

PREFACE

In a bid to standardize higher education in the country, the University Grants Commission (UGC) has introduced Choice Based Credit System (CBCS) based on five types of courses viz. *core, discipline specific, generic elective, ability and skill enhancement* for graduate students of all programmes at Honours level. This brings in the semester pattern, which finds efficacy in sync with credit system, credit transfer, comprehensive continuous assessments and a graded pattern of evaluation. The objective is to offer learners ample flexibility of choose from a wide gamut of courses, as also to provide them lateral mobility between various educational institutions in the country where they can carry their acquired credits. I am happy to note that the University has been recently accredited by National Assessment and Accreditation Council of India (NAAC) with grade "A".

UGC (Open and Distance Learning Programmes and Online Programmes) Regulations, 2020 have mandated compliance with CBCS for U. G. programmes for all the HEIs in this mode. Welcoming this paradigm shift in higher education, Netaji Subhas Open University (NSOU) has resolved to adopt CBCS from the academic session 2021-22 at the Under Graduate Degree Programme level. The present syllabus, framed in the spirit of syllabi recommended by UGC, lays due stress on all aspects envisaged in the curricular framework of the apex body on higher education. It will be imparted to learners over the six semesters of the Programme.

Self Learning Materials (SLMs) are the mainstay of Student Support Services (SSS) of an Open University. From a logistic point of view, NSOU has embarked upon CBCS presently with SLMs in English/Bengali. Eventually, the English version SLMs will be translated into Bengali too, for the benefit of learners. As always, all of our teaching faculties contributed in this process. In addition to this we have also requisitioned the services of best academics in each domain in preparation of the new SLMs. I am sure they will be of commendable academic support. We look forward to proactive feedback from all stakeholders who will participate in the teaching-learning based on these study materials. It has been a very challenging task well executed, and I congratulate all concerned in the preparation of these SLMs.

I wish the venture a grand success.

Professor (Dr.) Subha Sankar Sarkar
Vice-Chancellor



Netaji Subhas Open University
Under Graduate Degree Programme
Subject : Chemistry HCH
Course Code : SE-CH-11
Choice Based Credit System (CBCS)
Paper : Skill Enhancement Course-01 (Theory)
Course : Intellectual Property Rights (IPR)

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**Netaji Subhas
Open University**

**UG : Chemistry
(HCH)**

Course Code : SE-CH-11

Intellectual Property Rights (IPR)

Unit - 1	□ Theories of Intellectual Property Right	7 – 18
Unit - 2	□ Various facets of IPR	19 – 25
Unit - 3	□ The TRIPS Agreement : Some details	26 – 36
Unit - 4	□ The Indian Scenario in IPR	37 – 43
	Self Assessment Questions	44
	Further Reading	45

Unit - 1 □ Theories of Intellectual Property Right

Structure

1.1 Objectives

1.2 Introduction

1.3 Theories of IPR

1.4 Historical background

1.4.1 Descriptive history

1.4.2 Timeline of important events

1.5 Summary

1.1 Objectives

After reading this unit one should know about the following issues :

- Various theories of Intellectual Property right.
- Historical background of IPR.
- Different arguments in support of enactment of law of IPR.
- About the timeline of important events.

1.2 Introduction

When the GATT treaty and Trade Related Intellectual Property Rights (TRIPS) came into effect in January 1, 1995, there was a lot of noise about it. Some hailed it as the panacea for all existing ills in any society. Others saw the ghost of neo-colonialism in it, the loss of livelihood of small tradesmen, small farmers, mechanics etc. Now that over two decades and a half have passed since then, and many of the clauses in the original treaty have become operational, it is worthwhile to consider the entire issue in a nutshell, once more.

Intellectual property means idea or ideas originating from an intellect. The originator or creator of the idea can be awarded rights over the idea, singly or

collectively, should the person or persons seek such right. Such rights are of two broad categories: copyright over pure ideas (equations, thoughts, concepts), and those pertaining to technical issues or industrial matters i.e. industrial / manufacturing rights. While all forms of artistic creations – literature, painting, sculpture, artistic designs, layouts – come under the first category, any idea related to industrial production directly would fall into the second category. Generally, such rights assume forms such as copyrights, patents, trademarks and trade secrets. Other forms such as geographical indicators, design of integrated circuits, protection of plant varieties are also part of intellectual property rights. These shall all be discussed in some detail, along with laws that delineate rights in each category. The ambit of each law, its duration and infringements shall be defined properly with suitable examples.

The arguments put forward in support of enactment of law on IPR are the following :

- To encourage and reward creative work
- To support and promote technological innovation
- To stimulate and ensure fair competition
- To protect the rights of the consumer
- To promote and facilitate transfer of technology
- To maintain balance of rights and obligations

These may be discussed at two levels – theoretically, examining the philosophical bases of each of the claims advanced above, and practically, checking the ground reality among producers and consumers in various economies, developed and developing.

Before we begin discussing the rights, let us understand that intellectual property really points to something that is not tangible. Idea, thought, intuition and such other terms refer to entities that cannot be grasped physically, or sensed in tactile manner. Unless they are manifested through material products, material as allowing us to ‘feel’ it with our senses, they remain outside physical experience. Nonetheless they can be very much ‘real’, as the world understood by Napoleon’s soldiers who, when fighting and conquering other European armies, spread the ‘idea’ of liberty, equality or fraternity or when the idea embodied in some books and pamphlets led to revolutions in some countries in Europe, Asia, Africa and South and Central America. Do such ideas constitute ‘intellectual property’? Let us find out.

1.3 Theories of IPR

How does intellectual property differ from the idea of property per se? As far as we know, there are the following theories of (individual) property advanced by thinkers from different philosophical standpoints. These are –

- (1) **Historical theory** : According to its proponents Bentham and Henry Maine, property belonged to the community collectively, by natural possession. From this, legal or juristic concept of property emerged, finally leading to concept of individual ownership or private property. The concept of private property thus had a slow evolution.
- (2) **Labour theory** : Also called Positive theory, this states that all humans have equal freedom to labour, and hence when a particular individual creates something by his own labour, he has the sole right on it, and no one else does. There is a Lockean Labour theory, according to which labour of an individual must be adequately compensated. This also justifies ownership of a ‘product’, albeit an idea, as due to labour of an individual. This is the basis of “reward by monopoly” thesis of ownership of (intellectual) property. But there is a problem with the monetary benefit here. The economic reward can be for past labour of the inventor, which seems to be the position of Locke. Consideration of efficiency, however, would compute reward based on future labour saved by disclosure of the patent information.
- (3) **Psychological theory** : This theory was also propounded by Bentham. It states that every individual has acquisitive tendency and desire to own certain objects from which some benefits are expected by the individual. This gives rise to the concept of property, which is thus a product of human mind. There is a version of psychological theory due to Hegel, where idea is a product of an individual’s mind or self and hence belongs to that individual. This leads to the “natural law” theory of ownership of (intellectual) property.
- (4) **Functional theory** : Also called Sociological theory, it states that property is of society and rights of it is dictated by norms and welfare of society as a whole. No individual can have full rights on a property which can harm another member of the society. This theory of Jenks and Laski thus posits

property as social matter. We also realize that the idea may change as the society evolves.

- (5) **Metaphysical theory** : This theory, due to Kant and Hegel, concerns mental attachment between the property and an individual to such an extent that use of it by another individual may harm the former, or may hinder the freedom of the former to use it as per his/her will.
- (6) **Property as creation of state** : According to Rousseau, all individuals are naturally free and have common use of natural resources. Coercion and control by state and its machinery forces concepts of ownership and private property on individuals, who are then made to conform to norms of the state.
- (7) **Monopoly profit incentive** : This theory holds that if inventors are not adequately compensated, they and their supporters would have no incentive to carry out any research and development (R & D) activity.
- (8) **Exchange for secrets thesis** : This theory holds that granting of patents to the inventor makes the latter disclose essential features of his invention, which would otherwise be lost to society as it would remain unknown especially when the inventor dies. This applies to intellectual ideas as much as physical objects invented. The ownership or patent is thus not so much as a privilege for the inventor, but a sort of bargain between the inventor and society, similar to the idea of Rousseau as stated above.

