

**TWO-YEAR  
POST GRADUATE DEGREE PROGRAMME (CBCS)  
IN  
BOTANY**

**SEMESTER - III**

**Course: BOTSEC T  
(Intellectual Property Rights)**

**Self-Learning Material**



**DIRECTORATE OF OPEN AND DISTANCE LEARNING  
UNIVERSITY OF KALYANI  
KALYANI - 741235, WEST BENGAL**

---

## **Course Preparation Team**

---

**Dr. Ankita Pramanik**  
**Assistant professor**  
**Department of Botany, DODL**  
**Kalyani University**

**Dr. Neera Sen Sarkar**  
**Assistant Professor**  
**Department of Botany**  
**Kalyani University**

---

**July 2023**

Directorate of Open and Distance Learning, University of Kalyani

Published by the Directorate of Open and Distance Learning, University of Kalyani,  
Kalyani741235, West Bengal.

All rights reserved. No. part of this work should be reproduced in any form without the permission in writing from the Directorate of Open and Distance Learning, University of Kalyani.

---

**Authors are responsible for the academic contents of the course as far as copyright laws are concerned.**

---

## **Director's Message**

Satisfying the varied needs of distance learners, overcoming the obstacle of distance and reaching the unreached students are the threefold functions catered by Open and Distance Learning (ODL) systems. The onus lies on writers, editors, production professionals and other personal involved in the process to overcome the challenges inherent to curriculum design and production of relevant Self Learning Materials (SLMs). At the University of Kalyani a dedicated team under the able guidance of the Hon'ble Vice-Chancellor has invested its best efforts, professionally and in keeping with the demands of Post Graduate CBCS Programmes in Distance Mode to devise a self-sufficient curriculum for each course offered by the Directorate of Open and Distance Learning (DODL) University of Kalyani.

Development of printed SLMs for students admitted to the DODL within a limited time to cater to the academic requirements of the Course as per standards set by Distance Education Bureau of the University Grants Commission, New Delhi, India under Open and Distance Mode UGC-DEB Regulations, 2020 had been our endeavour. We are happy to have achieved our goal.

Utmost care and precision have been ensured in the development of SLMs, making them useful to the learners, besides avoiding errors as far as practicable. Further, suggestions from the stakeholders in this would be welcome.

During the production-process of the SLMs, the team continuously received positive stimulations and feedback from Professor (Dr.) Amalendu Bhunia, Hon'ble Vice-Chancellor, University of Kalyani, who kindly accorded directions, encouragements and suggestions, offered constructive criticisms to develop it within proper requirements. We gracefully, acknowledge his inspiration and guidance.

Sincere gratitude is due to the respective chairpersons as well as each and every Members of PGBOS (DODL), University of Kalyani, Heartfelt thanks is also due to the Course Writers- faculty members at the DODL, subject-experts serving at University Post Graduate departments and also to the authors and academicians whose academic contributions have enriched the SLMs. We humbly acknowledge their valuable academic contributions. I would especially like to convey gratitude to all other University dignitaries and personnel involved either at the conceptual or operational level of the DODL of University of Kalyani.

Their persistent and co-ordinated efforts have resulted in the compilation of comprehensive, learners friendly, flexible text that meets curriculum requirements of the Post Graduate Programme through distance mode.

Self-Learning Materials (SLMs) have been published by the Directorate of Open and Distance Learning, University of Kalyani, Kalyani-741235, West Bengal and all the copyright reserved for University of Kalyani. No part of this work should be reproduced in any form without permission in writing from the appropriate authority of the University of Kalyani.

All the Self Learning Materials are self-writing and collected from e-Book, journals and websites.

Director  
Directorate of Open & Distance Learning  
University of Kalyani



**SYLLABUS**  
**COURSE – BOTSEC T**  
**Intellectual Property Rights**  
**(Full Marks – 50)**

Course	Group	Details Contents Structure	Study hour
<b>BOTSEC T</b>	<b>Intellectual Property Rights</b>	<b>Unit 1. Introduction – I</b> 1.1. Introduction: Meaning and forms of Intellectual Property Rights; International Conventions; World Intellectual Property Organisation.	1
		<b>Unit 2. Introduction – II</b> 2.2. Introduction: Indian scenario.	1
		<b>Unit 3. Copyright</b> 3.3. Copyright: Background; Content and substance; Period and assignment of copyright; Infringement and remedies; penalties.	1
		<b>Unit 4. Patents</b> 4. Patents: Historical overview of Patent Law; purpose, policy and meaning of patent; objectives of Patent Law; patentability; procedure; rights and obligations of patent holder; infringement and remedies; penalties.	1
		<b>Unit 5. Geographical Indications</b> 5.5. Geographical Indications: Meaning and content; protection; procedure; period of validity; rights and obligations of registration owners; infringement and remedies; penalties.	1
		<b>Unit 6. Protection of Plant Varieties &amp; Farmers' Rights</b> 6.6. Protection of Plant Varieties & Farmers' Rights: Meaning and content; definitions; procedure; rights and privileges; compensations; compulsory licence; period of validity; revocation and cancellation of registration; infringement and remedies; penalties; National Gene Fund.	1

Course	Group	Details Contents Structure		Study hour
<b>BOTSECT</b>	<b>Intellectual Property Rights</b>	<b>Unit Traditional Knowledge</b>	<b>7.7. Traditional Knowledge: Documentation of TK; IPR issues in protection of TK; value addition; transfer of TK.</b>	1
		<b>Unit Biodiversity &amp; Environment</b>	<b>8.8. Biodiversity &amp; Environment: Documentation; IPR issues in biodiversity conservation; Access to plant genetic resources and benefit sharing; Bioprospecting; Biopiracy; Implications in environmental policies; IPR in environmental sustainability.</b>	1
		<b>Unit 9. IP issues in Biotechnology</b>	<b>9. IP issues in Biotechnology: Patentability issues; Trade Secrets; IP management; Relevant International Treaties.</b>	1

# Content

---

<b>COURSE - BOTSEC T</b>	<b>Page No.</b>
<b>(Intellectual Property Rights)</b>	
<b>Unit 1. Introduction - I</b>	<b>4-9</b>
<b>Unit 2. Introduction - II</b>	<b>9-16</b>
<b>Unit 3. Copyright</b>	<b>16-20</b>
<b>Unit 4. Patents</b>	<b>20-29</b>
<b>Unit 5. Geographical Indications</b>	<b>30-31</b>
<b>Unit 6. Protection of Plant Varieties &amp; Farmers' Rights</b>	<b>32-34</b>
<b>Unit 7. Traditional Knowledge</b>	<b>35-41</b>
<b>Unit 8. Biodiversity &amp; Environment</b>	<b>41-45</b>
<b>Unit 9. IP issues in Biotechnology</b>	<b>45-50</b>





# **COURSE – BOTSEC T**

## **Intellectual Property Rights**

**Skill Enhancement Courses**

**Credits = 2**

---

### **Content Structure**

---

1. Introduction
2. Course Objective
3. Introduction: Meaning and forms of Intellectual Property Rights; International Conventions; World Intellectual Property Organisation; Indian scenario.
4. Copyright: Background; Content and substance; Period and assignment of copyright; Infringement and remedies; penalties.
5. Patents: Historical overview of Patent Law; purpose, policy and meaning of patent; objectives of Patent Law; patentability; procedure; rights and obligations of patent holder; infringement and remedies; penalties.
6. Geographical Indications: Meaning and content; protection; procedure; period of validity; rights and obligations of registration owners; infringement and remedies; penalties.
7. Protection of Plant Varieties & Farmers' Rights: Meaning and content; definitions; procedure; rights and privileges; compensations; compulsory licence; period of validity; revocation and cancellation of registration; infringement and remedies; penalties; National Gene Fund.
8. Traditional Knowledge: Documentation of TK; IPR issues in protection of TK; value addition; transfer of TK.
9. Biodiversity & Environment: Documentation; IPR issues in biodiversity conservation; Access to plant genetic resources and benefit sharing; Bioprospecting; Biopiracy; Implications in environmental policies; IPR in environmental sustainability.
10. IP issues in Biotechnology: Patentability issues; Trade Secrets; IP management; Relevant International Treaties.

11. Let's sum up
12. Suggested Readings
13. Assignments

---

## **1. Introduction**

---

Intellectual property Right (IPR) is a term used for various legal entitlements which attach to certain types of information, ideas, or other intangibles in their expressed form. The holder of this legal entitlement is generally entitled to exercise various exclusive rights in relation to the subject matter of the Intellectual Property. The term intellectual property reflects the idea that this subject matter is the product of the mind or the intellect, and that Intellectual Property rights may be protected at law in the same way as any other form of property. Intellectual property laws vary from jurisdiction to jurisdiction, such that the acquisition, registration or enforcement of IP rights must be pursued or obtained separately in each territory of interest.

---

## **2. Course Objectives**

---

**After completion of the course you will be able to:**

- ❖ Define IPR
- ❖ Explain World Intellectual Property Organisation; Indian scenario
- ❖ To Know about patent
- ❖ To understand IPR issues in biodiversity conservation

---

### **3. Introduction: Meaning and forms of Intellectual Property Rights; International Conventions; World Intellectual Property Organisation; Indian scenario.**

---

#### **Meaning and forms of Intellectual Property Rights:**

Intellectual property Right (IPR) is a term used for various legal entitlements which attach to certain types of information, ideas, or other intangibles in their expressed form. The holder of this legal entitlement is generally entitled to exercise various exclusive rights in relation to the subject matter of the Intellectual Property. The term intellectual property reflects the idea that this subject matter is the product of the mind or the intellect, and that Intellectual Property rights may be protected at law in the same way as any other form of property. Intellectual property laws vary from jurisdiction to jurisdiction, such that the acquisition, registration or enforcement of IPR rights must be pursued or obtained separately in each territory of interest.

Intellectual property rights (IPR) can be defined as the rights given to people over the creation of their minds. They usually give the creator an exclusive right over the use of his/her creations for a certain period of time.

#### **Intellectual Property**

Intellectual property is an intangible creation of the human mind, usually expressed or translated into a tangible form that is assigned certain rights of property. Examples of intellectual property include an author's copyright on a book or article, a distinctive logo design representing a soft drink company and its products, unique design elements of a website, or a patent on the process to manufacture chewing gum.

