

INTRODUCTION TO IPR

The most important feature of any property is that the proprietor or the owner may use the property as he wishes and that nobody else can lawfully use his property without his authorisation. Generally speaking, there are three kinds of properties:

- Movable property
- Immovable property
- Intellectual property

Movable Property

Property consisting of movable things such as a camera or a car, which no one except the owner of the camera or car may use these objects. This is legal situation, which is called an exclusive right, belonging to the owner, to use his own property. Naturally, the owner is free to authorize others to use his property. Such authorisation is legally necessary and use without the owner's authorisation would be illegal.

Immovable Property

Immovable property includes land and building, which is permanently fixed. Certain limits exist in exercising the right. For example, the owner of a piece of land is not always free to construct a building of whatever dimensions he wishes, but must respect the applicable legal requirements and administrative formalities while constructing a building on the piece of the land.

Intellectual Property

Intellectual property is the creation of the human mind, the human intellect and hence called "intellectual property". Intellectual property is an asset and, as such, it can be bought, sold, mortgaged, licensed, exchanged or gratuitously given away like any other form of the property. Further, by acquiring a legal right over the property, the creator of the intellectual property seeks to ensure that he has exclusive right over it and that the property can be put to use by others only with his consent. Ownership of IPR is a source of national wealth and mark of an economic leadership in the context of the global market scenario.

NEED FOR PROTECTION OF INTELLECTUAL PROPERTIES

Any property has to be protected in order to save it from an unauthorized use. Similarly, Intellectual Property Rights also need to be protected from infringement. The rationale for

protection of IPR are IPRs relates to new Ideas, new technology, new products and evolution of knowledge.

- In today's dynamic and knowledge based industrial environment, IPRs are key elements needed to maintain the competitive edge of any industry. IPRs impart success to the business enterprise by creating and preserving exclusive markets.
- The cost of R & D in developing new products and new processes is rising sharply and hence, there is a need to increase and accelerate the extent of protection of IPRs to get reasonable return on investment and reduce the element of risk and uncertainty.
- IPR protection provides an incentive to inventors for further research and investment in R & D, which leads to creation of new and better products and in turn, brings about economic growth and social benefits.
- Intellectual properties are emerging as a new wealth and power of nations and are described as a new global currency.
- Intellectual properties, through propagation of new knowledge and ideas, have become significant components of world-trade.

The World Intellectual Property Organisation (WIPO) provides further clarification on what exactly should be nature of Intellectual Property. According to WIPO, intellectual property includes rights relating to:

- Inventions in all fields of human endeavour;
- Scientific discoveries;
- Industrial designs;
- Trade marks, service marks and commercial names and designations;
- Literary, artistic and scientific works;
- Performances of performing artists, phonograms;
- Protection against unfair competition; and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic field.