We see that in all the cases above, the arguments are based on (a) utility of the invention, (b) commodification of the utility, and (c) property rights based on labour theory, social contract theory or psychological theory in some fashion. Consequently, granting of patents for a limited period (say 14 or 17 years) has been criticized based on the same grounds: if ownership of invention is an inalienable right, then how can it be granted for a limited period instead of lifetime? Also, such a “natural” ownership is contradicted by examination of the patent application. The “natural” right of the actual inventor can never be nullified by any “manifest” sign disclosed by examination. This holds for copyrights, where two different individuals may be granted copyright of the same (or very similar) invention, if they arrive at it differently or independently.

Intellectual property differs from physical property in being intangible. Therefore,

it must be expressed in physical or tangible form to be discernible, and can then be subject to protection. This idea, originally applied to literary and artistic works, and industrial drawings and layouts, has evolved to include other entities, including plant and other life forms, semiconductor circuits and computer programs, and even undisclosed information. Let us briefly glance through the history of development of the idea of proprietary ownership of inventions and its legitimacy.

1.4 Historical background

1.4.1 Descriptive history

When we search the ancient texts such as the Vedas or the Code of Hammurabi, we do not find terms equivalent to “invent”, “discover” or “create” in the sense that is discussed here. Whatever discovery there was, was about the wonders of the world or of the nature of self and its relation to the world. It is to be noted that both Egypt and Babylon, among other such centres in the Near East and North Africa, people had built large cities with drainage systems, canals for irrigation, pyramids and gigantic structures like the Ziggurat. The drainage system was very well developed in Harappan civilization, which in its heyday probably covered around a million square kilometers. All these required technology. Setting up the pyramids and the Ziggurats (and other structures) required knowledge of geometry. Making bricks of very uniform and standard sizes required brick kilns and quality control. There were even standard weights and measures, currencies, and writing. Some knowledge of star gazing and astronomy had come down from the Chaldeans. Yet, as far as we know, these were common knowledge. These were handed down from teacher to student, or from master craftsman and trainees, exactly as the knowledge of wild animals and plants, what to do in what kind of disease or accident, was handed down from older shamans to younger candidates in hunter-gatherer societies. Such kind of transmission of knowledge, without any proprietorship on it, continued for several millennia, even as human society changed from nomadic hunting-gathering, to proto-agricultural and agricultural, and human settlements started forming. These later morphed into the great civilizations of Mesopotamia, Egypt, India and China. However, we find no notion of proprietary intellectual property, even when private property was very much part of human society. When we come to European civilization, we find the great Plato scoffs at the notion of private property. In both Republic and The Laws, he stresses on common access to facilities, joint ownership

of land and property etc., and stresses on the concept of virtue instead. Aristotle, however, was more conservative and while endorsing the priority of the ruling class as 'aristocratic', allowed them to own more property.

Inequality, or unequal division of property, wealth and entitlement increased in the Roman period. They were more specific on the idea of property, rights and ownership. They distinguished between common land (usable by all), public land (roadways etc, belong to the state), personal / private property and even property that belongs to no one (e.g. temple land). Res (thing) may be corporeales (i.e. tangible) and incorporeales (intangible). Among the latter may be right to pass through another's land, right or servitude etc. The Romans were particular about monetary or economic value of the res in question. However, beyond the intangibles mentioned, intellectual property was not considered.

It is also interesting to note that during this period i.e. from a couple of millennia BCE to a few centuries after Christ, priorities have changed. The ideals set forth in the Code of Hammurabi, or even in Moses, were "an eye for an eye". The Supreme Being was more like a dictator, and the law proclaimed by His followers (or human beings in His name) were harsh. Slowly, that changed. From Jeremiah, the God of Israelites became a personal God of individuals. Virtue and righteous living was praised by Christ, Lao Tzu, Buddha and Confucius. Mental acts acquired as much importance as physical acts. Until the Renaissance, leading thinkers and reformers in Christian, Judaism and later, in Islam, were all concerned with virtue, righteousness and proper living. Some, as in Islam, reverted back to a kind of primitive Communism, i.e. to communal living and common ownership of property (within a tribe). Similar tradition existed among the Jews (e.g. the kibbutz) and among (early) Christians (the Desert Fathers). Whatever happened after the Fall of Rome to the Rebirth was essentially a kind of consolidation, of formation of small and large kingdoms, Holy Roman Empire, formation of Guilds of artisans, and a long period of feudal rule at the local level.

The times were changing, especially in Italy. City states were forming, with independent administration, with merchants, traders and bankers. Money was becoming an important means of exchange of goods, replacing the earlier system of barter. By this time, a few major Universities had been established in Europe (e.g. Bologna, Paris, Pisa). Although they were controlled by the Church, some lay topics (e.g. logic, medicine, natural philosophy) were taught. Erasmus and later Spinoza and

others taught that thinking of Man may be as worthwhile as thinking of God. Several theologians, esp. Thomas Aquinas, established basic truths of Christianity using ideas of Plato and Aristotle, talking about which had led to lynching of Hypatia in 415 CE. With this brief digression, we have come to the dawn of intellectual property rights, so to speak.

There have always been some sorts of ownership of inventions. We find peculiar marks in construction materials in ancient civilizations including in Harappan civilization in ancient India. They were probably meant to be some kind of trademark. Artisans were known to put their mark or signature in their crafts, a practice very prevalent among artists and sculptors. This was especially important during the early periods, in Greece, Rome and later on, among the artisan's guilds in many parts of Europe. In Greece, cooks and chefs were encouraged to preserve and cultivate their special culinary skills. This probably led to the word 'monopoly', which in its Greek root meant sale by one person. There was a Roman law similar to the Trade Secrets Act of today, called "officio servio corrupti" (corrupting a slave). Furniture, clothes, besides paintings and sculpture, decorations in churches and royal palaces, stained glass windows to draperies – all bore marks of specific artisans or guilds. The 'potter marks' of earlier times became 'merchant marks' and still later, 'production marks'. Also, there are tales of potentates in Europe, Asia and elsewhere rewarding artisans whose creations (be it culinary, artistic or machinery) they appreciated, or found useful. The idea was to encourage such useful or beautiful work. The latter, over the ages, became conscious of such privilege and sought to protect themselves from spurious, unauthorized reproduction. This practice became widespread from the European Renaissance. This also gave rise to a class of individuals, connoisseurs and the cognoscenti, who could identify the maker from the craft and so could distinguish the genuine article from a fake reproduction. For, as demand for such 'luxury' goods increased, with rise of the mercantile class, traders etc., some people took to copying original paintings, statuettes and other articles, to earn quick money. Let us not forget, piracy of material goods long preceded piracy of intellectual property. In fact, several aristocratic families in England and other countries proudly trace their roots to buccaneers and outlaws in the Spanish Main and the Caribbean Seas.

There is record of a law (ordinance) passed in the Italian city state of Venice in 1474 in which individuals were granted some rights over their own creations. By then, printing press using movable types was already invented in Europe by Johannes

Gutenberg and others. In reality, it may have been the result of collective effort by a group of persons (artisans and others) in Germany, Belgium and nearby regions. In England, Caxton has started his press. Printing press made dissemination of decrees, edicts and notices much easier. At the same time, text materials could be easily reproduced and distributed. Earlier, when there was no industry of note in England, Edward II awarded letters of patent to the Flemish weaver John Kempe and two other weavers from Brabant to come and settle in England. It was expected that the immigrants would train young English men to become weavers, but also protected the holders of patent for a period of 14 years (which could be extended) to sell their produce. Award of monopoly privileges in England in 15th and 16th centuries were not so much to reward inventions, but to secure loyalty among court favourites. The practice of grant of exclusive rights over property by inventors probably started a few centuries earlier. The Statute of Monopolies in 1623 by Elizabeth I outlawed previous practice of awarding monopolies and gave such rights to the first and true inventor. Attracting foreign artisans was one of the motivations of this act. This was passed by the English Parliament as a constitutional law of patents. German princes were awarding patent rights in the 16th century to new machines, but were also checking utility and novelty of the inventions. In fact, the inventors who created some artifacts, were expected to put them to practical use within a stipulated period. The Statute of Anne, passed in British parliament in 1710, gave the right to grant copyright to the government and the court. The Engravers Copyright Act, passed in 1834, granted engravers the right to designs, etchings etc. created by them. It distinguished between the engravers and their creation. As to designs, textile designs were the first to be protected in Britain by an act of 1787. The period of rights were flexible originally, but was extended later. Designs for printing woven clothes were protected by an act in 1839. The Factory, Manufacture and Workplace Act, passed in 1803 in France, considered stealing another person's design or machinery for own benefit a criminal act, calling for punishment. By the Criminal Acts of 1810 and 1824, using another person's name for own benefit became punishable crime. The Merchandise Marks Act of 1832 regarded using another's symbols or misusing symbols a crime.

