



## **E-CONTENT**

**UDAI PRATAP COLLEGE, VARANASI-221002**

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**Topic: IPR & Traditional Knowledge**

**IPR and WTO (TRIPS, WIPO), Patent Act 1970, TIFAC, NRDC, Rights, Procedure of obtaining patents, Copyrights, Trademarks, Geographical Indications, Traditional Knowledge Digital Library.**

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### **1.0-IPR**

Intellectual Property Rights (IPR) are the legal rights given to persons over the creations of their minds. They usually give the creator an exclusive legal right over the use of his/her creation for a certain period of time to protect his invention.

Actually these are the legal rights, which result from intellectual activity in industrial, scientific, literary and artistic fields. These rights safeguard creators and other producers of intellectual goods and services by granting them certain time-limited rights to control their use.

IPR include patents, copyright, industrial design rights, trademarks, patent variety rights, trade dress, geographical indications, and in some jurisdictions trade secrets.

Protected IP rights like other property can be a matter of trade, which can be owned, sold or bought. These are intangible and non exhausted consumption.

## **1.1-WTO (World Trade Organization)**

The WTO is the only international organization dealing with the global rules of trade between nations. Its main function is to ensure that trade flows as smoothly, predictably and freely as possible.

The WTO came into being in 1995. It is the successor to the General Agreement on Tariffs and Trade (**GATT**) established in the wake of the Second World War. WTO was created by Uruguay Round negotiations (1986-94).

The past 70 years have seen an exceptional growth in world trade. This growth in trade has been a powerful engine for overall economic expansion and on average trade has grown by 1.5 times more than the global economy each year.

The GATT and the WTO have helped to create a strong and prosperous trading system contributing to unprecedented growth.

### **❖ Functions**

The WTO's overriding objective is to help trade flow smoothly, freely and predictably. It does this by:

- Administering trade agreements;
- Acting as a forum for trade negotiations;
- Setting trade disputes;
- Reviewing national trade policies;
- Building the trade capacity of developing economies; and
- Cooperating with other international organizations.

### **❖ Structure**

The WTO has 164 members, accounting for 98% of world trade. A total of 25 countries are negotiating membership.

### **❖ WTO Secretariat**

The WTO Secretariat, based in Geneva, established on 1 January, 1995, headed by Director-General.

## **1.1a-TRIPS (Trade-Related Aspects of Intellectual Property Rights)**

is an agreement on international IP rights.

- ❖ TRIPS came into force in 1995, as part of the agreement that established the WTO.
- ❖ TRIPS establishes minimum standards for the availability, scope, and uses of seven forms of IP namely, trademarks, copyrights, geographical indications, patents, industrial designs, layout designs for integrated circuits, and undisclosed information or trade secrets.

- ❖ It applies basic international trade principles regarding intellectual property to member states.
- ❖ It is applicable to all WTO members.
- ❖ It frames the IP system in terms of innovation, technology transfer and public welfare.
- ❖ The TRIPS Agreement is also described as a “Berne and Paris-plus” Agreement.
- ❖ The agreement is often termed one of the three “pillars” of the WTO, the other two being trade in goods (the traditional domain of the GATT) and trade in services.

The TRIPS Agreement covers five broad areas:

- How general provisions and basic principles of the multilateral trading system apply to international intellectual property.
- What the minimum standards of protection are for IPR that members should provide.
- Which procedures members should provide for the enforcement of those rights in their own territories.
- How to settle disputes on IP between members of the WTO.
- Special transitional arrangements for the implementation of TRIPS provisions.

**1.1b-**World Intellectual Property Organization (**WIPO**) is a UN specialized agency created in 1967 to promote intellectual property (IP) protection and encourage creative activity all over the world. WIPO is basically a global forum for IP policy, services, information and cooperation.

The origins of WIPO go 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 provided for the establishment of an “International Bureau”. India became member of WIPO in 1975.

**Functions:**

- To assist the development campaigns that improve IP protection all over the globe and keep the national legislations in harmony.
- Signing international agreements related to IPR protection.
- To render legal and technical assistance in the field of IP.
- To conduct research and publish its results as well as to collect and circulate information.

## **1.2- Patent Act 1970**

The Patent Act, 1970 is a legislation that provides legal protection for Inventions and promotes innovation. It establishes the framework for granting patents, which are exclusive rights granted to inventors for their inventions for a specified period of time.

This act illustrates that an innovation, which might be a product or a procedure that generally provides a unique method of performing a task or the latest innovation solution for a problem, is given an exclusive license by way of a patent.

### **1.2a- Patent Act Amendment Rules 2021**

To encourage the creation, innovative thinking, and advancement of new technologies in the educational sector, the Ministry for Promotion of Industry and Internal Trade publicly released the Patents (Amendment) Rules, 2021, which also added academic institutions to the list of individual citizens, start-ups, and small organizations.

## **1.3- Technology Information, Forecasting and Assessment Council**

**[TIFAC]**, New Delhi has been established by the Government of India, in 1988 with the mandate to assess the state of the art technology and set directions for future technological development in India in important socio-economic sectors.