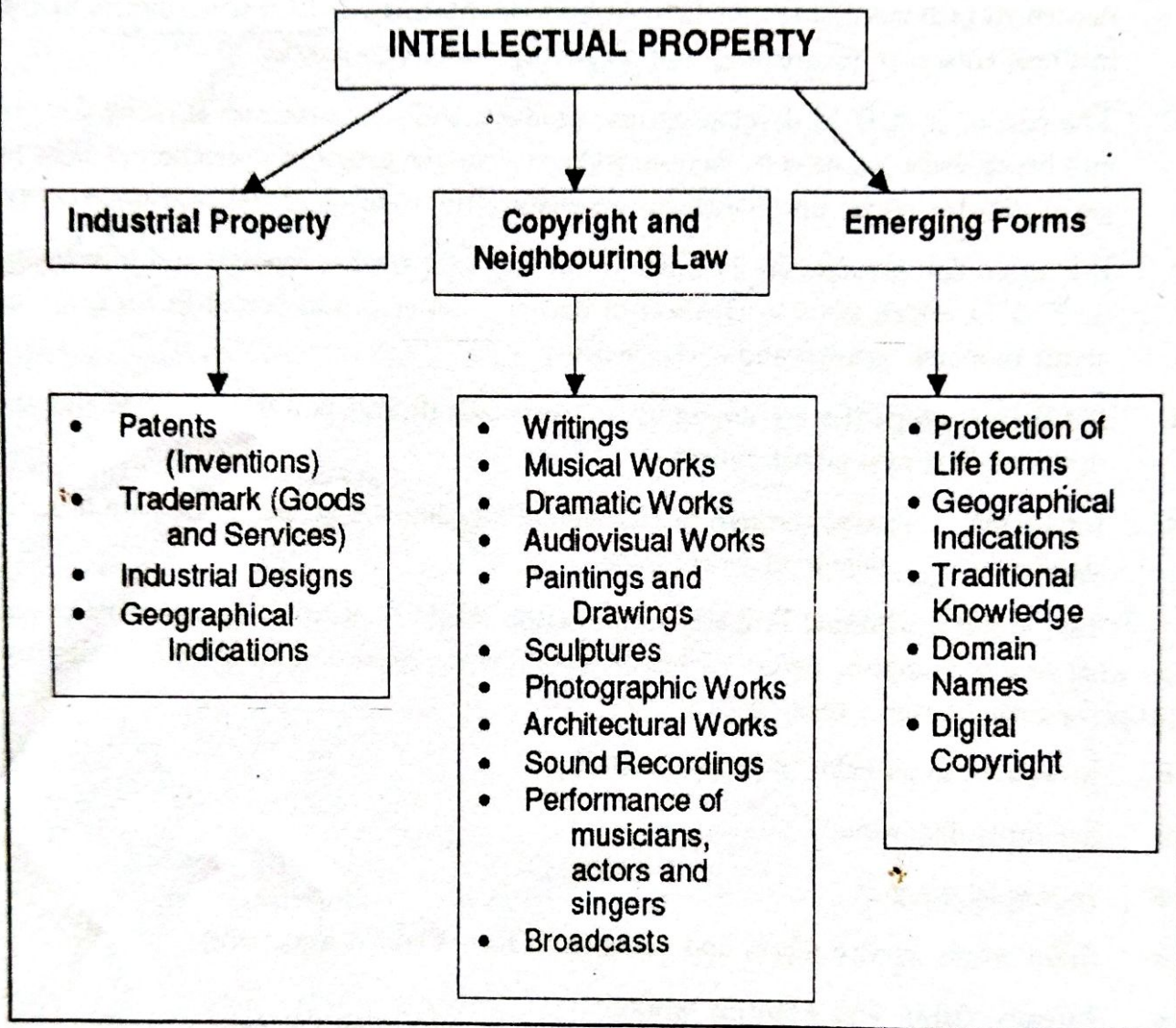
INTELLECTUAL PROPERTY

Industrial Property

IPR is a general term covering patents, copyright, trademark, industrial designs, geographical indications, protection of layout design of integrated circuits and protection of undisclosed information (trade secrets). Figure 1 shows intellectual property and its facets. Industrial property can be classified as inventions, i.e., patents, trademarks, goods and services and industrial designs.