The first patent in North America was granted by the Massachusetts General Court in 1641 to Samuel Winslow for his way of making salt. On 10 April, 1790, US Govt. passed a law in the senate to grant patent to "any useful art, manufacture, engine, machine, or device, or any improvement therein not before known or used" for a period of 14 years. The right to grant patents was left to a committee of three,

including Secretary of State (Thomas Jefferson), Secretary of War (Henry Knox) and Attorney General (Edmund Randolph). The Copyright Act was also passed in 1790 in the US which gave authors “sole right and liberty of printing, reprinting, publishing and vending” the copies of their “maps, charts, and books” for a term of 14 years, plus they can renew it for another 14 years if the owner of the work is still alive. By 1793, it was realized the task is burdensome on the trio, and hence physical examination of the invention to be patented was discontinued. So, usefulness of the invention was not verified physically. Terms other than usefulness of the invention were kept as before. Still, foreigners were not allowed to file for patents in the US from 1790 to 1836. The United States Patent Act was passed in 1836. However, patent fees of foreigners were approximately ten times as much as US citizens. British nationals had to pay an additional 65% charge. The Federal Trade Marks Act was passed in the US in 1870 but was repealed in 1879 due to some flaws in the Act. In the US, copyright protection was extended to foreign nationals only from 1891. By this time the Paris Convention for the Protection of Industrial Property was held in 1883 and the Berne Convention for the Protection of Literary and Artistic Works in 1886. But even after these two conventions, copyright protection for foreigners was still restricted in the US even after 1891. Because of this, US became a signatory to the Berne convention only in 1989. This is an example of flexibility enjoyed by individual countries regarding copyright protection and patent laws. An extreme case of this was a patent application in Japan by a US company on integrated circuits (IC), one of the major technological breakthroughs in the 20th century. The Japanese government took 29 years to grant the patent, whereas the information was public knowledge after one and a half years. Therefore, by the time the patent was granted, Japanese companies were manufacturing items based on ICs, and controlling major part of the US electronics goods market.

Disclosure of patent or copyright related information was thought at one time to provide incentive to artisans to innovate, create and improvise. But in the above examples, patent-related information becomes a weapon in global power politics. It can be used to stifle innovation in one part of the world and encourage it in another part.

As discussed already, trademarks have been in existence much longer than patents. However, in recognizable form, modern trademarks began to be recognized in Europe in the 19th Century. In England it happened in 1862, in France in 1857, in Germany in 1874, in USA in 1870.

In the Paris exhibition of 1867, there was an initial approach to come to an agreement on this issue among some countries. In 1873 exhibition in Vienna, USA refused to participate for fear of imitation of their inventions in the hands of Europeans (esp. Germans). This led to the Paris Convention for protection of patent rights over inventions among countries. To supervise and organize patents and their protection internationally, an organization named United International Bureau for the Protection of Intellectual Property (BIRPI) was set up in Berne, Switzerland in 1893.

After the Second World War, and after the United Nations was formed, the World Bank, International Monetary Fund (IMF) and International Trade Organization (ITO) were formed in 1947. The objective was to revive economy in developing countries. General Agreement on Tariffs and Trade (GATT) came into existence and on 1 January, 1948, 23 countries including India ratified the GATT agreement. In 1960, with increased awareness of property rights and for closer coordination with the United Nations, BIRPI was shifted to Geneva. It was renamed World Intellectual Property Organization (WIPO) in 1967. The objective of the WIPO is to foster international cooperation with respect to creation, dissemination, use and protection of intellectual property for economic, social and cultural progress of mankind. It seeks to protect moral and material interests of creators and provides socio-economic and cultural benefits to others. It promotes intellectual property and cooperation among member states by setting norms and providing legal and other guidance, help with registration etc.

In India, the British Patent Law of 1852 was established as Act VI, which granted inventors some privileges over their inventions for a period of 14 years. This was modified in 1859 as Act XV in which making, selling, using of inventions and authorizing others to manufacture on behalf of the inventor was allowed for a period of 14 years from the date of filing of the patent. This became the Patents and Design Protection Act in 1872, the Protection of Inventions Act in 1883 and the Inventions and Design Act in 1888. This finally became the Indian Patents and Design Act in 1911.

1.4.2 Timeline of important events

Let us briefly list the major timelines pertaining to rights of inventors, including Intellectual Property Rights.

1883 Convention of Protection of Industrial Property, Paris

- 1886 Convention for Protection of Literary and Artistic Works, Berne
- 1891 Madrid Agreement Concerning International Registration on Marks, Madrid
- 1893 United International Bureaux for the Protection of Intellectual Property (BIRPI)
- 1925 Agreement on Designs, Hague
- 1947 General Agreement on Tariffs and Trade (GATT) ratified
- 1948 Universal Declaration of Human Rights
- 1950 European Convention of Human Rights and Fundamental Freedoms
- 1961 International Convention for the Protection of Performers, Producers of Phonograms, and Broadcasting Organizations, Rome
- 1961 International Convention for the Protection of New Varieties of Plant
- 1066 International Covenant on Civil and Political Rights, International Covenant on Economic, Social and Cultural Rights, Declaration of Principles of International Cultural Cooperation, UNESCO
- 1967 World Intellectual Property Organization (WIPO) set up, Stockholm Protocol Revision of Berne Convention texts
- 1969 American Convention on Human Rights
- 1970 Patent Cooperation Treaty, Washington
- 1971 Universal Copyright Convention (as revised), Paris (referred as Paris text/revision of Berne Convention)
- 1974 WIPO becomes a specialized agency of the United Nations
- 1981 African Charter on Human and Peoples' Rights Ananda M. Chakraborty wins case against State of Massachusetts. Biological organisms can now be patented. IBM PC launched, with operating system written by Microsoft (Bill Gates & Paul Allen)
- 1983 GNU Project launched by Richard Stallman
- 1984 Declaration of Principles of Indigenous Rights, 4th Assembly of the World Council of Indigenous Peoples

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- 1986 Uruguay round of multinational trade negotiations (MTN) under General Agreement of Tariffs and Trade (GATT) started, will continue till 1993, involving 123 countries. Largest trade negotiations till date, led to large changes in world trade
 - 1989 Treaty on Intellectual Property in Respect of Integrated Circuits (IPIC Treaty), Washington Protocol related to Madrid Agreement on International Registration of Marks (Madrid Protocol), Madrid
 - 1991 International Convention for the Protection of New Varieties of Plant
Linux kernel built by Linus Torbalds, to be the OS of choice of Free Software Momevent
 - 1992 Convention on Biological Diversity, Rio
 - 1995 World Trade Organization (WTO) formed Trade Related Intellectual Property Rights (TRIPS) become operational.
 - 2001 Doha Declaration on TRIPS Agreement and Public Health, from WTO Ministerial Meeting, Doha

1.5 Summary

Intellectual property refers to creations of the mind, such as invention, literary and artistic works, designs and symbols, names and images used in commerce. Intellectual Property Rights (IPR) are the statutory rights once granted allows the creator(s) or owner(s) of the intellectual property to exclude others from exploiting the same commercially for a given period of time. IPR is important because intellectual property is critical to fostering innovation. In our modern world, intellectual property enhances every aspect of our lives.

Unit - 2 □ Various facets of IPR

Structure

- 2.1 Objectives**
- 2.2 Introduction**
- 2.3 Copyrights**
- 2.4 Patents**
- 2.5 Trademarks**
- 2.6 Geographical indicators**
- 2.7 Industrial designs**
- 2.8 Undisclosed information : trade secrets, test data**
- 2.9 Design of integrated circuits**
- 2.10 Protection of new plant varieties**
- 2.11 Summary**

2.1 Objectives

After reading this unit we can able to know the following :

- About the copyrights
- About the IPR law for patents
- Various Trademarks
- About geographical indicators & Industrial design
- Undisclosed Information : trade secrets, test data
- Design of Integrated circuits
- The protection of new plant varieties

2.2 Introduction

Intellectual property refers to creation of the mind, such as invention, literary and artistic works; designs and symbols, names and images. Intellectual property rights provide protection for creations and inventions to enable creators and inventors to earn recognition and financial benefit from their work. There are many facets or forms of intellectual properties—such as Copyright, Patents, Trademarks and so on.