#### **Intellectual Property Rights**

Intellectual property rights (IPR) can be defined as the rights given to people over the creation of their minds. They usually give the creator an exclusive right over the use of his/her creations for a certain period of time.

Intellectual property (IP) refers to creations of the mind: inventions, literary and artistic works, and symbols, names, images, and designs used in commerce.

### **Categories of Intellectual Property**

One can broadly classify the various forms of IPRs into two categories:

- ✓ IPRs that stimulate inventive and creative activities (patents, utility models, industrial designs, copyright, plant breeders' rights and layout designs for integrated circuits)and
- ✓ IPRs that offer information to consumers (trademarks and geographical indications).

IPRs in both categories seek to address certain failures of private markets to provide for an efficient allocation of resources. IP is divided into two categories for ease of understanding:





#### **1. Industrial Property**

#### **2. Copyright**

**Industrial property**, which includes inventions (patents), trademarks, industrial designs, andgeographic indications of source; and

**Copyright**, which includes literary and artistic works such as novels, poems and plays, films, musical works, artistic works such as drawings, paintings, photographs and sculptures, andarchitectural designs. Rights related to copyright include those of performing artists in their performances, producers of phonograms in their recordings, and those of broadcasters in their radio and television programs.

### **Intellectual property shall include the right relating to:**

-  Literary, artistic and scientific works;
-  Performance of performing artists;
-  Inventions in all fields of human endeavour;
-  Scientific discoveries;

- ✚ Industrial designs;
- ✚ Trademarks, service marks and etc;
- ✚ Protection against unfair competition.

### **Rights protected under Intellectual Property:**

The different types of Intellectual Property Rights are –

- 1) Patents
- 2) Copyrights
- 3) Trademarks
- 4) Industrial designs
- 5) Protection of Integrated Circuits layout design
- 6) Geographical indications of goods
- 7) Biological diversity
- 8) Plant varieties and farmers rights
- 9) Undisclosed information

### **International Conventions:**

The most important Conventions and Treaties at International level include –

- (i) The Paris Convention for the Protection of Industrial Property
- (ii) The Berne Convention for the Protection of Literary and Artistic Works
- (iii) The WIPO Copyright Treaty (WCT)
- (iv) The Patent Cooperation Treaty (PCT)
- (v) Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure
- (vi) The Madrid Agreement Concerning the International Registration of Marks and the Protocol Relating to the Madrid Agreement
- (vii) The Hague Agreement Concerning the International Deposit of Industrial Designs
- (viii) The Trademark Law Treaty (TLT)

- (ix) The Patent Law Treaty (PLT)
- (x) Treaties on Classification
- (xi) Special Conventions in the Field of Related Rights: The International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations (“the Rome Convention”)
- (xii) The WIPO Performances and Phonograms Treaty (WPPT)
- (xiii) The International Convention for the Protection of New Varieties of Plants
- (xiv) The Agreement on Trade-Related Aspects of Intellectual Property Rights (“TRIPS”) and WIPO-WTO Cooperation
- (xv) Progressive Development of International Intellectual Property Law

**World Intellectual Property Organization:**

The World Intellectual Property Organization (WIPO) is one of the 17 specialized agencies of the United Nations, located in Geneva, Switzerland. The Organization has External Offices at Rio de Janeiro in Brazil, Tokyo in Japan, Singapore and New York.

The **mission of WIPO** is to promote innovation and creativity for the economic, social and cultural development of all countries, through a balanced and effective international intellectual property system.

The origin of WIPO goes back to 1883 and 1886 when the Paris Convention for the Protection of Industrial Property and the Berne Convention for the Protection of Literary and Artistic Works, respectively, were concluded. Both Conventions provided for the establishment of an international bureau. The two bureaus were united in 1893 and, in 1970, were replaced by the World Intellectual Property Organization, by virtue of the WIPO Convention.

The WIPO Convention, the constituent instrument of the World Intellectual Property Organization (WIPO), was signed at Stockholm on July 14, 1967, entered into force in 1970 and was amended in 1979. WIPO is an inter-governmental organization that became in 1974 one of the specialized agencies of the United Nations system of organizations.

WIPO currently has 185 Member States, and 68 inter-governmental organizations (IGOs) and International non-governmental organizations (NGOs) and 63 National NGOs that are accredited as observers at WIPO meetings.

The core tasks of WIPO are:

- working with Member States to support a balanced evolution of international IP law
- administering treaties
- assisting governments and organizations in developing the policies, structures and skills needed to harness the potential of IP for economic development
- servicing global registration systems for trademarks, industrial designs and appellations of origin and a global filing system for patents
- delivering arbitration, mediation and other dispute resolution services
- promoting respect for IP
- providing a forum for informed debate and for the sharing of IP knowledge identifying IP-based solutions that can help confront global challenges and maximize the benefits of the IP system for all.

### **How WIPO works?**

WIPO's Member States determine the strategic direction and activities of the Organization. They meet in the Assemblies, committees and working groups. The WIPO Secretariat, or International Bureau, is based in Geneva. WIPO staff, drawn from more than 90 countries, includes experts in diverse areas of IP law and practice, as well as specialists in public policy, economics, administration and IT. The respective divisions of the Secretariat are responsible for coordinating the meetings of Member States and implementing their decisions; for administering the international IP registration systems; for developing and executing the programs designed to achieve WIPO's goals; and for providing a repository of IP expertise to assist its members.

It has to present a program and a budget every 2 years about performance measures, budget planning for all the events of the organization which requires member state



approval. It is a self financing organization and its funds are majorly used for organizing events.

WIPO Arbitration and Mediation Centre was created in 1994 for the settlement of international commercial disputes arising between private parties located in Geneva, Switzerland and it has an office in Singapore.

### **WIPO's Goals:**

The strategic goals defined in WIPO's revised Program and Budget for 2008/09 are:

- A balanced evolution of the international normative framework for IP
- Provision of premier global IP services
- Facilitating the use of IP for development
- Coordination and development of global IP infrastructure
- World reference source for IP information and analysis
- International cooperation on building respect for IP
- Addressing IP in relation to global policy issues
- A responsive communications interface between WIPO, its Member States and all stakeholders
- An efficient administrative and financial support structure to enable WIPO to deliver its programs

### **Indian Scenario:**

#### **History of Copyright Law in India**

Modern copyright law developed in India gradually, in a span of more than 150 years. Copyright law entered India in 1847 through an enactment during the East India Company's regime. According to the 1847 enactment, the term of copyright was for the lifetime of the author plus seven years post-mortem. But in no case could the total term of copyright exceed a period of forty-two years. The government could grant a compulsory licence to publish a book if the owner of copyright, upon the death of the author, refused to allow its publication. The act of infringement comprised in a person's

unauthorized printing of a copyright work for (or as a part of attempt of) "sale hire, or exportation", or "for selling, publishing or exposing to sale or hire".

Suit or action for infringement was to be instituted in the "highest local court exercising original civil jurisdiction." The Act provided specifically that under a contract of service copyright in "any encyclopedia, review, magazine, periodical work or work published in a series of books or parts" shall vest in the "proprietor, projector, publisher or conductor". Infringing copies were deemed to be copies of the proprietor of copyrighted work. Importantly, unlike today, copyright in a work was not automatic. Registration of copyright with the Home Office was mandatory for the enforcement of rights under the Act. However, the Act also specifically reserved the subsistence of copyright in the author, and his right to sue for its infringement to the extent available in law other than the 1847 Act. At the time of its introduction in India, copyright law had already been under development in Britain for over a century and the provisions of the 1847 enactment reflected the learnings from deliberations during this period.

In 1914, the then Indian legislature enacted a new Copyright Act which merely extended most portions of the United Kingdom Copyright Act of 1911 to India. It did, however, make a few minor modifications. First, it introduced criminal sanctions for copyright infringement (sections 7 to 12). Second, it modified the scope of the term of copyright; under section 4 the "sole right" of the author to "produce, reproduce, perform or publish a translation of the work shall subsist only for a period of ten years from the date of the first publication of the work." The author, however, retained her "sole rights" if within the period of ten years she published or authorised publication of her work a translation in any language in respect of that language. The 1914 Act was continued with minor adaptations and modifications till the 1957 Act was brought into force on 24th January, 1958.

### **History of Patent Law in India**

The first legislation in India relating to patents was the Act VI of 1856. The objective of this legislation was to encourage inventions of new and useful manufactures and to induce inventors to disclose secret of their inventions. The Act was subsequently

repealed by Act IX of 1857 since it had been enacted without the approval of the sovereign. Fresh legislation for granting 'exclusive privileges' was introduced in 1859 as Act XV of 1859. This legislation contained certain modifications of the earlier legislation, namely, grant of exclusive privileges to useful inventions only and extension of priority period from 6 to 12 months. The Act excluded importers from the definition of inventor. The 1856 Act was based on the United Kingdom Act of 1852 with certain departures including allowing assignees to make application in India and also taking prior public use or publication in India or United Kingdom for the purpose of ascertaining novelty.

The Act of 1859 provided protection for invention only and not for designs whereas United Kingdom had been protecting designs from 1842 onwards. To remove this lacuna, the 'Patterns and Designs Protection Act' (Act XIII) was passed in 1872. This Act amended the 1859 Act to include any new and original pattern or design or the application of such pattern to any substance or article of manufacture within the meaning of 'new manufacture'. The Act XV of 1859 was further amended in 1883 by XVI of 1883 to introduce a provision to protect novelty of the invention, which prior to making application for their protection were disclosed in the Exhibitions of India. A grace period of 6 months was provided for filing such applications after the date of the opening of such Exhibition.

In 1888, new legislation was introduced to consolidate and amend the law relating to invention and designs in conformity with the amendments made in the UK law.

In 1911, the Indian Patents and Designs Act, 1911, (Act II of 1911) was brought in replacing all the previous legislations on patents and designs. This Act brought patent administration under the management of Controller of Patents for the first time. This Act was amended in 1920 to provide for entering into reciprocal arrangements with UK and other countries for securing priority. In 1930, further amendments were made to incorporate, *inter-alia*, provisions relating to grant of secret patents, patent of addition, use of invention by Government, powers of the Controller to rectify register of patent and increase of term of the patent from 14 years to 16 years. In 1945, another amendment was made to provide for filing of provisional specification and submission of complete specification within nine months. After Independence, it was felt that the

Indian Patents & Designs Act, 1911 was not fulfilling its objective. It was found desirable to enact comprehensive patent law owing to substantial changes in political and economic conditions in the country. Accordingly, the Government of India constituted a committee under the Chairmanship of Justice (Dr.) Bakshi Tek Chand, a retired Judge of Lahore High Court, in 1949, to review the patent law in India in order to ensure that the patent system is conducive to the national interest.

