



WTO CELL NewsLetter

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WTO AND INDIAN AGRICULTURE

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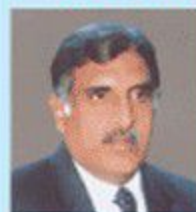
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Message from the Hon'ble Vice-Chancellor

Dr. S. Raghu Vardhan Reddy



The importance of IPRs particularly patents has been recognized by the Indian public only during the last few years although the system was existing in India for more than one and half century.

There are many misconceptions about patents which may be due to the reason that the subject of patents is technology oriented and complicated.

In this connection, this bulletin was designed in such a manner that it may give a brief outlook on patents and patent procedures which is useful to the scientists/researchers in understanding the patent issues. I hope that this issue may enthrust them in protecting their knowledge driven inventions.

What are the requirements for a Patent?

- Novelty
- New Invention
- Non obviousness
- Industrial application
- Marketability and Utility
- It is important to remember that a patent has a time limit (20 years)
- A patent has a geographical limit
- A patent is restricted to the claims made in the application

Patent Law in India

Introduction of Patent Law in India took place in 1856 whereby certain exclusive privileges to the inventors of new inventions were granted for a period of 14 years. However, the formal Patent protection in India was introduced by Patent Act, 1911. Thereafter, various acts appeared on the patent law pattern. Presently, the provisions with respect to patents in India are governed by The Patents Act, 1970 and the subsequent amendments to it in a phased manner in 1999, 2002, 2005 and 2006.

Trade Related Intellectual Property Rights (TRIPS)



India as a member of the World Trade Organization (WTO) is obliged to comply with the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS

Agreement) since 1 January 1995 which requires that member countries provide for Intellectual Property Rights (IPR) in one form or the other in all fields of technology, including agriculture. IPRs include Patents, Copy Rights, Trade Marks, Geographical Indications, Industrial Designs, Layout designs for Integrated Circuits etc.

What is a Patent?

A patent is an exclusive right granted to the inventor to use and market the invention for a limited period of time in consideration of the disclosure of the invention.

Why Patent?

The purpose of a patent is to provide a form of protection for technological advances. Patent protection provides a reward not only for the creation of an invention, but also for its technological feasibility and marketability. This incentive promotes creativity and encourages healthy competition to develop new technology, which is marketable, useful to the public and desirable for public good.

Patents not only avoids redundant research, but also gives assurance for commercialization, technological development and upgradation.

Who can file the patent application in India ?

- True and first inventor (Indian resident either alone or jointly)
- Assignee of the true and first inventor (Indian resident or Non resident)
- Legal representatives of any deceased person.

Where to file ?

- Indian residents - Patent office situated in their jurisdiction
- Non residents - Patent office situated in their agent's jurisdiction

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On

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Patenting and Protection in India Under Old Act & New Act

Item	Old Act (1970)	New Act (2005)
Human Life forms/Genes	Not patentable	Not patentable
Plants and animals	Not patentable	Not patentable
Micro-organisms	Not patentable	Patentable
Non - Biological processes	Patentable	Patentable
Non - Biological products	Not patentable	Patentable
Bio-chemical and Bio-technological processes	Patentable	Patentable
Bio-products	Not Patentable	Patentable
Crop varieties	No protection	Protection under PVPFR*
Animal varieties	Excluded	Excluded
Method of Agriculture and Horticulture	Not patentable	Products/process qualifying for novelty are patentable

* Plant Varietal Protection and Farmer Rights

Important websites on Patents

www.patentoffice.nic.in - Indian Patent office
www.wipo.int - World Intellectual Property Rights Organization, Geneva
www.uspto.gov - United States Patent and Trademark Office
www.patent.gov.uk - United Kingdom Patent database
www.owgm.com - Canadian Patent data base
www.european-patent-office.org - European Patent data base
www.indianpatents.org.in - Indian site on Patents
www.apipr.org - Andhra Pradesh site on Patents
www.ipindia.biz - Facilitator site for Patents
www.indianpatents.org.in - Patent facilitating centre
www.nrdcindia.com - National Research Development Corporation

Patent Co-operation Treaty (PCT)

PCT is a multi-lateral agreement for international cooperation towards harmonization of patenting at international level. It became operational from 1978 onwards with 124 member countries. The major objective of PCT is to make patenting more efficient, effective and economical in the interests of patent applicants. The treaty makes it possible to seek patent protection for an invention in each of the large number of countries by filing an international patent application. Such an application can be filed by anyone who is a national or resident of the contracting country party to the PCT.

The PCT also provides dissemination of technical information with in member countries. The treaty only simplifies the procedure for an applicant to obtain patent for his/her invention in a number of countries designated for the purpose.

Although the PCT application is an international application, the treaty does not provide for the international patent which is left to the specific country in which patent identification is sought by the applicant. The PCT is not a platform for grant of patents, which is left to the designated offices.

What is not patentable in India ?