2.3 Copyrights

Copyright is the legal right given to creator of literary and artistic works. Such works may be textual (books, pamphlets, compendiums etc.), artistic (pictures, paintings, graphics, sculpture, etc.) or audiovisual (songs, movies, sound or audiovisual clips, pieces etc.). Reference works, newspaper articles, computer programs, databases etc. can also be copyrighted. It is not necessary to register a copyright for a particular work, as it subsists in the latter by virtue of its creation. However, registering a copyright indicates awareness of it among the creator and consumers of the product. Unlike some of the other IPR entities, copyright is enjoyed for a limited period, commonly till the end of the life of the creator and an additional sixty years. However, this does not hold for photographs. The creator may sell such rights to other individuals or companies who may market the product better. In turn, the marketing agency may give back some amount, either one time or periodically, based on volume of the product (or copies of it) sold. These are often called royalties. Sometimes, performance of actors / singers / musicians and sound / video recordings etc. are protected by so called “neighbouring” rights acts.

2.4 Patents

A patent is a legal right granted for a new invention, which may be a new way of doing something, a new technical breakthrough or a new process which may be modification of an existing method for some technical end. Thus, a patent must have novelty, an inventive step (non-obviousness) and industrial applicability. A discovery cannot be patented. In India, a frivolous invention, or one that seems to violate natural law(s), cannot be patented. Also, an invention, for commercial use, which is

against public morality or harms the environment or animal life, cannot be patented. Only duplication of previously known devices also cannot be patented. Similarly, any agricultural method or a design of integrated circuit cannot be protected. A patent is also usually granted for a limited period, usually 20 years. During this period, no one has the right to use the patented method in any manner for commercial ends. The owner of the patent has the sole right to decide who can use the patent commercially. He may grant or lease the patent in exchange of money mutually agreed upon. The new owner then will have the same rights enjoyed by the original inventor, for a stipulated period. Once the term of patent expires, its information becomes available to all in the public domain, and anyone can use it in any manner. Even otherwise, the patent owners are obliged to reveal information regarding the patent in pertinent databases or places prescribed by corresponding regulatory body.

Under Patent Cooperation Treaty (PCT), finalized in 1970, one can file a single patent application and expand its scope as per choice in several countries. In the usual manner, patents have to be filed separately in each country, where the patent office shall search its database for possible duplication. This is followed by examination and if approved, grant of a patent. Under PCT, one just files a single patent application. The verification etc. can be taken care of globally, and the grant of patent may be expanded across countries of choice. PCT system is also operated under WIPO. There is also possibility of addition to an existing patent, and or restoration of a lapsed patent.

2.5 Trademarks

Trademarks are distinct symbols or signs that identify specific products or services created or offered by individuals or corporations. These may be letter, drawings, numerals, sketches in two or three dimensions, or even distinctive sounds, speeches (textual or musical) or some aroma attached to the product, in short anything that distinguishes a product from a producer from other such products. Trademarks are required to be registered to be effective and legally operative. There is usually a period (10 years) by which a fresh trademark is to be registered. Unlike a copyright or a patent, a trademark is considered effective for ever.

Here, something must be said about the Madrid Protocol regarding trademarks. This is based on an original agreement of 1891, held in Madrid, the protocol of which was finalized in 1989. In the Madrid System, one can register and pay one time, and make the trademark protected in 124 countries. One can thus control trademark registration and protection by a single central controlling authority. Like, PCT in case of patents, Madrid System is also operated by WIPO.

2.6 Geographical indicators

Whenever we hear of “champagne”, “scotch whisky”, “Brazilian coffee”, “Nagpur orange” or “Kullu apple”, we understand that these materials have a fixed geographical origin. In the recent past, we heard some exchange between the state governments of West Bengal and Odisha about rasgullas, whether it began in Bengal (in or around Kolkata), or in Odisha. This is because once the origin of such a traditional product is fixed, a tag of geographical origin (GI) can be put on it. From then on, everyone has to acknowledge the origin of the sweet as Kolkata, West Bengal or some lace in Odisha. Darjeeling and Assam tea, which have been given tags, have cultivation of the same tree, *Camellia sinensis*, but differ widely in taste because of the local climatic conditions, soil quality and local production methods. Similarly, Kanjibharam and other sarees, Kashmiri shawls and other such products of local artisans have acquired GI tags. The GI tag, once registered internationally, also prevents people from other countries from reproducing the object in their homeland and patenting it. Delay in doing so has caused many indigenous products, e.g. extracts from *Azadirachta indica* (Neem) to be patented in the USA. Prompt action by activists have prevented similar patents of *Curcuma longa* (turmeric, haldi) and other entities. Geographical indicators, like trademarks, can last indefinitely, as long as the quality of the product marked by GI continues to be distinctive.

2.7 Industrial designs

An industrial design which comes under IPR is a layout or plan of producing an industrial product which is novel, or has not been used before, or may even be a new modification of an existing layout or plan. Acknowledgement and protection of rights of such a design in a particular individual or a group of individuals in

enjoined under the TRIPS agreement, of which India is a signatory. This is intended to promote innovation and R & D activity in industry, by publicly acknowledging and rewarding innovators. There have been some legislations in India ensuring the rights of innovators of industrial designs. It also have to be kept in mind that the industrial scenario is rapidly evolving with increased incursion on automation and robotics, control by computer via network, use of nanomaterials, along with shrinking of physical, manual labour. There is already much talk about convergence of similar technologies, especially those involving computers and network. How this will impact industrial designs is anybody's guess. But this also points out the need to be aware of all such developments.

2.8 Undisclosed information : trade secrets, test data

Any commercial enterprise, especially in highly competitive sectors, involve trade or commercial secrets of operations which are known to a select few in each business entity in such sectors. We all know such legends e.g. of the secret formula of taste of a well known soft drink, which is synonymous with lifestyle of the US, being held by a very small number of individuals who are not allowed to see each other. Such secrets are protected without registration and can still enjoy legal protection, unlike for patents where registration is necessary. Therefore, there is no legal means of obtaining such information, other than by straightforward, legal dealing with the holder of such secret.

Interestingly, there may be innumerable techniques used by the indigenous people worldwide to prepare herbal medicines, or extract metals or develop plants or tracking animals in the wild. Such knowledge is being catalogued and stored in some countries, and is being collected illegally in other countries, taking advantage of ignorance and simplicity of the indigenous people. The faster all such knowledge is catalogued in the public domain and tagged with GI or similar indicator, these will be protected from profiteering and may ultimately benefit the local community.

2.9 Design of integrated circuits

We have already mentioned the importance of integrated circuits and how delaying grant of patent of the same in another country helped the latter gain

advantage over the country of its origin in economic terms. The first integrated circuit (IC) was made by Jack Kilby in Texas Instruments in 1958, with the assistance of others. Since then much water has flown across rivers in all countries, and today's desktop computers typically have tens of billions of transistors or MOSFETs, and high end computers may have components in trillions. This happened because of research and developmental activities on integration, esp. with VLSI technologies.

2.10 Protection of new plant varieties

This particular right is for protection of farmers, agriculturalists and indigenous people who are the main contributors in maintaining agricultural and biological diversity of this earth. At one time, when feeding a burgeoning population was the main concern of governments all over the world, there was a lot of emphasis on intensive farming, mechanization, large-scale application of chemical, fertilizers and irrigation. Big dams were built in countries, with canals to carry irrigation water to small villages. After a lot of investment in this sector, it was realized that such an approach ultimately destroys sustainability of eco-system, contributes to global warming, destroys traditional knowledge base regarding such matters, and leads to many other problems. In any case, it yields diminishing returns, as discussed by economists over past few centuries. Large-scale mechanization of agricultural land, conversion of forests into arable land, conversion of natural water bodies as fisheries etc. also cause large-scale displacement of tribals and indigenous people, who depend on forests and natural environment for their livelihood. In addition, multinational agri-business has been pressuring countries like India to use their genetically modified (GM) crops, which can make farmers completely dependent on an external agency for their living.