The Committee submitted its interim report on 4th August, 1949 with recommendations for prevention of misuse or abuse of patent right in India and for amendments to sections 22, 23 & 23A of the Patents & Designs Act, 1911 on the lines of the United Kingdom Acts of 1919 and 1949.

Based on the recommendations of the Committee, the 1911 Act was amended in 1950 (Act XXXII of 1950) in relation to working of inventions and compulsory licence/revocation. In 1952, an amendment was made to provide compulsory licence in relation to patents in respect of food and medicines, insecticide, germicide or fungicide and a process for producing substance or any invention relating to surgical or curative devices, through Act LXX of 1952. The compulsory licence was also available on notification by the Central Government. Based on these commendations of the Committee, a bill was introduced in the Parliament in 1953 (Bill No. 59 of 1953). However, the bill lapsed on dissolution of the Lok Sabha.

In 1957, the Government of India appointed Justice N. Rajagopala Ayyangar Committee to examine the question of revision of the Patent Law and advise government accordingly. The report of the Committee, which comprised of two parts, was submitted in September, 1959. The first part dealt with general aspects of the patent law and the second part gave detailed note on the several clauses of the lapsed bill of 1953. The first part also dealt with evils of the patent system and solution with recommendations in regard to the law. The committee recommended retention of the patent system, despite its shortcomings. This report recommended major changes in the law which formed the basis of the introduction of the Patents Bill, 1965. This bill was introduced in the Lok Sabha on 21st September, 1965, which, however, lapsed.

In 1967, an amended bill was introduced which was referred to a Joint Parliamentary

Committee and on the final recommendation of the Committee, the Patents Act, 1970 was passed. This Act repealed and replaced the 1911 Act so far as the patents law was concerned. However, the 1911 Act continued to be applicable to designs. Most of the provisions of the 1970 Act were brought into force on 20th April, 1972 with the publication of the Patents Rules, 1972.

This Act remained in force for about 24 years till December 1994 without any change. An ordinance effecting certain changes in the Act was issued on 31st December 1994, which ceased to operate after six months. Subsequently, another ordinance was issued in 1999. This ordinance was later replaced by the Patents (Amendment) Act, 1999 that was brought into force retrospectively from 1st January, 1995. The amended Act provided for filing of applications for product patents in the areas of drugs, pharmaceuticals and agro-chemicals though such patents were not allowed. However, such applications were to be examined only after 31st December, 2004. Meanwhile, the applicants could be allowed Exclusive Marketing Rights (EMRs) to sell or distribute these products in India, subject to fulfillment of certain conditions.

The second amendment to the 1970 Act was made through the Patents (Amendment) Act, 2002 (Act 38 of 2002). This Act came into force on 20th May, 2003 with the introduction of the new Patents Rules, 2003 by replacing the earlier Patents Rules, 1972. The third amendment to the Patents Act, 1970 was introduced through the Patents (Amendment) Ordinance, 2004 with effect from 1st January, 2005. This Ordinance was later replaced by the Patents (Amendment) Act, 2005 (Act 15 of 2005) on 4th April, 2005 which was brought into force from 1st January, 2005.

### **History of Trademark Law in India**

While some form of proprietary protection for marks in India dates back several millennia, India's statutory Trademarks Law dates back to 1860. Prior to 1940 there was no official trademark Law in India. Numerous problems arose on infringement, law of passing off etc and these were solved by application of section 54 of the Specific Relief Act, 1877 and the registration was obviously adjudicated by obtaining a declaration as to the ownership of a trademark under Indian Registration Act 1908.

To overcome the aforesaid difficulties the Indian Trademarks Act was passed in 1940, this corresponded with the English Trademarks Act. After this there was an increasing need for more protection of Trademarks as there was a major growth in Trade and Commerce. The replacement to this act was the Trademark and Merchandise Act, 1958. This Act was to provide for registration and better protection of Trademarks and for prevention of the use of fraudulent marks on merchandise. This Law also enables the registration of trademarks so that the proprietor of the trademark gets legal right to the exclusive use of the trademark. The objective of this act was easy registration and better protection of trademarks and to prevent fraud.

The repeal of the Trademarks and Merchandise Act gave rise to the Trademark Act 1999; this was done by the Government of India so that the Indian Trademark Law is in compliance with the TRIPS obligation on the recommendation of the World Trade Organisation. The object of the 1999 Act is to confer the protection to the user of the trademark on his goods and prescribe conditions on acquisition, and legal remedies for enforcement of trademark rights.

### **Intellectual Property Trends – India**

During 2009-10, 34,287 patent applications were filed, 6069 examined and 6168 patents granted. The number of applications filed by the Indian applicants was 7044. Out of the applications filed by the Indian applicants, Maharashtra accounted for the maximum number followed by Delhi, Tamil Nadu, Karnataka, Andhra Pradesh, West Bengal etc.

During 2009-10, 6092 design applications were filed, 6266 examined and 6025 registered. The number of applications filed by the Indian applicants was 4267. The number of registered designs in force at the end of 2009-10 was 39008.

During 2009-10, 1,41,943 trademark applications were filed, 25875 examined and 67,490 registered. The number of applications filed by the Indian applicants was 1,34,403. The total number of registered trademarks as of 31st March, 2010 is 8,22,825.

During 2009-10, 40 Geographical indications applications were filed and 14 were registered. A total of 120 Geographical Indications have been registered till 31st

March,2010.

During 2009-10, 142 applications were received for access of bio-resources for research/commercial use, transfer of research results, intellectual property rights and thirdparty transfer. Totally, 13 agreements have been signed. So far, 11 patents have been granted on the applications cleared by NBA. The NBA has also received a royalty amount of Rs.37.89 lakhs from the applicants who have exported bio-resources.

In 2010-11, a total of 642 applications representing 28 crops were received by the Authority for seeking plant variety protection under the Act. The applications belong to new (395), extant (216), farmers' varieties (30) and essentially derived variety (1) categories.

### **Initiatives of Government of India towards protection of IPR**

1. The Government has brought out A Handbook of Copyright Law to create awareness of copyright laws amongst the stakeholders, enforcement agencies, professional users like the scientific and academic communities and members of the public.
2. National Police Academy, Hyderabad and National Academy of Customs, Excise and Narcotics conducted several training programs on copyright laws for the police and customs officers.
3. The Department of Education, Ministry of Human Resource Development, Government of India has initiated several measures in the past for strengthening the enforcement of copyrights that include constitution of a Copyright Enforcement Advisory Council (CEAC), creation of separate cells in state police headquarters, encouraging setting up of collective administration societies and organization of seminars and workshops to create greater awareness of copyright laws among the enforcement personnel and the general public.
4. Special cells for copyright enforcement have so far been set up in 23 States and Union Territories, i.e. Andhra Pradesh, Assam, Andaman & Nicobar Islands, Chandigarh, Dadra & Nagar Haveli, Daman & Diu, Delhi, Goa, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Madhya Pradesh,

Meghalaya, Orissa, Pondicherry, Punjab, Sikkim, Tamil Nadu, Tripura and West Bengal.

5. The Government also initiates a number of seminars/workshops on copyright issues. The participants in these seminars include enforcement personnel as well as representatives of industry organizations.

---

#### **4. Copyright: Background; Content and substance; Period and assignment of copyright; Infringement and remedies; penalties.**

---

##### **Background**

Copyright is the set of exclusive rights granted to the author or creator of an original work, including the right to copy, distribute and adapt the work. Copyright lasts for a certain time period after which the work is said to enter the public domain. Copyright gives protection for the expression of an idea and not for the idea itself. For example, many authors write textbooks on physics covering various aspects like mechanics, heat, optics etc. Even though these topics are covered in several books by different authors, each author will have a copyright on the book written by him / her, provided the book is not a copy of some other book published earlier.

**Copyright** ensures certain minimum safeguards of the rights of authors over their creations, thereby protecting and rewarding creativity. Creativity being the keystone of progress, uncivilized society can afford to ignore the basic requirement of encouraging the same. Economic and social development of a society is dependent on creativity. The protection provided by copyright to the efforts of writers, artists, designers, dramatists, musicians, architects and producers of sound recordings, cinematograph films and computer software, creates an atmosphere conducive to creativity, which induces them



to create more and motivates others to create.

### **Content and Substance**

According to Section 14 of the Act, "copyright" means the exclusive right subject to the provisions of this Act, to do or authorise the doing of any of the following acts in respect of a work or any substantial part thereof, namely –

#### **1. in the case of a literary, dramatic or musical work, not being a computer programme, -**

- (i) to reproduce the work in any material form including the storing of it in any medium by electronic means;
- (ii) to issue copies of the work to the public not being copies already in circulation;
- (iii) to perform the work in public, or communicate it to the public;
- (iv) to make any cinematograph film or sound recording in respect of the work;
- (v) to make any translation of the work;
- (vi) to make any adaptation of the work;
- (vii) to do, in relation to a translation or an adaptation of the work, any of the acts specified in relation to the work in sub-clauses (i) to (vi);

#### **2. in the case of a computer programme,-**

- (i) to do any of the acts specified in clause (a);
- (ii) to sell or give on commercial rental or offer for sale or for commercial rental any copy of the computer programme;
- (iii) Provided that such commercial rental does not apply in respect of computer programmes where the programme itself is not the essential object of the rental.

#### **3. in the case of an artistic work,-**

- (i) to reproduce the work in any material form including depiction in three dimensions of a two dimensional work or in two dimensions of a three dimensional work;
- (ii) to communicate the work to the public;
- (iii) to issue copies of the work to the public not being copies already in

circulation;

(iv) to include the work in any cinematograph film;

(v) to make any adaptation of the work;

(vi) to do in relation to an adaptation of the work any of the acts specified in relation to the work in sub-clauses (i) to (iv);

**4. In the case of cinematograph film, -**

(i) to make a copy of the film, including a photograph of any image forming part thereof;

(ii) to sell or give on hire, or offer for sale or hire, any copy of the film, regardless of whether such copy has been sold or given on hire on earlier occasions;

(iii) to communicate the film to the public;

**5. In the case of sound recording, -**

(i) to make any other sound recording embodying it;

(ii) to sell or give on hire, or offer for sale or hire, any copy of the sound recording regardless of whether such copy has been sold or given on hire on earlier occasions;

(iii) to communicate the sound recording to the public.

