further IP rights provide monetary benefit to inventors, creates environment of competition which is good for the growth of the economy. As India is a growing economy and competing with many countries out of which some are involved in reverse engineering and copying many of the original work, hence the role of IPR becomes even more crucial. It is also believed that IPR creates monopoly and could

increase the price of essential commodity thus affecting poor people. All in all IPR is needs for today's world; it is about promoting enterprise without harming the interest of the society at large. This can be done by balancing the interests of the inventors & users by making careful law and its effective implementation.

### Acknowledgment

National Bureau of Agriculturally Important Microorganisms (NBAIM), Mau. for providing library support.

### References

1. [www.wipo.int](http://www.wipo.int)
2. [www.ipindia.nic.in](http://www.ipindia.nic.in)
3. Sreenivasulu, N. S. and Raju, C. B. (2008) Biotechnology and Patent Law: Patenting Living Beings. Manupatra, p.95. ISBN 9788189542313. Print
4. [https://en.wikipedia.org/wiki/Patent\\_Cooperation\\_Treaty](https://en.wikipedia.org/wiki/Patent_Cooperation_Treaty).
5. Annual report 2013-14 of intellectual property India. The office of the controller general of patents, designs, trademarks and geographical indicators, Government of India, ministry of commerce & industry, department of industrial policy and promotion. p.1-83 (pdf file).
6. <http://automobiletechno.blogspot.com/2013/09/dtsi-digital-twin-spark-ignition-system.html>.
7. "Environment: Oil-Eating Bug". [www.time.com/time/magazine/article/0917191787700.html](http://www.time.com/time/magazine/article/0917191787700.html).
8. <http://en.wikipedia.org/wiki/basmati>.

### Cite this article as:

Abhishek Parashar. Patent - a brief scenario in India. *International Journal of Bioassays* 5.7 (2016): 4711-4713.  
<http://dx.doi.org/10.21746/ijbio.2016.07.0011>

**Source of support:** National Bureau of Agriculturally Important Microorganisms (NBAIM), Mau., India

**Conflict of interest:** None Declared