Keeping in mind these matters, laws have been enacted which recognizes right of agriculturalists, farmers and indigenous people over land that they have been using for long in traditional ways. Several crop varieties such as varieties of rice, wheat, maize, sorghum, millet, chick peas, gram, lentil, beans etc. have been identified for protection. India has opted for sui generic system of protection of plant species, instead of patents.

2.11 Summary

Copyrights : Copyright is the legal right given to creator of literary and artistic works. It protects creative works like musical compositions, audio recordings, movies, books, journals and software applications etc.

Patents : A patent is an exclusive right granted by the state for an invention which is a product or a process.

Trademarks : A Trademark is a distinctive sign or mark used in trade to distinguish your goods or services

Geographical indicators : It is a name or sign used on certain products which corresponds to a specific geographical location or origin.

Industrial Designs : Industrial design is what makes a product attractive and appealing hence adding commercial value to product and increase its marketability.

Trade secrets : A trade secret is any confidential information used in business that gives or competitive edges.

Unit - 3 □ The TRIPS Agreement : Some details

Structure

3.1 Objectives

3.2 Introduction

3.3 Trips Agreement : Articles

3.4 Restrictive trade practices

3.5 Summary

3.1 Objectives

After reading this unit we will be able to know about the following main objectives :

- About Trips Agreement
- Articles for Trips Agreement
- Main features of Trips Agreement
- Principles of Trips Agreement
- Restrictive trade practices

3.2 Introduction

The Trips Agreement is a minimum standards agreement that allows the members to provide more extensive protection of intellectual property if the members so wish. Member are left free to decide the appropriate method of implementing the provisions of the agreement within their own legal system and practice. The aspects of Intellectual Property Right (the Trips Agreement) was agreed upon at the ministerial meeting in Marrakesh, Morocco in April, 1994, and came into force as part of the WTO Agreement on January 1, 1995.

3.3 Trips Agreement : Articles

Let us consider the Trade Related Intellectual Property Rights agreement, operational since 1995, in some detail. This is the most complete multilateral agreement on intellectual property so far. It consists of 7 parts – (1) General provisions and basic agreements, (2) Substantive standards of IPR protections, (3) Enforcement, (4) Procedure for acquisition and maintenance of IPRs, (5) Dispute prevention and settlement, (6) Transitional arrangements and (7) Institutional arrangements. Part (1) includes minimum standards to be set by member nations (i.e. those who are signatories of the TRIPS accord) for protection of IPRs, treatment of nations, including most favoured nation (MFN) status and exhaustion of IPRs. Part (2) clearly delineates the minimum standards of protection of the rights to be provided by member nations within its boundaries. Permissible exceptions and the minimum duration of protection, wherever applicable, are also clearly spelt out. Part (3) lays down certain general principles of enforcement of protection of the IP rights to be followed by each member nations. It gives detailed procedures, civil and administrative, to be followed so that rights holders can safely and effectively enforce their rights, and also specifies safeguards and remedial measures. Part (4) enlists general rules for acquisition and maintenance of IP rights. Part (5) deals with disputes among member nations and how to settle them. Effectively, such disputes come under the jurisdiction of World Trade Organization (WTO). Part (6) involves transitional periods, including transfer of technology and technical cooperation between member nations and other entities. Part (7) discusses institutional arrangements and how to deal with existing subjects.

In effect, the TRIPS agreement included most of the issues discussed in the Paris and the Berne Conventions, tightened the loose ends thereof and included safeguards. It is the most comprehensive treaty on intellectual property rights till date. In addition, it included some of the issues discussed in the Rome Convention of 1961, and the Washington Treaty of 1989. Some of the items not fully dealt with in the 1995 agreement were added later. For example, the Doha Declaration of 2001 added important clauses in the TRIPS Agreement regarding public health and allowed member nations with poor public health infrastructure to create provisions with help from other nations.

The goals of TRIPS, as explained in Article (1), are: promotion of adequate and effective intellectual property rights, and at the same time, to ensure that these do not hamper international trade. In other words, removal of distortions and impediments to international trade is also a goal of TRIPS. In Article 1.1, it is mentioned that member nations are free to enforce stronger domestic provisions for protection of IPRs, insofar as they do not contravene any of the TRIPS provisions. They are also free to incorporate such provisions within their own legal systems. Article 1.3 in this part defines the beneficiaries of such protections, viz. creators or owners of the rights being discussed. While they may belong to a particular nation, they may also have close association with other nations. The terms are spelt out more clearly in WIPO articles, which must be considered together with similar articles of WTO. In Article 3 in Part (1), it is mentioned that each member nation must accord the same treatment to persons belonging to other member nations that is met out to its own nationals. Exceptions to this rule are as specified in Conventions of Paris, Berne, Rome and Washington referred earlier. Following the Berne Convention, the concept of 'material reciprocity' applies when, in a certain case, if extra protection is accorded to a right or an entity, duration of its protection need not exceed the stipulated period. There may be limited exceptions to this rule, as delineated in Article 4, especially dealing with MFN status, certain judicial provisions, some administrative procedures and international agreements established before January 1, 1995. Article 5 also deals with MFN status.

'Exhaustion' refers to lapse of control of distribution rights over the item in question by the owner of IPR once the item enters the market. In some countries this is also called "first-sale doctrine". 'National exhaustion' means loss of control over sale of the item if it appears in market inside a nation. The person may still control its sale or distribution in other nations. However, if the country is part of an international exhaustion regime, sale or distribution of any such item can no longer be restricted, and parallel imports and exports between countries are legally permissible. Article 6 states that each member nation is free to set its regime regarding this matter, in accordance with national treatment and MFN provisions of Articles 3 and 4. This is also clarified in the Doha Declaration. Article 7, called "Objectives", calls for balance between IPR and societal benefits, between promotion of innovation and technology transfer. Article 8, entitled "Principles", states that

member nations can adopt measures for public health and to prevent misuse of IPR, provided that such measures are not in conflict with TRIPS provisions.

Part II of TRIPS deals with copyright issues. This has been discussed above. Here, the purpose is to reward creative work. It basically refers to the Paris text of 1971 and leaves out the moral aspect of literary or creative work mentioned in the original Berne Convention of 1886. At the same time, it offers clarification on several ideas. For example, copyright is supposed to protect 'literary and artistic' work, which includes any literary, artistic or scientific work in any form or expression. This brings software programs and databases under its ambit. However, only original expressions can be protected, not ideas. Economic rights of creator of a literary work include rights to reproduce, translate, rent, broadcast and communicate to the public in any manner, among others. Similarly, performers can decide who shall copy and broadcast their performance in any form, phonographic or in video mode, and prevent others from doing so. Similarly, authorized broadcasters of certain media may have the rights to distribute or air certain audio or video clips, etc. Quotation, copying for education purposes and reporting of events may be exempt from such restrictions, within limits. While Article 14 discusses rights of the author, artist and performer over their works, Article 13 demarcates areas where exceptions can be made. Here also, some conditions must be satisfied. For example, exceptions must be limited to special cases and should not interfere with normal use of the artistic or literary work or performance. They also should not affect the legitimate rights of the owner. In general, term of protection for literary or artistic works is lifetime of the author/artist and a further fifty years. For performances, it is 50 years, while for broadcasting, it is 20 years.

Article 15 to 22 of Part II involves trademarks and related rights. It is made clear that member nations may allow registration of trademarks, which may involve words, drawings, symbols, colours etc. or any combinations of these, so that individual products are distinctly identified visually. There must be no confusion among consumers regarding this issue. In other words, trademark owned by one may not be used by another under any circumstance or used with so little variation that the consumer may have difficulty identifying one as belonging to the original owner of the trademark. For internationally known trademarks, these need not be registered in every member country, but must be protected from copying or such minor

variations as stated before. Permissible exceptions, as in case of copyrights, also hold for trademarks, as described in Article 17. Term of protection, as described in Article 18, is for a minimum period of seven years, to be renewed indefinitely, and once renewed regularly, may last indefinitely. However, actual use of it is required, and continuous non-use for three years may lead to cancellation of registration of a trademark, as stated in Article 19. Articles 20, 21 deal with use of trademarks, their licensing norms, restrictions and exceptions to such restrictions on its use.