TIFAC is an autonomous organization under the Department of Science & Technology to look ahead in technology domain, assess the technology trajectories, and support innovation by networked actions in select areas of national importance.

TIFAC continues to strive for technology development in the country by leveraging technology innovation through sustained and concerted programmes in close association with industry and academia.

TIFAC embarked upon the major task of formulating a Technology Vision for the country in various emerging technology areas. Under the leadership of Dr. APJ Abdul Kalam, the then Chairman of TIFAC, Technology Vision 2020 exercise led to set 17 documents, including sixteen technology areas and one on services. In more than 25 years of its service to the nation, it has delivered number of technology assessment and foresight reports.

While inaugurating the 103<sup>rd</sup> Indian Science Congress in Mysuru, Hon'ble PM of India Shri Narendra Modi released the **Technology Vision 2023** prepared by TIFAC. This is being followed by release of Technology Roadmaps in 12 thematic areas of national priorities and importance namely,

*Education, Medical Science & Health Care, Food and Agriculture, Water, Energy, Environment, Habitat, Transportation, Infrastructure, Manufacturing, Materials and Information & Communication Technology (ICT).*

**1.4- NRDC [National Research Development Corporation]** was established in 1953 as a Government of India enterprise and presently working under the Department of Scientific and Industrial Research, Ministry of Science & Technology with the objective to develop, promote, and transfer of technologies emanating from various national R&D institutions.

The Corporation has been offering services from its head office in New Delhi and branch office at Bangalore in improving the manufacturing base in India with innovative technologies and acting as an effective catalyst translating innovative research into marketable industrial products.

**1.4a-Technology involved:** Agriculture and Agro-processing, Chemicals including Pesticides, Drugs and Pharmaceuticals, Bio Technology, Metallurgy, Electronic and Instrumentation, Building Materials, Mechanical, Electrical and Electronic etc.

**1.4b-Achievements:** Trained over 5.2 million trainees and establishes 235 partnerships to drill a minimum of 50,000 persons in each.

### **1.5-Procedure of obtaining patents:**

A patent is an exclusive right granted for an invention, which is a product or a process that provides, in general, a new way of doing something, or offers a new technical solution to a problem. To get a patent, technical information about the invention must be disclosed to the public in a patent application.

In procedure an application should be made for an invention in the prescribed form and filed in the patent office . The application should state that the applicant has possession of the invention and the name of the person claiming to be the true inventor must be mentioned.

Grant of a patent is a long process that entails multiple checks on novelty, non-obviousness, and industrial applicability of the invention.

### 1.5.a:-Steps involved in Patent filing in India

**Step 1: Conceiving your invention:** This is the first step for an inventor who want to go ahead with his or her invention.

Section 3 of the **Patent Act** provides those subject matter which are not patentable.

**Step 2:-Drafting of the patent application:**

The application consists of various parts such as Claims, Background, Description, Drawing (if any), Abstract, and Summary.

**Step 3:-Filing the Patent Application:**

This is the step where real process starts. This can be filed in the Government Patent Office. One gets 12 months to file the complete specification.

**Step 4:-Publication of the Application:**

After filing the complete specification, the application is published after 18 months from the date filing.

**Step 5:-Request for Examination:**

Unlike the publication, the examination is not an automatic process and the applicant is required to request the patent office to examine the patent application.

**Step 6:-Respond to the Objection:**

The applicant needs to respond to the objection received from the patent office by way of the First Examination Report. The applicant is expected to file a written response to the objection raised in the examination report.

**Step 7:-Grant of Patent:**

After addressing all objections, the application would be placed for a grant once it is found to be meeting all patentability requirements, and finally, the patent will be granted to the applicant. The grant of a patent is notified in the patent journal.

The official patent cost for filling a patent application are Rs. 1,600 for an individual or Rs. 4,000 for a small or Rs 8000 large entity.

### 1.6-Patents

It is an exclusive right granted for an invention, which is a product or a process that provides a new way of doing something, or offers a new technical solution to a problem.

It provides protection for the invention to the owner of the patent.

The protection is granted for a limited period, i.e. 20 years.

Patent protection means that the invention cannot be commercially made, used, distributed or sold without the patent owner's consent.

A patent owner has the right to decide who may – or may not – use the patented invention for the period in which the invention is protected.

The patent owner may give permission to, or license, other parties to use the invention on mutually agreed terms.

The owner may also sell the right to the invention to someone else, who will then become the new owner of the patent.

Once a patent expires, the protection ends, and an invention enters the public domain, so that the owner no longer holds exclusive rights to the invention, which becomes available to commercial exploitation by others.

### **1.7-Trademarks**

A trademark is a distinctive sign that identifies certain goods or services as those produced or provided by a specific person or enterprise.

It may be one or a combination of words, letters, and numerals. They may consist of drawings, symbols, three-dimensional signs such as the shape and packaging of goods, audible signs such as music or vocal sounds, fragrances, or colours used as distinguishing features.