The patent Act, 1970 and amendments in 2002 and 2005 specifies some areas that are not patentable, as under Section 3:

- An invention either primary or intended use or commercial exploitation which could be contrary to public order or morality or which causes serious prejudice to human, animal or plant life or health or to the environment.
 - The mere discovery of a scientific principle or the formulation of an abstract theory or discovery of any living thing or non-living substance occurring in nature.
 - The mere discovery of new form of a known substance which does not result in the enhancement of known efficacy of that substance or mere discovery of any new property or new use for a known substance or of the mere use of a known process, machine or apparatus unless such known process results in a new product or employs at least one new reactant.
 - A substance obtained by a mere admixture resulting only in the aggregation of the properties of the components thereof or a process of producing such substance.
 - The mere arrangement or re-arrangement or duplication of known device each functioning independently of one another in a known way.
 - A mathematical or business method or a computer programme per se or algorithms
 - An invention which, in effect, is traditional knowledge or which is an aggregation or duplication of known properties of traditionally known component or components.
- Further, it may be noted that Indian Law also does not provide for patenting the following subjects in agriculture.
- Method of agriculture or horticulture
 - Any process for medicinal, surgical, curative, prophylactic or other treatment of animal or plants to render them free of diseases or to increase their economic value or that of their products
 - Plant varieties, strains of animals or birds or micro organisms per se

Total output of Indian Patents in Agriculture

Year	Total no. of granted patents	Total no. of patents in agriculture	Percentage
1995-96	2780	47	1.69
1997-98	4780	100	2.09
1999-2000	3250	91	2.8
2001-02	3820	109	2.85
2003-04	5930	102	1.78
10 years	20,560	449	2.18

It can be known from the above table that there is a gradual increase in the number of patents. The number of patents in agriculture reached a maximum during 2001-02, while it again declined during 2003-04.

Information for Filing of International Application for Patents under PCT (Patents Co-operation Treaty) by Indian Applicants.

a.	Competent receiving office	The Patent Office, Kolkata, and its branch offices at New Delhi, Mumbai and Chennai (RO/IN) International bureau (RO/IB), Geneva, Switzerland.
b.	Language of filing	RO/IN : English, Hindi RO/IB : Any language
c.	Elements of the International application	i. Request (PCT/RO/101) ii. description iii. one or more claims iv. abstract v. Drawings (where applicable) vi. Fees vii. P.A./G.P.A. (where applicable)
d.	No. of copies required	RO/IN : 3 to The Patent office, Kolkata and 4 to the above Patent office branches at New Delhi, Mumbai and Chennai RO/IB : 1
e.	Competent International Searching Authorities [ISAs]	Austrian Patent Office (AT) Australian Patent Office (AU) European Patent Office (EP) China Intellectual Property Office (CN) United States Patent & Trademark Office (US) Swedish Patent office (SE)
f.	Competent International Preliminary Examining Authorities [IPEAs]	Austrian Patent Office (AT) Australian Patent Office (AU) European Patent Office (EP) (only if ISA was AT, EP or SE) China Intellectual Property Office (CN) United States Patent & Trademark Office (US) Swedish Patent Office (SE)

Why Indian government protested against Basmati patent?

In 1997, the US Patent Office granted a patent to US firm Rice Tec Co. (patent number 5663484) for a variety called *Texmati* rice (20 claims). *Texmati* rice has 16 claims similar to Indian Basmati rice.

As per Geographical Indication, Basmati is an Indian Rice Variety, which could not be patented by other country. Government of India protested against the US patent for the following reasons:

- US patent could affect annual basmati exports of India and thus threaten the livelihood of thousands of Punjabi farmers.
- The brand name of Indian Basmati will be largely affected.
- Agricultural and Processed Food Products Export Development Authority (APEDA) filed for revocation of the patents granted to Rice Tec Co. by the US Patent Office.
- Evidences from IARI, New Delhi and Directorate of Rice Research, Hyderabad proved that 16 claims are similar to traditional Indian Basmati rice. So, Rice Tec Co. withdrew these 16 claims. However US Patent Office has not revoked the patent. The patent was issued to Rice Tec Co. for the remaining 4 claims.

Fees to be paid for PCT applications (from 01/02/06)

(A) International Application

Transmittal Fee	- INR 8,000/- for legal entity INR 2,000/- for natural person
Fee for Certified Copy	- INR 4,000/- for legal entity INR 1,000/- for natural person

Fees to be paid In Us Dollars:

International filing fee	- USD 1086** (USD 12) per sheet over 30**
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PCT-Easy	- USD 78**
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Patent Search Fees:

ISA FEES

	Search Fees
Austria (AT)	USD 241
Australia (AU)	USD 908
China (CN)	USD 260
Europe (EP)	USD 1871**
Sweden (SE)	USD 1871
United States of America	USD 1000

IPEA FEES

	Preliminary examination fee	Handling fee
Austria (AT)	EUR 200	EUR 129
Australia (AU)	AUD 550	AUD 205
China (CN)	CNY 1500	CNY 200
Europe (EP)	EUR 1530	EUR 129
Sweden (SE)	SEK 5000	SEK 1210
USA	USD 600	USD 155

** 75% reduction for natural persons

Why Turmeric patent was revoked?