Articles 22 to 24 relate to Geographical Indicators (GI). As stated already, this is applicable only when the characteristics, quality, reputation, etc. of some material is invariably linked to its place of origin in a country which is member of WTO. This is limited to physical goods so far, whose qualities are attributable to their geographical place of origin. The member countries of WTO are free to formulate legal means to protect such materials, which ensuring that unfair trade practices are prevented and normal commercial transactions are allowed. Certification of such goods, their registration, assignment of trademark etc. are left to member countries. India has opted for sui generis laws for such goods, which means laws formulated specially to deal with such items. Article 22 states that such goods can never be transacted in a manner that (a) misleads consumers regarding origin of the goods, and (b) leads to unfair trade practice. The article also makes it clear that when registration or trademark for such a good appears in a country other than its true geographical origin, it is liable to be rejected. Article 23 states that stricter norms must pertain to wines and spirits, i.e. alcoholic beverages, and even in country of origin, distributors other than licensed ones may not deal with such products under consideration. In general, homonymous GIs are to be prevented, while for alcoholic beverages, it is left to the member countries. Article 23 also requires member countries to engage in multilateral negotiations regarding applicability of alcoholic beverages. Article 24 deals with exceptions to GI rules, involving local terms and pre-existing agreements etc. It also enjoins the member countries to be involved multilaterally regarding this issue, which may also involve the Council for TRIPS.

Industrial designs are subject matter of Articles 25 and 26, where the term is understood to mean ornamental or aesthetic aspect of an industrial product. Here, as stated earlier, a minimum of 10 years protection is supposed to be provided for such a design which is new or original. Textile designs, which usually go out of fashion

in a short time, are given special attention here. There should not be hindrance in obtaining such protection. Exceptions to the rights being enforced are as stated in case of copyrights above.

Patents are dealt with in Articles 27 to 34. Article 27 mentions that all patent applications, for products or processes, must be subject to tests of originality, innovation and applicability before grant of patents. There must be no discrimination and patent rights must transcend local and national boundaries. There are three conditions where patents shall not be granted, and the products are to be prevented from being marketed or used in public. These are: (a) if the product / process is harmful to human, animal or plant life or to the environment, (b) if it is any diagnostic, therapeutic or surgical method and (c) if plants and animals (other than microorganisms and biological processes) are used to produce plants and animals in non-biological and non-microorganismic processes. But any country excluding plant varieties from being patented must have effective *sui generis* means of protection. Article 28 details the rights of patents for products (making, using, selling, importing etc.) and processes (processes and of the products there from), and also to assign, transfer (by succession) and license the patent rights. Article 29 clarifies that the patent information must be disclosed prior to award of the patent, in sufficient clarity so that anybody adequately proficient in the subject may carry out the process or obtain the product in the manner disclosed. Limited exception to the patent rights, in the manner as pertaining to copyrights, and without harming the interests of the patent owner, may be made as declared in Article 30. Article 31 specifies under which circumstances compulsory licensing is possible of products or processes. These include government use, and should be decided by proper designated authority. However, the legitimate interests of the rights owner must be protected. The minimum stipulated period of protection is 20 years, but this may be amended by judicial review, as explained in Article 32. Article 34 states that in patent application for a process, the applicant may be asked to prove that the process for which a patent has been filed is different from other, similar processes in existence or known.

Layout designs of integrated chips (ICs) are subject matter of Articles 36 to 38 of TRIPS Agreement, as well as of IPUC Treaty of 1989. Here, layout design refers to the full three dimensional layout of the IC in question. Basic terms are set in Article 36. Dealing in protected design unlawfully, but without being fully aware,

implies payment of royalty and stoppage of such dealings once existing stock is cleared. This is mandated in Article 37. This article also provides for compulsory licensing, as in case of patents, for non-commercial use or to correct anti-competitive practices. Article 38 specifies a period of 10 years for protection of such designs.

Undisclosed information refers to trade secrets or test data submitted to government agencies. This is dealt with in Article 39. It is stated clearly that persons in possession of undisclosed information must be able to use it, trade it or deal with it in any manner the person wishes, except insofar as in public interest or to check unfair trade practices, member countries may take appropriate steps. Obtaining such information without consent, using force to obtain such information, or involvement of third parties in this business must be protected against.

Article 40 is about anti-competitive practices. In the prevailing international business scenario, at least theoretically, competition is supposed to maximize gains for the consumers i.e. for public in general, and any barrier to it is anathema to the authorities that control such trade viz. WTO and others. Therefore, if practice of IPR in any situation is seen to be anti-competitive or leads to unfair trade practices, the member country or countries are expected to take appropriate steps to correct it. It is termed abuse of IPR. Usually, consultation among member countries is prescribed in such situations. However, Doha Declaration called for flexibility in IPR regime when public health is considered, so that member countries which have poor medical infrastructure or access to pharmaceuticals, may be assisted so that such lacuna can be addressed properly. The declaration allows individual member countries to call for public license, declare emergency etc. and thus deal with extreme conditions such as epidemics and spread of HIV, tuberculosis, malaria and such diseases. For example, the least developed members had increased transition period to prepare for proper entry into TRIPS regime, and even trade secrets of some pharmaceuticals products were disclosed to them. This is expressly stated in Paragraph 6 of Doha Declaration, and is also part of Article 31 of TRIPS agreement.

Part III of TRIPS Agreement is about enforcement of IPR. Enforcement is called for when right of a person (an IPR) is infringed upon, where no exception is permitted. Article 41 lays down the general objectives and calls for prompt and effective action, while ensuring due process of law, provision of appeal etc. are observed. It also cautions about unfair trade practices. Articles 42 to 46 deals with

the procedures that can be adopted in some detail (evidence, fair and equitable justice) and what effective steps may be taken (injunction, destruction of goods in possession of the accused, indemnification etc.). Article 50 declares some provisional measures in this regard, e.g. temporary injunctions, pending negotiations to resolve the issue. Article 51 to 59 are about passage of goods across international borders, and what steps to be taken in case of piracy or transport of goods in illegal manner. Here also, destruction of confiscated good is advised, once it has been proved by proper evidence. However, as in the earlier case, here also care must be taken to ensure due process of law and legal provisions and to prevent abuse of the rights. Article 61 deals with criminal procedures to be applied. These are meant for willful infringement of trademark and copyright for commercial purposes. For lapses in other cases, criminal procedure is optional. The caveats as applicable to legal procedures in other cases are also to be observed here.

Part IV of the TRIPS Agreement involves other aspects of IPRs and their implementation and observance. While how to acquire and maintain IPRs are not described in detail anywhere, Article 62, some areas of Part II, provisions of Paris Convention and the IPIC Treaty are usually referred to in this regard. While January 1, 1995 is the date when the TRIPS Agreement comes into effect, January 1, 1996 was the deadline specified for all developed nations to comply with all TRIPS norms. Transition period were specified for other countries, in Articles 65 and 66, to prepare themselves to become TRIPS compliant. However, all countries were to conform to national and MFN norms by January 1, 1996. For developing countries, the deadline to conform was January 1, 2000. However, they were allowed another five years to file patents and such instruments in technologies that are not easily available to them or those which are not so protected. But such relaxation was not extended to pharmaceutical and agricultural products, vide Article 70. Least developed countries were granted till January 1, 2006 to comply, extendable upon request, to be examined properly. For such countries, the TRIPS Council decided in 2002 to extend the deadline for setting IPR norms for pharmaceuticals to January 1, 2016. In 2005, the TRIPS Council decided to extend the transition period of least developed countries to January 1, 2013. What happens to pre-existing standards and rights when a country becomes TRIPS compliant are dealt with in Article 70, Article 18 and in Berne Convention.

Member countries are required to inform the TRIPS Council when they become compliant to the TRIPS Agreement. There are provisions of benefits, exceptions etc. which can be awarded to individual nations upon request, but records must be kept and transmitted to the TRIPS Council, and status reports submitted in prescribed forms. In other words, regular status update must be maintained with the TRIPS Council. Information about national and MFN status must also be notified immediately to the Council, as that would apply to foreign nationals visiting that country and what kind of treatment the person would expect. All the notifications are expected to be made available to all members of the TRIPS Agreement.