It provides protection to the owner of the mark by ensuring the exclusive right to use it to identify goods or services, or to authorize another to use it in return for payment.

It helps consumers identify and purchase a product or service because its nature and quality, indicated by its unique trademark, meets their needs.

Registration of trademark is prima facie proof of its ownership giving statutory right to the proprietor.

Trademark rights may be held in perpetuity. The initial term of registration is for 10 years; thereafter it may be renewed from time to time.

### **1.8-Copyrights**

This is the legal term describing rights given to creators for their literary and artistic works.

The kinds of works covered by copyright include: literary works such as novels, poems, plays, reference works, newspapers and computer programs; databases; films, musical compositions, and choreography; artistic works such as paintings, drawings, photographs and sculpture; architecture; and advertisements, maps and technical drawings.

Creators often sell the rights to their works to individuals or companies best able to market the work in return for payment.

### **1.9-Geographical Indications (GI)**

GI are signs used on goods that have a specific geographical origin and possess qualities or a reputation that are due to that place of origin.

Agricultural products typically have qualities that derive from their place of production and are influenced by specific local factors, such as climate and soil.

They may also highlight specific qualities of a product, which are due to human factors that can be found in the place of origin of the products, such as specific manufacturing skills and traditions.

Recently the GIs of goods like Chanderi Sarees, Kullu Shawls, Wet Grinders etc. have been registered. In addition to this Basmati rice, Nagpur orange, Darjeeling tea, Kanjeeppuram silk, Pochampalli silk, Kolhapuri chappals, Mysore sandal soap, Solapur bedsheet etc.

### **1.10-Traditional Knowledge Digital Library [TKDL]:**

TK refers to knowledge or practices passed down from part of the traditions or heritage of Indigenous communities. It refers to the knowledge, innovations and local communities around the world. Developed from experience gained over the centuries and adapted to the local culture and environment. TK is transmitted orally from generation to generation. For TK and practices Indigenous communities act as the guardians or custodians.

TK can be agriculture, environmental or medicinal knowledge associated with genetic resources. Examples include knowledge about traditional medicines, traditional hunting or fishing techniques, knowledge about animal migration patterns or water management.

TK in IPR is usually protected through two methods (a). Positive protection and (b). defensive mechanism.

Positive protection is the act of providing TK holders with the rights to take necessary action and seek remedies against the misuse of the knowledge base.

The Traditional Knowledge Digital Library (TKDL) is a pioneering initiative of India, under the joint collaboration of the Council of Scientific and Industrial Research (CSIR) and Ministry of Ayurveda, Yoga & Naturopathy, Unani, Siddha, Sowa Rigpa and Homoeopathy (AYUSH), to prevent exploitation and to Protect Indian TK at Patent Offices worldwide.

TKDL was conceptualized to overcome the language and format barrier by systematically converting and structuring the available contents of the ancient texts – currently focussed on Indian System of Medicines i.e. Ayurveda, Siddha, Unani and Sowa Rigpa as well as Yoga practices – into five international languages, namely, English, Japanese, French,



German and Spanish, with the help of information technology tools and an innovative classification system – Traditional Knowledge Resource Classification (TKRC). As on date, >4.24 lakh formulations/practices have been transcribed into TKDL database.

TKRC has structured and classified the Indian TK into several thousand subgroups for Ayurveda, Unani, Siddha and Yoga related terminology while correlating the same with modern terminology. The recognition of this unique classification – TKRC – enabled incorporation about 200 subgroups under A61K 36/00, thus enhancing the quality of search and examination of prior art with respect to patent applications field in the area of traditional knowledge.

TKDL has also set international specifications and standards for setting up of TK databases based on TKDL specifications. This was adopted in 2003 by the Committee in fifth session of the Intergovernmental Committee (IGC) of World Intellectual Property Organization (WIPO) on IP and Genetic Resources, TK and Expression of folklore.

TKDL technology integrates diverse disciplines such as Ayurveda, Unani, Siddha, Sowa Rigpa and Yoga, and languages such as Sanskrit, Arabic, Urdu, Persian, Tamil, English, Japanese, Spanish, French, German, and traditional knowledge with modern science and modern medicine. Currently, TKDL contains information from books of Indian System of Medicine, which are available in open domain and can be sourced by any individual/organization at national/international level. TKDL is an innovative tool that acts as a bridge between these books (prior art) and patent examiners.

TKDL Access Agreement is unique in nature and has in-built safeguards on non-disclosure to protect India's interest against any possible misuse.

TKDL is the first of its kind prior-art database of TK globally, and has proven to be an effective deterrent against bio-piracy. While being recognized internationally as a unique effort, TKDL has set a benchmark in TK protection around the world, by demonstrating the advantages of proactive action and the power of strong deterrence. Focus is on deterrence and in preventing the erroneous grant of patents by ensuring access to TK related prior art for patent examiners without restricting the use of traditional knowledge.

### ***Declaration***

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