*Explanation:* For the purposes of this section, a copy which has been sold once shall be deemed to be a copy already in circulation.

**Period and Assignment of Copyright:**

Sec.18 of the Copyright Act, 1957 deals with assignment of copyright. The owner of the copyright in an existing work or the prospective owner of the copyright in a future work may assign to any person the copyright either wholly or partially and either generally or subject to limitations and either for the whole term of the copyright or any part thereof.

The mode of assignment should be in the following manner:

- Assignment should be given in writing and signed by the assignor or by his duly authorized agent.

- The assignment should identify the work and specify the rights assigned and the duration and territorial extent of such assignment.
- The assignment should also specify the amount of royalty payable, if any, to the author or his legal heirs during the currency of the assignment and the assignment may be subject to revision, extension or termination on terms mutually agreed upon by the parties.
- Where the assignee does not exercise the rights assigned to him within a period of one year from the date of assignment, the assignment in respect of such rights will be deemed to have lapsed after the expiry of the said period unless otherwise specified in the assignment.

The period of assignment will be deemed to be 5 years from the date of assignment unless specifically mentioned. If the territorial extent of assignment of the rights is not specified, it will be presumed to extend within India.

#### **Infringement and Remedies:**

Some of the commonly known acts involving infringement of copyright: Making infringing copies for sale or hire or selling or letting them for hire;

Permitting any place for the performance of works in public where such performance constitutes infringement of copyright;

Distributing infringing copies for the purpose of trade or to such an extent so as to affect prejudicially the interest of the owner of copyright ;

Public exhibition of infringing copies by way of trade; and Importation of infringing copies into India.

#### **Civil Remedies for Copyright Infringement:**

A copyright owner can take legal action against any person who infringes the copyright in the work. The copyright owner is entitled to remedies by way of injunctions, damages and accounts.

#### **Penalties:**

Any person who knowingly infringes or abets the infringement of the copyright in any work commits criminal offence under Section 63 of the Copyright Act. The minimum punishment for infringement of copyright is imprisonment for six months with the minimum fine of Rs. 50,000/-. In the case of a second and subsequent conviction the minimum punishment is imprisonment for one year and fine of Rs. one lakh.

---

**5. Patents: Historical overview of Patent Law; purpose, policy and meaning of patent; objectives of Patent Law; patentability; procedure; rights and obligations of patent holder; infringement and remedies; penalties.**

---

**Historical overview of Patent Law:**

The earliest form of patents might have existed in the 500 BC in Sybaris, Greece where monopolies were granted to new dishes for a period of one year. Some even contend that the patents originated in the Roman Empire where guilds existed, but its uncertain whether the guilds in that era followed such a system as they existed primarily for social and religious purposes. The guilds in the Middle Ages developed in the context of the market economies that existed in the cities. Maybe the proprietary attitude developed to safeguard the craft knowledge which had attained widespread reputation outside the region, thus increasing the commercial value of the craft. The, the guild system followed a system of apprenticeship, which facilitated the process of imparting the techniques of the craft. Thus it can be regarded as communal property, rather than a monopoly held by an individual. The craft developed within the guild and was shared by all the craftsmen of the guild. For example, the Venetian glassmakers had reputation for glass making during the Renaissance time. Glassmaking was strictly restricted to guild members and was closely controlled by them. There were regulations as to working

days, apprenticeship, technical specifications, quality of the glass, ingredients to be used. As the reputation of their craft increased the commercial value also increased, with it the realization that the craft must be strictly forbidden from being exported to other parts of Europe. Thus, the earliest forms of monopoly emerged in the form of a communal property, restricted to a region and the guild. Patents could have emerged out of the need to develop new industries within in the realm. The need for increased revenue, prevailing high taxes meant that the royalty could fill their coffers by allowing foreigners to practice new art within the realm. Protection of the trade, tax incentives may have served as inducements to lure the foreigners to introduce new industries. They were to be granted exclusive rights to practice their art for a certain period of time. Although, it is certain that the genesis of the patent system originated in Italy, there is some ambiguity as to whether it began in Venice or Florence as Filippo Brunelleschi of Florence had invented a new kind of boat in which heavy loads could be effectively hauled over the river. In 1421, the Gentlemen of the Works requested from the Lords of the Council of Florence an exclusive privilege for Filippo Brunelleschi to make and use his invention on the waters of Florence for three years. Quite a few patents had already been granted prior to 1474 when Venice came up with its first patent statute, traces of the modern patent law could be found in it: "We have among us men of great genius, apt to invent and discover ingenious devices; and in view of the grandeur and virtue of our city, more such men come to us very day from divers parts. Now, if provision were made for the works and devices discovered by such persons, so that others who may see them could not build them and take the inventor's honor away, more men would then apply their genius, would discover, and would build devices of great utility and benefit to our commonwealth.

The Patent System in India is governed by the Patents Act, 1970 as amended by the Patents(Amendment) Act, 2005 and the Patents Rules, 2003, as amended by the Patents (Amendment)Rules 2006 effective from 05-05-2006.

### **Purpose, Policy and Meaning of Patent:**

Patent is a grant for an invention by the Government to the inventor in exchange for full disclosure of the invention. A patent is an exclusive right granted by law to

applicants/assignees to make use of and exploit their inventions for a limited period of time (generally 20 years from filing). The patent holder has the legal right to exclude others from commercially exploiting his invention for the duration of this period. In return for exclusive rights, the applicant is obliged to disclose the invention to the public in a manner that enables others, skilled in the art, to replicate the invention. The patent system is designed to balance the interests of applicants/assignees (exclusive rights) and the interests of society (disclosure of invention).

### **Meaning of 'Invention' under Patent Law:**

Sec.2(1)(j) - Invention" means a new product or process involving an inventive step and capable of industrial application.

### **What is meant by 'New'?"**

The invention to be patented must not be published in India or elsewhere, or in prior public knowledge or prior public use with in India or claimed before in any specification in India. A feature of an invention that involves technical advance as compared to the existing knowledge or have economic significance or both and makes the invention not obvious to a person skilled in the art.

### **What can be patented?**

Any invention concerning with composition, construction or manufacture of a substance, of an article or of an apparatus or an industrial type of process.

### **What cannot be patented?**

Inventions falling within Section 20(1) of the Atomic Energy Act, 1962

### **Who are the beneficiaries of the patent grant?**

1. The inventor is secure from competition and can exploit the invention for his gain.
2. For the public the invention becomes public knowledge. The technology is freely available after expiry of patent and cheaper and better products become available.

## **Objectives and Patentability:**

### **What is meant by patentable invention?**

A new product or process, involving an inventive step and capable of being made or used in an industry. It means the invention to be patentable should be technical in nature and should meet the following criteria –

- ❖ Novelty: The matter disclosed in the specification is not published in India or elsewhere before the date of filing of the patent application in India.
- ❖ Inventive Step: The invention is not obvious to a person skilled in the art in the light of the prior publication/knowledge/ document.
- ❖ Industrially applicable: Invention should possess utility, so that it can be made or used in an industry.

### **What is not an 'Invention'?**

According to Sec 3 of the Patent Act, 1970

- ✓ Frivolous inventions
- ✓ Inventions contrary to well established natural laws
- ✓ Commercial exploitation or primary use of inventions, which is contrary to public order or morality which causes serious prejudice to health or human, animal, plant life or to the environment
- ✓ Mere Discovery of a Scientific Principle or
- ✓ Formulation of an Abstract Theory or
- ✓ Discovery of any living thing or
- ✓ Discovery of non-living substance occurring in nature

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.*

- ✓ Substance obtained by mere admixture resulting only in the aggregation of the properties of the components thereof or a process for producing such substance
- ✓ Mere arrangement or re-arrangement or duplication of known devices, each

functioning independently of one another in a known way

- ✓ Method of Agriculture or Horticulture
- ✓ Any process for medicinal, surgical, curative, prophylactic, diagnostic, therapeutic or other treatment of human beings *or* a similar treatment of animals to render them free of disease *or* to increase their economic value *or* that of their products
- ✓ Plants & animals in whole or any part thereof other than micro-organisms, but including seeds, varieties and species and essentially biological process for production or propagation of plants & animals
- ✓ mathematical method *or*
- ✓ business method *or*
- ✓ algorithms *or*
- ✓ computer programme *per se*
- ✓ A literary, dramatic, musical or artistic work or any other aesthetic creation including cinematographic work and television productions
- ✓ Presentation of information
- ✓ Topography of integrated circuits.
- ✓ Inventions which are Traditional Knowledge or an aggregation or duplication of known properties of traditionally known component or components

**Procedure:**

Application is required to be filed according to the territorial limits where the applicant or the first mentioned applicant in case of joint applicants, for a patent normally resides or has domicile or has a place of business or the place from where the invention actually originated. If the applicant for the patent or party in a proceeding having no business place or domicile in India, the appropriate office will be according to the address for service in India given by the applicant or party in a proceeding. The appropriate office once decided in respect of any proceedings under the Act shall not ordinarily be changed. The four patent offices are located at Kolkata, Mumbai, Delhi & Chennai.



**Publication:**

All the applications for patent, except the applications prejudicial to the defence of India or abandoned due to non-filing of complete specification within 12 months after filing the provisional or withdrawn within 15 months of filing the application, are published in the Patent Office Journal just after 18 months from the date of filing of the application or the date of priority whichever is earlier. The publication includes the particulars of the date of the application, application number, name and address of the applicant along with the abstract. The applications for patent are not open for public inspection before publication. After the date of publication of the application, as stated above, the complete specification along with provisional and drawing, if any, abstract, application on any form or on plain paper and any correspondence between the office and applicant may be inspected at the appropriate office by making a written request to the Controller in the prescribed manner and on the payment of prescribed fee.