In 1995, two non-resident Indians viz., Suman K. Das and Hari Har P. Cohly were granted a US patent for turmeric to be used to heal the wounds at the University of Mississippi. However, Council for Scientific and Industrial Research (CSIR) filed a re-examination test against the US patent office challenging the turmeric patent on the grounds of 'Prior Art' i.e. existing public knowledge. The claim had to be backed by written documentation claiming traditional wisdom. CSIR submitted a document proof in the form of research paper published in 1953 in the Journal of the Indian Medical Association. The US Patent Office upheld the objection and cancelled the patent in 1997.

Inventions can be patented only if they can satisfy three criteria viz., Novelty, No-obviousness, Marketability and Utility. Hence, US turmeric patent failed and the Indian government has successfully contested in the United States because it could produce documented evidence, from ancient Indian texts, showing that turmeric's medicinal use was well known in the country for centuries.

Addresses and names of the contact persons of the Patent offices in India

Shri S.Chandrasekran,
 Controller General of Patents, Designs & Trade Marks
 Boudhik Sampada Bhavan,
 Near Antop Hill Head Post Office, S.M. Road, Antop Hill,
 Mumbai-400037,
 Phones : 022-24123311, Fax : 022-24123322
 Web site : www.ipindia.nic.in

Address	Contact person
The Patent Office, Intellectual Property Office Building, CP-2 Sector V, Salt Lake City, Kolkata-700091, Phone : 23671945, 1946, 1987, FAX-033-2367-1988, Email : kolkata-patent@nic.in	Shri N.R. Seth Deputy Controller of Patents & Designs
The Patent Office, Intellectual Property Office Building, G.S.T. Road, Guindy, Chennai - 600032, Phone: 044-22322824-25, FAX: 044-22322878, Email: chennai-patent@nic.in	Shri H.C. Bakshi, Sr. Joint Controller of Patents & Designs
The Patent Office, Intellectual Property Office Building, Plot No. 32, Sector 14, Dwarka, New Delhi -110075, Phone : 011-28081922-25 FAX:011-28081920-40 Email: delhi-patent@nic.in	Shri P.K. Patni Deputy Controller of Patents & Designs
Patent Office Boudhik Sampada Bhawan, S.M.Road, Near Antop Hill Post Office, Antop Hill, Mumbai - 400 037. Phone : 24137701, 24141026, 24150381, 24148165, 24171457 FAX : 24130387 EMAIL: mumbai-patent@nic.in	Shri M.A. Haafeez Assistant Controller of Patents & Designs

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Some important Do's and Don'ts in Patent Application according to Indian Council of Agricultural Research (ICAR)

- Maintain a complete secrecy of invention before filing a patent application
- Do not publish the invention for further 12 months from the date of filing the application nor publicize or take the invention to the public domain
- Adequate work records should be maintained while conducting the research leading to the patentable invention
- It should be possible to re-construct on time scale as to when the work related to invention was conceived, when it was actually started, when the inventive step was reached and when it was first successfully demonstrated in the laboratory.
- Data may be assembled, organized and analysed, if necessary and the results worked out as usual on the research/experiment elucidating the invention. Similarly drawings may be made and photographs taken wherever necessary and as appropriate to effectively document the claims of invention.
- The research must be done in a simplistic way so that it appears to be just a routine. Data must however be recorded and maintained diligently.
- Becoming conspicuous in the mid-course of research would possibly catch the attention of some probable offender or competitor. This precaution is necessary till the patent application is admitted by the patent office and thereby priority date of invention is ensured.
- A good background on the subject area of invention must be gained, particularly about the inventions from the subject area already and anywhere patented, if any. This would help in considering whether the results of present study/ experiment qualify for a patent or not.
- A 'Provisional Application' must be filed in cases where the results of the research are well anticipated but are not actually known or data not yet analysed or photographs or figures are not ready to be appended with the application.
- It is not necessary to write claims in the provisional application. An application is to be submitted as provisional only when its filing is felt urgent in view of a possible threat of losing priority date from a similar claim likely to be put up by another claimant on the same/similar invention.
- Once a 'Provisional Application' is filed, it is obligatory to file the 'Complete Application' within a period of 12 months, with out late fee, to maintain its Priority Date.
- The complete application must furnish complete specifications, claims, drawings and figures.
- The description/ claims in the complete application should not deviate from the provisional application
- The applicant should understand that the patent application is a Techno-legal document, which may often need improvement in presentation/style of the technical content, particularly in the claims.
- While preparing the application, the applicant must give 'Declaration' in respect of the bonafides of the research carried out and must complete the application in three original copies
- It is desirable to seek the advise of Patent Attorney for preparing patent document, particularly in cases where there is export potential or the patent is likely to have high commercial stakes in other countries.