Technical cooperation between countries has been discussed earlier, and is specified in Article 67. Developed nations are expected to make their technological expertise available to developing and less developed nations, while maintaining IPR rules and checking no abuse of such rules and unfair trade practices are taking place. Such activities are also to be reported annually. In observation of such provisions, intergovernmental organizations such as the WIPO, WHO, WTO etc. publish annual reports, enlisting cooperation activity among nations. The WTO and WIPO came to an agreement on January 1, 1996 to cooperate mainly regarding notification, access and translation of national laws and regulations, for protection of national emblems and for technical cooperation. In line with this, documents are made available to WIPO and to general public on all such matters.

As regards monitoring, the TRIPS Council is the supreme body which oversees all aspects of compliance of the TRIPS Agreement. The national laws and regulations are circulated among all member nations, who may raise queries for other nations to answer. These are further discussed in meetings, to sort out issues not properly addressed. While the TRIPS Council has set up a Forum to address all issues related to the Agreement and its compliance, all trade and business issues are dealt with by WTO. Pharmaceuticals and agricultural commodities are often discussed separately, keeping in mind the Doha Declaration. GI issues of wines and spirits are also similarly addressed separately.

Settlement of disputes is an important object in TRIPS Agreement. This is settled by the Dispute Settlement Understanding (DSU) of WTO. It acts to preserve the rights and obligations of the member nations and acts to resolve disputes between them, while maintaining all the provisions of TRIPS Agreement and related issues.

Only the member nations are involved, and they are committed to the dispute settlement mechanism of DSU. DSU acts in accordance to existing international laws, and those ordained under the acts and provisions of WTO and TRIPS. The dispute settlement involves, first, a consultation between the parties. This is followed by adjudication by a panel appointed by DSU of WTO. This can be followed by appeal to a higher, Appellate Body. Finally, the ruling of the panel and/or the Appellate Body is required to be implemented by the parties involved. The complaints brought before the DSU are of three kinds. The most common is the non-compliance of another member nation to abide by the TRIPS rules. These are called 'violation' complaints. There may be another type when a government brings a complaint against government of another nation for perceived loss of benefit, even when no WTO / TRIPS agreement has been violated. This can happen when a government introduces measures to favour business entities of its own nation, without directly violating WTO norms. These are called 'non-violation' complaints. There can also be 'situation' complaints, arising from situations which tend to oppose or nullify WTO / TRIPS agreements. Initially, there was a moratorium on 'non-violation' and 'situation' complaints to be brought before DSU, for five years. This was extended a few times. A list of some disputes and how they were settled can be found in WIPO depository.

3.4 Restrictive Trade Practices

A clause of caveat regarding restrictive trade practices appear in many, if not all, articles of the TRIPS Agreement outlined above. Let us list some of the restrictive trade practices experienced in dealing with licensing and trade of intellectual properties and their rights.

- (a) Restrictions after expiration of IPRs or loss of secrecy of technical know-how : Once the term of patent of an intellectual property expires, knowledge of it enters into the public domain, and anyone can use it for personal gain. Therefore, restriction after such expiration of terms is unfair and restrictive trade practice
- (b) Restrictive clauses in agreement : There may be clauses in agreement involving use of an IP, where one party continues to pay royalty or tries to withhold information even after the term of patent or copyright has expired.

- (c) Restrictions on innovation and research : There may be clauses involving use of an IP which restrains research and development activity involving the particular intellectual product. This constitutes unfair and restrictive trade practice, because the essence of IPR is to promote innovation and research.
- (d) Non-competition clause : There may be clause or clauses involving use of an IP which prevents the user or licensee from purchasing or using another product from a different company.
- (e) Tie-in arrangements : Sometimes, the user of an IP is compelled to purchase associated products from the same company selling / licensing the IP.
- (f) Export restrictions : Often, the licensee of an IP is prevented from developing marketable product(s) using the IP and selling / exporting it. Such restrictions may be direct or indirect, partial or more comprehensive.
- (g) Price fixing : This is an unfair trade practice which is familiar in business world for a long time, and continues in business involving IP and IPR.
- (h) Restrictions on field of use, volume or territory : There may be clause(s) in the license agreement for an IP to be used only within a particular domain, while in reality it can be used in other domains.
- (i) Grant back provisions : There may be clause(s) in the license agreement of an IP that any modification improving its activity must be reported back to the licensor, and to no one else. Such conditions may be unilateral or more relaxed.
- (j) Exclusive sales and representation arrangements

3.5 Summary

TRIPS : Trade-Related Aspects of Intellectual Property Rights.

There are main three features of TRIPS. These are standards, enforcement and dispute settlement. The purpose of the TRIPS agreement is to establish a uniform set of rules across the globe that would provide adequate standards of protection for intellectual property.

Unit - 4 □ The Indian Scenario in IPR

Structure

- 4.1 Objectives**
- 4.2 Introduction**
- 4.3 Timeline**
- 4.4 Some areas of concern**
- 4.5 Summary**

4.1 Objectives

The main objectives of this unit is to provide the information about the following issues :

- Indian Scenario in Trips Agreement.
- Timelines in India regarding intellectual property right.
- Important areas of concern in IPR.

4.2 Introduction

After India became one of the signatories of the multilateral TRIPS Agreement, its Patent Act of 1970 was amended several times (1995, 1999, 2002 and 2005) to integrate internal developments in awareness and technology with the international standards, to ensure legal requirements are met and at the same time to foster developments of intellectual property within the country. Consequently, the Rules associated with the Patent Act also had to be modified (2003 and 2005). While trademarks have been protected via an Act of 1958, India became a member of the World Trade Organization (WTO) from the very beginning. It became a party to the Paris Convention in 1998. To incorporate new developments, allow smooth flow of technology transfer and for simplification of related law, the trademark act was amended and passed in 1999. The act pertaining to industrial designs of 1911 had to

be amended, to keep up with developments in technology and to incorporate necessary legal provisions of the multilateral agreement. This was carried out with a new act in 2000. Regarding geographical indicators, there was no legal provision in India prior to the act of 1999, which was felt necessary as per the requirements of the TRIPS protocol regarding such matter. Likewise, the Copyrights Act of 1957 had to be amended in 1984, 1994 and 1999. Similarly, there was no law for plant varieties, but after the TRIPS Agreement, this was felt necessary. Hence a law was enacted in 2001. This seeks to stimulate research and development in new and useful plant varieties, boosts the seed industry, and at the same time allays fears of farmers and cultivators regarding IPR rules on these matters by providing benefits to them for protecting biodiversity and the environment. In the same manner, a law to protect genuine integrated circuits used in semiconductor electronic industry and prohibit use of spurious items, was introduced in 2000.

Common features of all these amendments are: (a) making the laws more comprehensive, thus bringing more items under their ambit; (b) making the laws more precise, so that there remains no ambiguity as to the possible use of the laws; (c) making the laws business-friendly, so that it appears that the government does not stifle freedom and creativity in business enterprise; and (d) making enforcement of the laws stricter. In all cases, infringement of the laws calls for far harsher measures than earlier. For example, the police have been empowered to seize, without warrant, goods that violate trademarks act. Fine for copyright violation has been increased by several orders of magnitude. At the same time, registration of new trademarks or copyright or geographical indicator are easier, simpler and faster than before. The procedures are more transparent. Interested persons are actually encouraged to become aware of IP rights and are urged to apply for them.

4.3 Timeline

The timelines in India regarding intellectual property rights are given below.

1856	India Patent Act
1911	The Indian Patents and Design Act
1957	Copyrights Act

1958	Trade and Merchandise Marks Act
1970	The Patent Act
1984	Copyright (Amendment) Act
1994	Copyright (Amendment) Act
1999	The Trade Marks Act
	Geographical Indications of Goods (Registration and Protection) Act
	Copyright (Amendment) Act
2000	Designs Act
	Semiconductor Integrated Circuit Layout-Designs Act
2001	The Protection of Plant Varieties and Farmer's Rights Act
	Designs Rules
2002	Trademarks Rules
	Biological Diversity Act
	Competition Act
	Geographical Indication of Goods (Regulation and Protection) Rules
2003	Patent Rules
2005	The Patent Amendment Act
2012	The Copyright (Amendment) Act
2016	Patent Amendment Rules
2017	Trademarks Rules

Earlier, there was a separate Copyright Office. Since 2016, India's copyright policy has been brought under the jurisdiction of the Ministry of Commerce and Industry. Intellectual Property issues are administered by the Department of Industrial Property and Promotion (DIPP). Patents in India are regulated by the Patent Registrar under the Controller General of Patents, Designs and Trademarks, part of the Ministry of Commerce and Industry. Patents are valid for 20 years, subject to an annual renewal fee. Trademarks registration and regulation is under the Controller

General of Patents, Designs and Trademarks. Registration of trademarks take about 2 years, and once granted, remains valid for 10 years, renewable indefinitely for many 10 year periods. However, in India, trade names are also treated as trademarks.