**Request for examination:**

An application for patent will not be examined if no request is made by the applicant or by any other interested person in Form-18 with prescribed fee of Rs.2,500/- or Rs.10,000/- for natural person and other than natural person respectively, within a period of 48 months from the date of priority of the application or from the date of filing of the application, whichever is earlier. Where no request for examination of the application for patent has been filed within the prescribed period, the aforesaid application will be treated as withdrawn and, there after, application cannot be revived.

***Examination***

Application for patent, where request has been made by the applicant or by any other interested person, will be taken up for examination, according to the serial number of the requests received on Form 18. A First Examination Report (FER) stating the objections/requirements is communicated to the applicant or his agent according to the address for service ordinarily within six (06) months from the date of request for examination or date of publication whichever is later. Application or complete

specification should be amended in order to meet the objections/requirements within a period of 12 months from the date of First Examination Report (FER). No further extension of time is available in this regard. If all the objections are not complied with within the period of 12 months, the application shall be deemed to have been abandoned. When all the requirements are met the patent is granted, after 6 months from the date of publication, the letter patent is issued, entry is made in the register of patents and it is notified in the Patent Office, Journal.

**Withdrawal of patent application:**

The application for patent can be withdrawn at least 3 (Three) months before the first publication which will be 18 (Eighteen) months from the date of filing or date of priority whichever is earlier. The application can also be withdrawn at any time before the grant of the patent. The application withdrawn after the date of publication cannot be filed again as it is already laid open for public inspection. However, application withdrawn before the publication can be filed again provided it is not opened to public otherwise.

**Opposition proceedings to grant of patents:**

Where an application for a patent has been published but a patent has not been granted, any person may, in writing represent by way of opposition to the Controller against the grant of any Patent. The representation shall be filed at the appropriate office and shall include a statement and evidence, if any, in support of the representation and a request for hearing if so desired.

**Grant of Patent:**

When all the requirements are met or in case of opposition under section 25(1), if the opposition is decided in favour of the applicant, the patent is granted, after 6 months from the date of publication under section 11 A, the letter patent is issued, entry is made in the register of patents and it is notified in the Patent Office, Journal, thereafter opening the application, specification and other related documents for public inspection on payment of prescribed fee.

**Term and Date of Patent:**

Term of every patent will be 20 years from the date of filing of patent application, irrespective of whether it is filed with provisional or complete specification. Date of patent is the date on which the application for patent is filed. The term of patent in case of International applications filed under the Patent Cooperation Treaty designating India, will be 20 years from the International filing date accorded under the Patent Cooperation Treaty. A patent will have cease to effect on the expiration of the period prescribed for the payment of any renewal fee, if that fee is not paid within the prescribed period.

**Rights and Obligations of Patent Holder:**

Where a patent covers a product, the grant of patent gives the patentee the exclusive right to prevent others from performing, without authorization, the act of making, using, offering for sale, selling or importing that product for the above purpose. Where a patent covers a process, the patentee has the exclusive right to exclude others from performing, without his authorization, the act of using that process, using and offering for sale, selling or importing for those purposes, the product obtained directly by that process in India. Where a patent is granted to two or more persons, each of those persons will be entitled to an equal undivided share in the patent unless there is an agreement to the contrary.

**Infringement and Remedies:**

Infringement of a patent consists of the unauthorized making, importing, using, offering for sale or selling any patented invention within the India.

**Remedies against infringement of a patented invention:****1. Interlocutory Injunction**

A patent owner at the start of a trial can request for an interim injunction to restrain the defendant from committing the acts complained of until the hearing of the action or further orders. Permanent injunction is given based on the merits of the case at the end of the trial.

2. **Relief of damages:** An award of damages focuses on the losses sustained by the claimant. A patent owner is entitled to the relief of damages as compensation to the patentee and not punishment to the infringer.
3. **Account of profits:** Account of profits focuses on the profits made by the defendant, without reference to the damage suffered by the claimant at the hands of the defendant. The purpose of the account is to prevent the unjust enrichment of the defendant by the use of the claimant's invention. The patent owner may also opt for the account of profits where he has to prove use of invention and the amount of profit derived from such illegal use.

**Penalties:**

- 1) Contravention of secrecy provisions relating to certain inventions (Sec.118) - If any person fails to comply with any directions given under section 35 or makes or causes to be made an application in contravention of section 39 he shall be punishable with imprisonment up to 2 years or with fine or with both. (Section 35 deals with secrecy directions relating to inventions relevant for defence purposes and Section 39 deals with residents not to apply for patents outside India without prior permission.
- 2) Falsification of entries in register etc (Sec.119) - If any person makes, or causes to be made, a false entry in any register kept under this Act, he shall be punishable with imprisonment for a term that may extend to 2 years or with fine or with both.
- 3) Unauthorized claim of patent rights (Sec.120) - If any person falsely represents that any article sold by him is patented in India or is the subject of an application for a patent in India, he will be punishable with fine that may extend to Rs.1,00,000. The use of words 'patent', 'Patented', 'Patent applied for', 'Patent pending', 'Patent registered' without mentioning the name of the country means they are patented in India or patent applied for in India.
- 4) Wrongful use of words, "patent office" (Sec.121) - If any person uses on his place of business or any document issued by him or otherwise the words "patent

office” or anyother words which reasonably lead to the belief that his place of business is, or is officially connected with, the patent office, he will be punishable with imprisonment for aterm that may extend to 6 months, or with fine, or with both.

- 5) Refusal or failure to supply information (Sec.122) - If any person refuses or fails to furnish information as required under section 100(5) and 146 he shall be punishable with fine, which may go up to Rs 10,00,000/-. If he furnishes false information knowingly he shall be punishable with imprisonment that may extend to 6 months or with fine or with both.
- 6) Practice by non-registered patent agents (Sec.123) - Any person practicing as patent agent without registering is liable to be punished with a fine of Rs 1,00,000/- in the first offenceand Rs.5,00,000/- for subsequent offence.
- 7) Deals with offences by companies (Sec.124) - When offence is committed by a company as well as every person in charge of and responsible to the company for the conducts ofits business at the time of the commission of the offence will be deemed to be guilty and will be liable to be preceded against and punished accordingly. Provided that nothing contained in this sub-section shall render any such person liable to any punishment if heproves that the offence was committed without his knowledge or that he exercised all duediligence to prevent the commission of such offence.

---

## **6. Geographical Indications: Meaning and content; protection; procedure; period of validity; rights and obligations of registration owners; infringement and remedies; penalties.**

---

### **Meaning and Content:**

Geographical Indications of Goods are defined as that aspect of industrial property which refers to the geographical indication referring to a country or to a place situated therein as being the country or place of origin of that product.

### **What is a Geographical Indication?**

- \* It is an indication.
- \* It originates from a definite geographical territory.
- \* It is used to identify agricultural, natural or manufactured goods
- \* The manufactured goods should be produced or processed or prepared in that territory. It should have a special quality or reputation or other characteristics.

Examples of Indian Geographical Indications - Basmati Rice, Darjeeling Tea

### **Protection:**

Geographical Indications of Goods (Registration and Protection) Act, 1999 and The Geographical Indications of Goods (Registration and Protection) Rules, 2002 deal with registration and better protection of geographical indications relating to goods. The primary purpose of this Act is to provide legal protection to Indian Geographical Indications which in turn boost exports. Registration of Geographical indication promotes economic prosperity of producers of goods produced in a geographical territory.

According to the Act, the term 'geographical indication' (in relation to goods) means "an indication which identifies such goods as agricultural goods, natural goods or

manufactured goods as originating, or manufactured in the territory of a country, or a region or locality in that territory, where a given quality, reputation or other characteristic of such goods is essentially attributable to its geographical origin and in case where such goods are manufactured goods, one of the activities of either the production or of processing or preparation of the goods concerned takes place in such territory, region or locality, as the case may be".

**Procedure:**

The registration of a geographical indication is not compulsory; however, it offers better legal protection to facilitate an action for infringement. The registered proprietor and authorized users can initiate infringement actions. The authorized users can exercise the exclusive right to use the geographical indication.

**Period of Validity:**

The registration of a geographical indication is valid for a period of 10 years. It can be renewed from time to time for further period of 10 years each. If a registered geographical indication is not renewed it is liable to be removed from the register.

**Infringement and Remedies:**

A registered geographical indication is infringed if an unauthorized user uses it to indicate or suggests that certain goods originate from a geographical area other than the true place of origin in a manner which misleads the public as to the geographical origin of the goods, or when use of the geographical indication results in unfair competition. This includes passing off in respect of a registered geographical indication, or when the use of another geographical indication results in false representation to the public that goods originate from a territory in respect of which there is a registered geographical indication. The registered proprietor or the authorized users of a registered geographical indication can initiate an infringement action.

---

## **7. Protection of Plant Varieties & Farmers' Rights: Meaning and content; definitions; procedure; rights and privileges; compensations; compulsory licence; period of validity; revocation and cancellation of registration; infringement and remedies; penalties; National Gene Fund.**

---

### **Meaning and Content**

A plant variety represents a more precisely defined group of plants, selected from within a species, with a common set of characteristics.

The **Protection of Plant Varieties and Farmers' Rights Act, 2001** has been enacted to provide for the establishment of an effective system for protection of plant varieties, the rights of farmers and plant breeders and to encourage the development of new varieties of plants.

The objectives of the Act are:

- to establish an effective system for 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 the farmers in respect of their contribution made at any time in conserving, improving and making available plant genetic resources for the development of new plant varieties;
- to protect plant breeders' rights to stimulate investment for research and development both in the public and private sector for development of new plant varieties;
- to facilitate the growth of seed industry in the country that will ensure the availability of high quality seeds and planting material to the farmers.



## **Definitions**

A plant variety represents a more precisely defined group of plants, selected from within a species, with a common set of characteristics.

The **Protection of Plant Varieties and Farmers' Right Act, 2001** has been enacted to provide for the establishment of an effective system for protection of plant varieties, the rights of farmers and plant breeders and to encourage the development of new varieties of plants.

The objectives of the Act are:

- ✓ to establish an effective system for 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 the farmers in respect of their contribution made at any time in conserving, improving and making available plant genetic resources for the development of new plant varieties;
- ✓ to protect plant breeders' rights to stimulate investment for research and development both in the public and private sector for development of new plant varieties;
- ✓ to facilitate the growth of seed industry in the country that will ensure the availability of high quality seeds and planting material to the farmers.

## **Procedure**

The application for protection under the Act can be made by any of the following persons:

- ❖ Any person claiming to be the breeder of the variety;
- ❖ Any successor of the breeder of the variety;
- ❖ Any person being the assignee or the breeder of the variety in respect of the right to make such application;
- ❖ Any farmer or group of farmers or community of farmers claiming to be breeder of the variety;

- ❖ Any person authorized to apply on behalf of farmers; or
- ❖ Any university or publicly funded agricultural institution claiming to be breeder of the variety.

### **Criteria for registration of new variety**

**Novelty** - A new variety is deemed to be novel if, at the date of filing of the application for registration for protection, the propagating and harvested material of such variety has not been sold or otherwise disposed of by or with the consent of its breeder or his successor for the purposes of exploitation of such variety for a certain period of time before the date of filing of the application. For sale or disposal of a new variety in India, this time period is earlier than one year. Outside of India, in the case of trees and vines, the time period is earlier than six years. In any other case in India, it is earlier than four years.

**Distinctiveness** - A new variety is deemed distinct if it is clearly distinguishable by at least one essential characteristic from any other variety whose existence is a matter of common knowledge in any country at the time of filing of the application.

**Uniformity** - A new variety is deemed uniform if subject to the variation that may be expected from the particular features of its propagation it is sufficiently uniform in its essential characteristics.

**Stability** - A new variety is deemed stable if its essential characteristics remain unchanged after repeated propagation or, in case of a particular cycle of propagation, at the end of each such cycle.

### **Period of Validity:**

The duration of protection of registered varieties is different for different crops which are as below:

1. For trees and vines - 18 years.
2. For other crops - 15 years.
3. For extant varieties - 15 years from the date of notification of that variety by the Central Government under section 5 of the Seeds Act, 1966.

---

## **8. Traditional Knowledge: Documentation of TK; IPR issues in protection of TK; value addition; transfer of TK.**

---

The current international system for protecting intellectual property was fashioned during the age of industrialization in the West and developed subsequently in line with the perceived needs of technologically advanced societies. However, in recent years, indigenous peoples, local communities, and governments, mainly in developing countries, have demanded equivalent protection for traditional knowledge systems.

In 2000, WIPO members established an Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC), and in 2009 they agreed to develop an international legal instrument (or instruments) that would give traditional knowledge, genetic resources and traditional cultural expressions (folklore) effective protection. Such an instrument could range from a recommendation to WIPO members to a formal treaty that would bind countries choosing to ratify it.

Traditional knowledge is not so-called because of its antiquity. It is a living body of knowledge that is developed, sustained and passed on from generation to generation within a community, often forming part of its cultural or spiritual identity. As such, it is not easily protected by the current intellectual property system, which typically grants protection for a limited period to inventions and original works by named individuals or companies. Its living nature also means that “traditional” knowledge is not easy to define.

Recognizing traditional forms of creativity and innovation as protectable intellectual property would be a historic shift in international law, enabling indigenous and local communities as well as governments to have a say over the use of their traditional knowledge by others. This would make it possible, for example, to protect traditional remedies and indigenous art and music against misappropriation, and enable

communities to control and benefit collectively from their commercial exploitation. Although the negotiations underway in WIPO have been initiated and propelled mainly by developing countries, the discussions are not neatly divided along “North-South” lines. Communities and governments do not necessarily share the same views, and some developed country governments, especially those with indigenous populations, are also active.

Two types of intellectual property protection are being sought:

- **Defensive protection** aims to stop people outside the community from acquiring intellectual property rights over traditional knowledge. India, for example, has compiled a searchable database of traditional medicine that can be used as evidence of prior art by patent examiners when assessing patent applications. This followed a well-known case in which the US Patent and Trademark Office granted a patent (later revoked) for the use of turmeric to treat wounds, a property well known to traditional communities in India and documented in ancient Sanskrit texts. Defensive strategies might also be used to protect sacred cultural manifestations, such as sacred symbols or words from being registered as trademarks.
- **Positive protection** is the granting of rights that empower communities to promote their traditional knowledge, control its uses and benefit from its commercial exploitation. Some uses of traditional knowledge can be protected through the existing intellectual property system, and a number of countries have also developed specific legislation. However, any specific protection afforded under national law may not hold for other countries, one reason why many indigenous and local communities as well as governments are pressing for an international legal instrument.

WIPO’s work on traditional knowledge addresses three distinct yet related areas: traditional knowledge in the strict sense (technical know-how, practices, skills, and innovations related to, say, biodiversity, agriculture or health); traditional cultural expressions/expressions of folklore (cultural manifestations such as music, art, designs, symbols and performances); and genetic resources (genetic material of actual

or potential value found in plants, animals and micro-organisms).

Although for many communities traditional knowledge, genetic resources and traditional cultural expressions form part of a single integrated heritage, from an intellectual property standpoint they raise different issues and may require different sets of solutions. In all three areas, in addition to work on an international legal instrument, WIPO is responding to requests from communities and governments for practical assistance and technical advice to enable communities to make more effective use of existing intellectual property systems and participate more effectively in the IGC's negotiations. WIPO's work includes assistance to develop and strengthen national and regional systems for the protection of traditional knowledge (policies, laws, information systems and practical tools) and the Creative Heritage Project which provides hands-on training for managing intellectual property rights and interests when documenting cultural heritage.

**Traditional knowledge:**

When community members innovate within the traditional knowledge framework, they may use the patent system to protect their innovations. However, traditional knowledge as such - knowledge that has ancient roots and is often informal and oral - is not protected by conventional intellectual property systems. This has prompted some countries to develop their own *sui generis* (specific, special) systems for protecting traditional knowledge.

There are also many initiatives underway to document traditional knowledge. In most cases the motive is to preserve or disseminate it, or to use it, for example, in environmental management, rather than for the purpose of legal protection. There are nevertheless concerns that if documentation makes traditional knowledge more widely available to the general public, especially if it can be accessed on the Internet, this could lead to misappropriation and use in ways that were not anticipated or intended by traditional knowledge holders.

At the same time, documentation can help protect traditional knowledge, for example,

by providing a confidential or secret record of traditional knowledge reserved for the relevant community only. Some formal documentation and registries of traditional knowledge support *sui generis* protection systems, while traditional knowledge databases such as India's database on traditional medicine – play a role in defensive protection within the existing IP system. These examples demonstrate the importance of ensuring that documentation of traditional knowledge is linked to an intellectual property strategy and does not take place in a policy or legal vacuum.

In the WIPO talks, many argue that use of traditional knowledge ought to be subject to free, prior and informed consent, especially for sacred and secret materials. However, others fear that granting exclusive control over traditional cultures could stifle innovation, diminish the public domain and be difficult to implement in practice.

#### **Genetic resources:**

Genetic resources themselves are not intellectual property (they are not creations of the human mind) and thus cannot be directly protected as intellectual property. However, inventions based on or developed using genetic resources (associated with traditional knowledge or not) may be patentable or protected by plant breeders' rights. In considering intellectual property aspects of use of genetic resources, WIPO's work complements the international legal and policy framework defined by the Convention on Biological Diversity (CBD), and its Nagoya Protocol, and the International Treaty on Genetic Resources for Food and Agriculture of the United Nations Food and Agriculture Organization. Issues under discussion at WIPO include:

- **Defensive protection of genetic resources:** This strand of the work aims at preventing patents being granted over genetic resources (and associated traditional knowledge) which do not fulfil the existing requirements of novelty and inventiveness. In this context, to help patent examiners find relevant prior art, proposals have been made that genetic resources and traditional knowledge databases could help patent examiners avoid erroneous patents and WIPO has improved its own search tools and patent classification systems. The other, more

controversial, strand concerns the possible disqualification of patent applications that do not comply with CBD obligations on prior informed consent, mutually agreed terms, fair and equitable benefit-sharing, and disclosure of origin. “Biopiracy” is a term sometimes used loosely to describe biodiversity-related patents that do not meet patentability criteria or that do not comply with the CBD’s obligations – but this term has no precise or agreed meaning.

- **Disclosure requirements:** A number of countries have enacted domestic legislation putting into effect the CBD obligations that access to a country’s genetic resources should depend on securing that country’s prior informed consent and agreeing to fair and equitable benefit sharing. WIPO members are considering whether, and to what extent, the intellectual property system should be used to support and implement these obligations. Many, but not all, WIPO members want to make it mandatory for patent applications to show the source or origin of genetic resources, as well as evidence of prior informed consent and a benefit sharing agreement. Parallel discussions are also taking place in the World Trade Organization’s Council on Trade Related Aspects of Intellectual Property (TRIPS).

WIPO also deals with the intellectual property aspects of mutually agreed terms for fair and equitable benefit-sharing. It has developed, and regularly updates, an online database of relevant contractual practices, and has prepared draft guidelines on intellectual property clauses in access and benefit-sharing agreements.

### **Traditional cultural expressions:**

Traditional cultural expressions (folklore) are seen as integral to the cultural and social identities of indigenous and local communities, embodying know-how and skills, and transmitting core values and beliefs. Protecting folklore contributes to economic development, encourages cultural diversity and helps preserve cultural heritage.

Traditional cultural expressions can sometimes be protected by existing systems, such as copyright and related rights, geographical indications, appellations of origin, trademarks and certification marks. For example, contemporary adaptations of folklore are copyrightable, while performances of traditional songs and music may come under

the WIPO Performances and Phonograms Treaty. Trademarks can be used to identify authentic indigenous arts, as the Maori Arts Board in New Zealand, *Te Waka Toi*, has done. Some countries also have special legislation for the protection of folklore. Panama has established a registration system for traditional cultural expressions, while the Pacific Regional Framework for the Protection of Traditional Knowledge and Expressions of Culture gives “traditional owners” the right to authorize or prevent use of protected folklore and receive a share of the benefits from any commercial exploitation.

**Developing an international legal instrument:**

Because the existing international intellectual property system does not fully protect traditional knowledge and traditional cultural expressions, many communities and governments have called for an international legal instrument providing *sui generis* protection.

An international legal instrument would define what is meant by traditional knowledge and traditional cultural expressions, who the rights holders would be, how competing claims by communities would be resolved, and what rights and exceptions ought to apply. Working out the details is complex and there are divergent views on the best ways forward, including whether intellectual property-type rights are appropriate for protecting traditional forms of innovation and creativity.