There are still problems. Outsiders complain of inadequate compliance with IP rights. Myriads of small and medium level enterprises (MSMEs) take advantage of lack of enough vigilance and continue to flood the market with identical or near identical copies of patented / copyrighted materials. Trademark restrictions are flouted. This is coupled with markets being flooded with materials at much lower cost from other countries (“dumping of goods”).

4.4 Some areas of concern

1. Management of intellectual property : In the information and knowledge driven world today, it is said that data is some times more valuable than oil. A company is worth as much as its assets and its goodwill or brand name in the market. Intellectual property is slowly taking over as more important than material assets for any company. Thus, protecting such property, managing databases, and how to deal with them effectively, is of utmost importance. Here, primary factors are commercialization and risk management.
2. Care and management of confidential information : In this information driven era, knowledge and information must be protected as much as formulas and processes for product manufacture were kept secret once. This means confidentiality clauses must be inserted in code of conduct of employees of a concern, and may even be part of departure contracts of an employee who would be retiring from service.
3. Valuation of intellectual property : All the business interest in intellectual property today arises because of (potential or actual) monetary value of such property. Unfortunately, there is no undisputed method to estimate the value of IP till date. Some of the existing methods are
 - Capitalization of historic profits
 - Gross profit differential method

- Excess profit method
- Relief from royalty method

Discounted cash flow analysis uses some of the last three methods and estimates possible value of an intellectual product. However, this is still more an art than a science (or technology). Therefore, as long valuation of an IP remains doubtful, the interest from business angle becomes that much less. Also, when we are discussing value, there are components that need to be looked into viz. owner value, market value, fair value, tax value. Often, it is not the property whose value is of interest, it is the value of its rights which may be more worthwhile to consider.

Associated with this is the question of risk and of insurance of the rights.

4. **Business deals involving intellectual property** : While business in materials such as chemicals, clothes, machines etc. are familiar with human civilization for a few centuries, business in intellectual property is only a few decades old. Hence dealing with such material is still unfamiliar to many. Also, it is not clear what is being dealt with: is it the intellectual property per se, or rights of it? In addition, the norms and protocols involved in these matters are not familiar, protection of such rights are difficult to maintain, especially in a developing country such a India, with very heterogeneous nature of population.
5. **Merger and acquisition involving IP related business** : This has been a prominent feature of businesses involving intellectual property, as has been witnessed since the 1990s. There have been many small start-ups, dealing with software security or database management, or even small programs to do useful calculations. These were taken over by bigger companies once their products gained popularity among users. Mergers and acquisitions in intellectual property platforms is more problematic from one point of view as the property and all aspects of it are intangible. Still acquisition agreement, transfer documents, sale of assets and stock purchases must be taken care of.
6. **IPR and biodiversity** : This actually calls for a separate, more comprehensive

treatment. Biodiversity is understood in terms of diversity of ecosystems, of species and of genetic materials. While the former points to the innumerable variety of living systems in the world as such, existing anywhere between arctic and Antarctic regions, in tundras in Siberia, in Steppe and in savannahs, in temperate and equatorial regions, rainforests, in Amazonia, in African wildernesses, in estuarine systems in the Everglades or in the Sunderbans, in deserts in all the continents (except in Europe), to peculiar ecological niches in Galapagos or Borneo or in Papua New Guinea or New Zealand. Species biodiversity means diversity within same family in animal kingdom. For example, the myriad bird species or the bewildering variety of insect species, probably the largest variety of species in a single family. Genetic diversity indicates the variability of genetic material (DNA, RNA) within a single species.

No discussion of IPR is complete without mentioning biodiversity for the simple reason that there exists a visible imbalance in this among countries of the world. The developed countries lack biodiversity, which is abundant among the developing nations, the global South, which accounts for 80-90% of the world's biodiversity. When the most comprehensive agreement on biodiversity was reached in Rio in 1992, many of the developing nations were not even aware of its importance. We now realize that mankind will perish if biodiversity of the world disappears at the rate it is vanishing presently. However, to protect it, we need (a) technology, (b) resources and (c) awareness about it. As our former Prime Minister pointed out in 1972 in Sweden, poverty of developing nations is also a problem of the environment. The bottom layers of the world population, those living in developing nations, have the knowledge and expertise to save their local environment from degradation using low-cost, sustainable methods. But usually, they are more concerned about feeding themselves and their family. Meanwhile, the developed countries acquire patents on all important plant and animal products from all countries, which they sell to the same people whose knowledge and expertise they now own, at a much higher price. At the same time, from purely financial objective without considering ecological effects, agricultural practices are foisted on regions which, in the long run, destroy the regenerative capacity of the soil and actually poison it with harmful chemicals, which in turn destroy beneficial microflora of the soil. On top of this, the poor

country is asked to pay compensation for damaging the environment, or causing greenhouse gas emission.

There is thus an unbalanced flow of biodiversity from poor to rich nations, and overall destruction of environment and biodiversity of the world. The Rio summit of 1992 sought to counter this by addressing all threats to biodiversity and ecosystems, issues of climate change, to develop necessary tools and processes, and involving all the stakeholders including indigenous and local populations, non-governmental organizations, young persons and women, and even the business organizations. The Cartagena Protocol on biosafety is a subsidiary accord.

4.5 Summary

- India has been a World Trade Organisation member since 1995.
- DIPP : Department of Industrial Property and Promotion.
- MSME_s : Myriads of small and medium level enterprises.
- 1984 : First copyright (Amendment) Act.
- 1970 : The Patent Act
- 1992 : The Rio Summit

Self Assessment Questions

1. Define “Copyright” and “Industrial manufacturing right”.
2. What is the primary objective of IPR laws?
3. State Lockean labour theory.
4. Distinguish between psychological and functional theory of property rights.
5. What was the objective of the statute of Monopolles (1623)?
6. Briefly narrate the objective of WIPO.
7. What are the different aspects of IPR?
8. What is the period of a copyright?
9. What are the works that cannot be patented? What is the period of a patent?
10. What is PCT?
11. What are the main features of Madrid protocol regarding trademarks?
12. What is a Geographical indicator? Explain with examples.
13. What is TRIPS agreement? Elucidate the objectives of Article 7 of this agreement.
14. Explain the objectives of Part III of the TRIPS agreement.
15. List a few clauses of Restrictive trade practices.
16. What are the methods for estimating the value of IP?
17. Mention the objectives of the Rio summit, 1992.
18. Write a short notes on IPR & bio-diversity.
19. Name some methods for valuation of Intellectual Property.
20. Discuss briefly about the various facets of IPR.

Further Reading

1. Trade-Related Aspects of Intellectual Property Rights, Chapter 24, WTO – Institute for Training and Technical Cooperation, Centre William Rappard, 154 Rue de Lausanne, 1211 Geneva 21, World Trade Organization, 2008
2. A Manual on Intellectual Property Rights (IPR), Entrepreneurship Development and IPR Unit, BITS, Pilani, November, 2007
3. Study Material, Professional Programme, Intellectual Property Rights – Laws and Practices, Module 3, Elective Paper 9.3, The Institute of Company Secretaries of India, New Delhi, 2020
4. Intellectual Property Law : A Brief Introduction, Congressional Research Service, US Congress, Washington, DC, September 19, 2018 (www.crs.gov, 7-5700)
5. Intellectual Property : Basic Concepts and Principles, Charles F. Carletta, J.D., Secretary of the Institute and General Counsel, Rensselaer Polytechnic Institute, Troy, New York, 12180, National Conference on Law and Higher Education, Stetson College of Law, February, 2011