To take just one example, communities may wish to control all uses of their traditional cultural expressions, including works inspired by them, even if they are not direct copies. Copyright law, on the other hand, permits building on the work of others, provided there is sufficient originality. The text of the legal instrument will have to define where the line is to be drawn between legitimate borrowing and unauthorized appropriation.

On genetic resources, countries agree that intellectual property protection and the conservation of biodiversity should be mutually supportive, but differ on how this should be achieved and whether any changes to current intellectual property rules are necessary.



Representatives of indigenous and local communities are assisted by the WIPO Voluntary Fund to attend the WIPO talks, and their active participation will continue to be crucial for a successful outcome. WIPO members have agreed to expedite their work so as to decide in late 2012 whether to convene a diplomatic conference for final adoption of one or more international instruments.

---

**9. Biodiversity & Environment: Documentation; IPR issues in biodiversity conservation; Access to plant genetic resources and benefit sharing; Bioprospecting; Biopiracy; Implications in environmental policies; IPR in environmental sustainability.**

---

**Documentation:**

India has been a party to the Convention on Biological Diversity since 5th June 1992 and ratified the Convention on 18th February 1994. The Convention on Biological Diversity is one of the most broadly subscribed international environmental treaties in the world. Opened for signature at the Earth Summit in Rio de Janeiro Brazil in 1992, it currently has 189 Parties – 188 States and the European Community - who have committed themselves to its three main goals: the conservation of biodiversity, sustainable use of its components and the equitable sharing of the benefits arising out of the utilization of genetic resources. The Secretariat of the Convention is located in Montreal, Canada. India is also a signatory to Cartagena Protocol on Biosafety signed on 23rd January 2001 and ratified on 11th September 2003.

**IPR issues in biodiversity conservation:**

India enacted The Biological Diversity Act, 2002 and The Biological Diversity Rules, 2004 to fulfill its commitments in the Convention on Biological Diversity and in the

Cartagena Protocol on Biosafety. Various states have also enacted state specific Biological diversity rules namely – Kerala Biological Diversity Rules, 2005; Sikkim State Biological Diversity Rules, 2006; Nagaland Biological Diversity Rules, 2010; Rajasthan Biological Diversity Rules, 2010; A.P. State Biological Diversity Rules, 2009, West Bengal Biological Diversity Rules, 2005; U.P. State Biodiversity Rules, 2010; Maharashtra Biological Diversity Rules, 2008 etc. The Biodiversity Act - 2002 primarily addresses access to genetic resources and associated knowledge by foreign individuals, institutions or companies, to ensure equitable sharing of benefits arising out of the use of these resources and knowledge to the country and the people.

The Act has specific provisions about ownership of intellectual property rights associated with exploitation of biodiversity. Industries have to obtain prior consent of the National Biodiversity Authority before exploring the biodiversity in India. In the event of R&D based on exploitation of biodiversity and associated local knowledge, there is a provision for sharing of benefits of such work with the local community. No direct flow of funds is expected to the community. Instead the Union Government will reach the benefits through State Governments to the community.

The Biological diversity Act of 2002 contains 65 sections under 12 chapters while the Biological Diversity Rules of 2004 consists of 24 rules and one schedule. According to Section 2(b) of the Biological Diversity Act, 2002 “Biological Diversity means the variability among living organisms from all sources and the ecological complexes of which they are part and includes diversity within species or between species and of ecosystems.”

### **Access to Plant Genetic Resources and Benefit Sharing:**

Chapter II of the Biological Diversity Act, 2000 lays down certain regulations with reference to access to Biological Diversity. The following regulations have been placed in Section 3 to 7 of the said act. Section 3 of the above referred act, requires the following categories of persons to seek previous permission of the National Biodiversity Authority, to obtain any biological resource occurring in India or knowledge associated there to for research or commercial utilization or for bio-survey and bio-utilization –

- A person who is not a citizen of India.

- A citizen of India who is a non-resident as per section 2(30) of the Income-tax Act, 1961.
- A body corporate, association, organization – Not incorporated or registered in India; or Incorporated or registered in India under any law for the time being in force which has any non-Indian participation in its share capital or management.

**Rule 14** of the Biological Diversity Rules, 2004 mentions the procedure for access to biological resources and associated traditional knowledge.

Section 4 of the above referred act requires that every person shall seek the previous approval of the national bio-diversity authority before transferring the results of any research related to any biological resources occurring in, or obtained from India to any person as referred to in section 3 above. **Rule 17** of the Biological Diversity Rules, 2004 mentions the procedure for seeking approval for transferring results of research.

#### **Bioprospecting & Biopiracy:**

Biodiversity prospecting is the exploration, extraction and screening of biological diversity and indigenous knowledge for commercially valuable genetic and biochemical resources. While it is true that biodiversity prospecting does not always involve the use of indigenous knowledge, it is clear that valuable chemical compounds derived from plants, animals and micro-organisms are more easily identified and are of greatest commercial value when collected with indigenous knowledge and/or found in territories traditionally inhabited by indigenous peoples.

Between 1956 and 1976 the U.S. National Cancer Institute screened over 35,000 plants and animals for anti-cancer compounds. The program was terminated in 1981 because of its failure to identify a greater number of new anti-cancer agents. A retrospective study conducted on the project concluded that the success rate in finding valuable species could have been doubled if medicinal folk knowledge had been the only information used to target species. Similarly in another instance scientists found that 86 percent of the plants used by Samoan healers displayed significant biological activity when tested in the laboratory.

Biopiracy can be defined as the stealing of knowledge from traditional and indigenous communities or individuals. The term can also be used to suggest a breach of a contractual agreement on the access and use of traditional knowledge to the detriment of the provider and bioprospecting without the consent of the local communities. The Action Group on Erosion, Technology and Concentration [ETC group, Canada (former RAFI)] defines it as “the appropriation of the knowledge and genetic resources of farming and indigenous communities by individuals or institutions seeking exclusive monopoly control (usually patents or plant breeders’ rights) over these resources and knowledge”.

There is a distinct difference between biopiracy and bioprospecting. The term ‘biopiracy’ describes the unauthorized and uncompensated taking and use of biological resources. In contrast, bioprospecting refers to the search for valuable active chemical compounds in nature, and involves accessing natural resources through legal means, securing prior informed consent from the custodians of the relevant natural resources and promoting equitable benefit sharing agreements with appropriate parties. Biopiracy deprives not only the custodians of biological resources but also the country concerned.

The *modus operandi* of the MNCs has been to collect the plant varieties and their germplasms from poor countries in order to cross-breed them with other varieties, and claim that they had invented something novel, non-obvious and of practical use (which are the requirements for acquiring patent rights), and then to patent them in their own countries or in any other country of their choice. Thus even though India is rich in biodiversity and has a rich biodiversity related intellectual heritage, biopiracy directs this wealth away from India and denies us our rights to use our resources and knowledge, for our needs and our economic benefits.

**IPR in environmental sustainability:**

Creating a world that is sustainable for future generations requires transitions towards novel technologies which are environmentally friendly and socially sustainable.

While intellectual property rights (IPR) can incentivise technological innovations, the debate on positive and negative effects of IPR over the last decades has identified a number of issues that hamper the diffusion of innovation. Amongst these issues are the increase of costs for negotiating licensing deals when necessary IPRs are distributed amongst several owners, and deterrent effects of the uncertainty whether existing IPRs are infringed and whether the owners are going to sue. Accordingly, increasing IPR protection is discussed as hindering market competition and for its negative impacts on costs of new technologies, most importantly those of high societal. Whereas the list of theoretical issues associated with IPR and diffusion of sustainable technologies is long, we lack empirical evidence about the extent of these potential problems.

---

## **10. IP issues in Biotechnology: Patentability issues; Trade Secrets; IP management; Relevant International Treaties.**

---

Biotechnology is generally defined as “the application of science and technology to living organisms, as well parts, products and models thereof, to alter living or non-living materials for the production of knowledge, goods and services”<sup>1</sup>. This definition is deliberately broad and covers all modern biotechnology but also many other traditional or borderline activities. Taken all together, these activities belong to what is commonly called “Life Sciences”. Biotechnology is a field where technology advances rapidly but returns on investments may be slow. For this reason, it is important for public research organisations and enterprises to protect the innovation that they generate with Intellectual Property Rights (IPR), which provide a basis for return on investment in research and development, by granting monopoly rights for a certain period of time to their owners.

Biotechnology is usually subdivided into three sectors that may overlap, namely:

Healthcare biotechnology or red biotechnology which plays an important role in drug

discovery (insulin, erythropoietin, etc.) and today is improving outcomes for patients and addressing unmet medical needs for the future; Agriculture biotechnology or green biotechnology that is used to enhance plants in order to improve their resistance to disease, tolerance for herbicides or difficult environment conditions, or to achieve higher yields with less inputs (water, fertilizers, etc.);

Industrial biotechnology or white technology, representing the “third wave” in biotechnology, because it follows innovation in the health and agricultural areas; this sector encompasses the application of biotechnology-based tools to traditional industrial processes (“bioprocessing”) and the manufacturing of bio-based products (biofuels, bio- plastics and bio-based chemicals). In this technology enzymes and/or micro-organisms, such as fungi, yeast, bacteria (also referred as “biocatalysts”), are used to make intermediate and endproducts more efficiently, reduce environmental impacts of processes and products and/or enable the creation of new products from renewable resources.

It is obvious that management of IP and IPR is a multidimensional task and calls for many different actions and strategies which need to be aligned with national laws and international treaties and practices. It is no longer driven purely by a national perspective. IP and its associated rights are seriously influenced by the market needs, market response, cost involved in translating IP into commercial venture and so on. In other words, trade and commerce considerations are important in the management of IPR. Different forms of IPR demand different treatment, handling, planning, and strategies and engagement of persons with different domain knowledge such as science, engineering, medicines, law, finance, marketing, and economics. Each industry should evolve its own IP policies, management style, strategies, etc. depending on its area of specialty. Pharmaceutical industry currently has an evolving IP strategy. Since there exists the increased possibility that some IPR are invalid, antitrust law, therefore, needs to step in to ensure that invalid rights are not being unlawfully asserted to establish and maintain illegitimate, albeit limited, monopolies within the pharmaceutical industry. Still many things remain to be resolved in this context.

More than any other technological area, drugs and pharmaceuticals match the description of globalization and need to have a strong IP system most closely. Knowing

that the cost of introducing a new drug into the market may cost a company anywhere between \$ 300 million to \$1000 million along with all the associated risks at the developmental stage, no company will like to risk its IP becoming a public property without adequate returns. Creating, obtaining, protecting, and managing IP must become a corporate activity in the same manner as the raising of resources and funds. The knowledge revolution, which we are sure to witness, will demand a special pedestal for IP and treatment in the overall decision- making process.

Competition in the global pharmaceutical industry is driven by scientific knowledge rather than manufacturing know-how and a company's success will be largely dependent on its R&D efforts. Therefore, investments in R&D in the drug industry are very high as a percentage of total sales; reports suggest that it could be as much as 15% of the sale. One of the key issues in this industry is the management of innovative risks while one strives to gain a competitive advantage over rival organizations. There is high cost attached to the risk of failure in pharmaceutical R&D with the development of potential medicines that are unable to meet the stringent safety standards, being terminated, sometimes after many years of investment. For those medicines that do clear development hurdles, it takes about 8-10 years from the date when the compound was first synthesized. As product patents emerge as the main tools for protecting IP, the drug companies will have to shift their focus of R&D from development of new processes for producing known drugs towards development of a new drug molecule and new chemical entity (NCE). During the 1980s, after a period of successfully treating many diseases of short-term duration, the R&D focus shifted to long duration (chronic) diseases. While looking for the global market, one has to ensure that requirements different regulatory authorities must be satisfied.

It is understood that the documents to be submitted to regulatory authorities have almost tripled in the last ten years. In addition, regulatory authorities now take much longer to approve a new drug. Consequently, the period of patent protection is reduced, resulting in the need of putting in extra efforts to earn enough profits. The situation may be more severe in the case of drugs developed through the biotechnology route especially those involving utilization of genes. It is likely that the industrialized world would soon start canvassing for longer protection for drugs. It is also possible that

many governments would exercise more and more price control to meet public goals. This would on one hand emphasize the need for reduced cost of drug development, production, and marketing, and on the other hand, necessitate planning for lower profit margins so as to recover costs over a longer period. It is thus obvious that the drug industry has to wade through many conflicting requirements. Many different strategies have been evolved during the last 10 to 15 years for cost containment and trade advantage. Some of these are out sourcing of R&D activity, forming R&D partnerships and establishing strategic alliances.

### **Relevant International Treaties:**

#### **PARIS CONVENTION FOR THE PROTECTION OF INDUSTRIAL PROPERTY**

The **Paris Convention for the Protection of Industrial Property**, signed in Paris, France, on March 20, 1883, was one of the first intellectual property treaties. It established a Union for the protection of industrial property. The Convention is still in force. After a diplomatic conference in Paris in 1880, the Convention was signed in 1883 by 11 countries: Belgium, Brazil, France, Guatemala, Italy, Netherlands, Portugal, El Salvador, Serbia, Spain and Switzerland.

As of December 2011, the Convention has 174 contracting member countries, which makes it one of the most widely adopted treaties worldwide. Notably, Taiwan and Kuwait are not parties to the Convention.

The Paris Convention is administered by the World Intellectual Property Organization (WIPO), based in Geneva, Switzerland.

The Convention applies to industrial property in the widest sense, including patents, marks, industrial designs, utility models (a kind of “small patent” provided for by the laws of some countries), trade names (designations under which an industrial or commercial activity is carried on), geographical indications (indications of source and appellations of origin) and the repression of unfair competition. India’s membership into the convention came into force on December 7, 1998.

#### **BERNE CONVENTION FOR THE PROTECTION OF LITERARY AND ARTISTIC WORKS**



The **Berne Convention for the Protection of Literary and Artistic Works**, usually known as the **Berne Convention**, is an international agreement governing copyright, which was first accepted in Bern, Switzerland in 1886.

The Convention rests on three basic principles and contains a series of provisions determining the minimum protection to be granted, as well as special provisions available to developing countries which want to make use of them.

The three basic principles are the following:

- a) Works originating in one of the contracting States (that is, works the author of which is a national of such a State or works which were first published in such a State) must be given the same protection in each of the other contracting States as the latter grants to the works of its own nationals (principle of “national treatment”).
- b) Such protection must not be conditional upon compliance with any formality (principle of “automatic” protection).
- c) Such protection is independent of the existence of protection in the country of origin of the work (principle of the “independence” of protection). If, however, a contracting State provides for a longer term than the minimum prescribed by the Convention and the work ceases to be protected in the country of origin, protection may be denied once protection in the country of origin ceases.

As of March 2012, there are 165 countries that are parties to the Berne Convention. India’s membership into the convention came into force on April 1, 1928.

#### **THE PATENT COOPERATION TREATY (PCT):**

The Patent Cooperation Treaty (PCT) is an international treaty administered by the World Intellectual Property Organization (WIPO). The treaty was done at Washington on June 19, 1970. The PCT makes it possible to seek patent protection for an invention simultaneously in a large number of countries by filing a single “international application” with a single patent office (i.e. receiving Office). The PCT system simplifies the process of multi-national patent filings by reducing the requirement to file multiple patent applications for multi-national patent rights. The PCT international applications do not result in the issuance of “international patents” and the International Bureau (IB)

does not grant patents. The decision on whether to confer patent rights remains in the hands of the national and/or regional patent offices, and the patent rights are limited to the jurisdiction of the patent granting authority. The PCT procedure consists of an international phase and a national/regional phase. The PCT international application process starts with the international phase and concludes with the national/regional phase. The total number of PCT filings (international patent applications filed through the Patent Cooperation Treaty) in 2010 was approximately 164,300.

**PATENT LAW TREATY:**

The Patent Law Treaty (PLT) was adopted on June 1, 2000 at a Diplomatic Conference in Geneva. The purpose of the PLT is to harmonize and streamline formal procedures in respect of national and regional patent applications and patents. With a significant exception for the filing date requirements, the PLT provides maximum sets of requirements which the Office of a Contracting Party may apply: the Office may not lay down any additional formal requirements in respect of matters dealt with by this Treaty. This means that a Contracting Party is free to provide for requirements that are more generous from the view point of applicants and owners, but are mandatory as to the maximum that an Office can require from applicants or owners. India is not a contracting party to this treaty.

---

## 11. Let's sum up

---

- Intellectual property is an intangible creation of the human mind, usually expressed or translated into a tangible form that is assigned certain rights of property.
- Intellectual property rights (IPR) can be defined as the rights given to people over the creation of their minds. They usually give the creator an exclusive right over the use of his/her creations for a certain period of time.
- The mission of WIPO is to promote innovation and creativity for the economic, social and cultural development of all countries, through a balanced and effective international intellectual property system.
- Copyright ensures certain minimum safeguards of the rights of authors over their creations, thereby protecting and rewarding creativity.
- Patent is any invention concerning with composition, construction or manufacture of a substance, of an article or of an apparatus or an industrial type of process.
- Uniformity - A new variety is deemed uniform if subject to the variation that may be expected from the particular features of its propagation it is sufficiently uniform in its essential characteristics.
- WIPO's work includes assistance to develop and strengthen national and regional systems for the protection of traditional knowledge (policies, laws, information systems and practical tools) and the Creative Heritage Project which provides hands-on training for managing intellectual property rights and interests when documenting cultural heritage.
- Geographical Indications of Goods are defined as that aspect of industrial property which refers to the geographical indication referring to a country or to a place situated therein as being the country or place of origin of that product.

---

## 12. Suggested Readings

---

1. Intellectual Property Rights – by Neeraj Pandey and Khushdeep Dharni (August, 2014).
2. Ann Marie Sullivan, Cultural Heritage & New Media: A Future for the Past, 15 J. MARSHALL REV. INTELL. PROP. L. 604 (2016) <https://repository.jmls.edu/cgi/viewcontent.cgi?article=1392&context=ripl>
3. "What are intellectual property rights?". World Trade Organization. World Trade Organization. Retrieved 2016-05-23.
4. "Intellectual property", Black's Law Dictionary, 10th ed. (2014).
5. Property as a common descriptor of the field probably traces to the foundation of the World Intellectual Property Organization (WIPO) by the United Nations." in Mark A. Lemley, Property, Intellectual Property, and Free Riding Archived 2009-02-26 at the Wayback Machine., Texas Law Review, 2005, Vol. 83:1031, page 1033, footnote 4.
6. Goldstein & Reese (2008), p. 17.
7. Rod Falvey and Neil Foster (2006): "The Role of Intellectual Property Rights in Technology Transfer and Economic Growth": Theory and Evidence, In cooperation with Olga Memedovic UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION (UNIDO), available: [https://www.unido.org/sites/default/files/2009-04/Role\\_of\\_intellectual\\_property\\_rights\\_in\\_technology\\_transfer\\_and\\_economic\\_growth\\_0.pdf](https://www.unido.org/sites/default/files/2009-04/Role_of_intellectual_property_rights_in_technology_transfer_and_economic_growth_0.pdf)
8. Goldstein & Reese (2008), pp. 18–19.
9. Brad, Sherman; Lionel Bently (1999). The making of modern intellectual property law: the British experience, 1760–1911. Cambridge University Press. p. 207. ISBN 978-0-521-56363-5.
10. "Intellectual property". Oxford English Dictionary (3rd ed.). Oxford University Press. September 2005. (Subscription or UK public library membership

required.) (Citing Monthly Review, vol. 41. p. 290 (1769): "What a niggard this Doctor is of his own, and how profuse he is of other people's intellectual property.")

11. "Intellectual property". Oxford English Dictionary (3rd ed.). Oxford University Press. September 2005. (Subscription or UK public library membership required.) (Citing Medical Repository Of Original Essays And Intelligence, vol. 11. p. 303 (1808): "New-England Association in favour of Inventors and Discoverers, and particularly for the Protection of intellectual Property.")
12. 'Article 4 No. 6 of the Constitution of 1867 (German)' Hastings Law Journal, Vol. 52, p. 1255, 2001

---

### **13. Assignments**

---

1. What is IPR?
2. Mention different types of patents
3. What are IPR issues?
4. Discuss IPR about biodiversity conservation.
5. Define bioprospecting, biopiracy.
6. Discuss about IP management.

**All the materials are self writing and collected from ebook,  
journals and websites.**