FIGURE 1.1

Intellectual Property and its facets



Patent

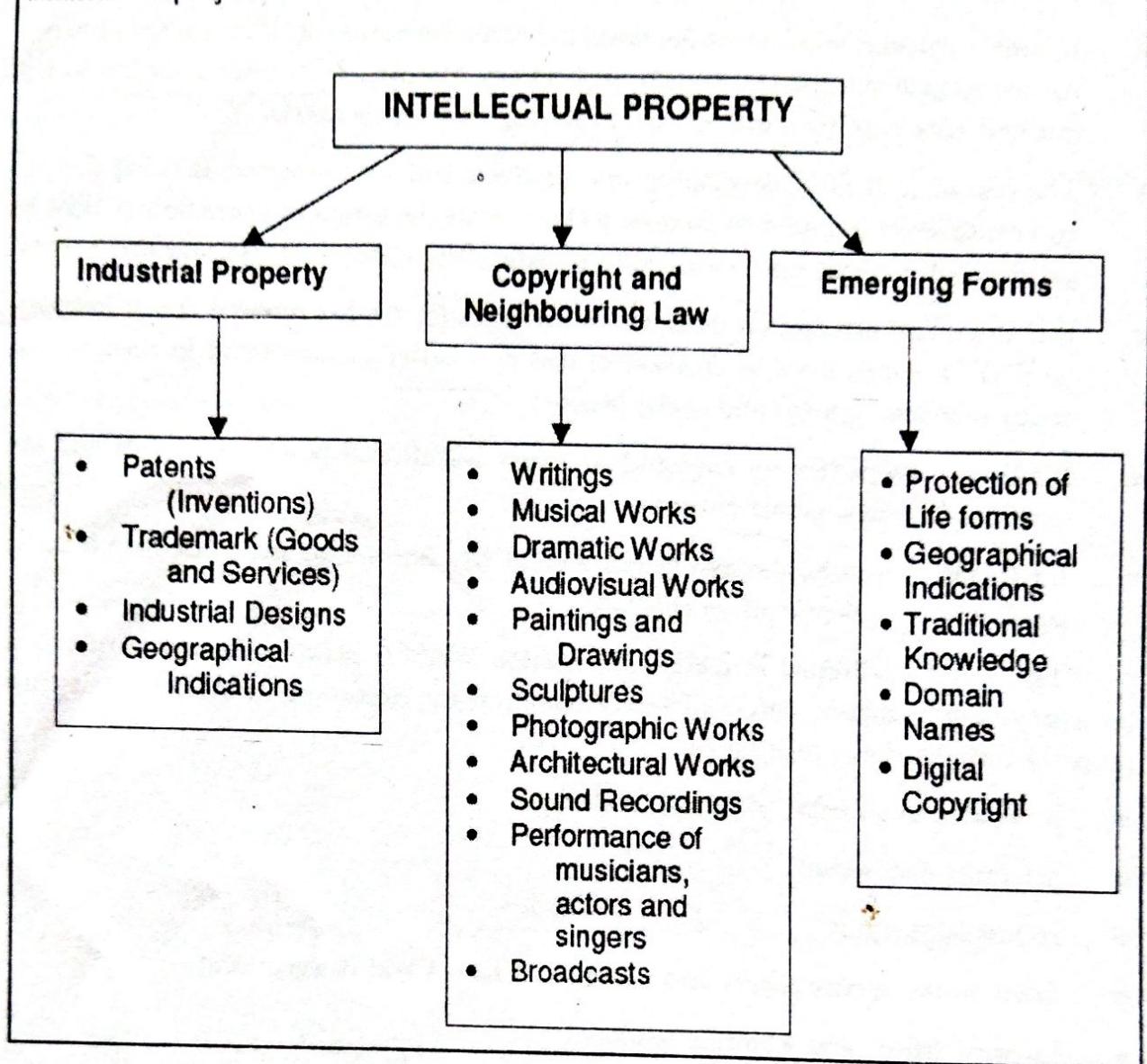
The term 'patent' has its origin in the Latin term "Litterae Patentes". The expression meant open letter as distinguished from closed letter. It means a grant of some privilege, property or authority made by government or the sovereign authority of the country to one or more individuals. The instrument by which such grant is made is known as "Patent".

A patent is a monopoly right to the exclusive use of an invention, granted to the inventor or his assignee. This right is granted only for a limited period called the term of the patent. The right may cease, if not kept alive by payment of renewal fees. The inventor or his assignee has to apply for a patent for the invention to the patent office along with his application disclosing the complete invention in the form of complete specification.

This complete specification is published by the patent office immediately on deciding that a patent may be granted. In many countries, this publication takes place even earlier.

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Thus, patent is an exclusive right for a limited period of time by the government to the patentee (owner of the patent), in exchange of full disclosure of his invention, for making, using, selling the patented product or process or authorizing others to do so. The purpose of this system is to encourage inventions by promoting their protection and utilization so as to contribute to the development of industries, which in turn provides better facilities to the society. Once published, the copy of the patent specification is available for inspection for the general public.

Trademarks (Goods and Services)

A trademark as such is a property, which is also termed as industrial property. During the activity of trading or selling the goods need some identification. One make of soap should be distinguishable from another make, one hair oil is to be distinguished from another and so on. A manufacturer wants his goods to be distinctively identified to assume and assure quality, utility, price and for that identification he desires that the goods should be branded by a brand name by a word mark in the form of a label or sum. Such a device is to be attached or applied on the goods directly or on its packing so as to attach distinctiveness to the goods from those offered for sale by others. These and such other means designated for acquiring distinctiveness are generally known as "trade marks."

A trademark is a visual symbol in the form of a word, a device or a label applied to articles of commerce with a view to indicate to the purchasing person or a particular organization as distinguished from similar goods manufactured or dealt in by others. In other words, a trademark is a visual representation attached to goods for the purpose of indicating their trade origin. Illustrative examples of trademarks are KODAK, for photographic goods, APPLE for computers, WILLS for cigarettes. Where a trademark is used as in connection with services, it may be called 'service mark'. For example, hotels, restaurants, airlines, tourist agencies, laundries and cleaners use service marks.

Industrial Designs

An industrial design is an outcome of inventive activity, initially mentally conceived and then put on a drawing board, followed by the mechanics of giving a concrete shape to the basic new idea in the design and then finally contriving a method for mass manufacturing the same, to put forth a product in the market for the benefit of the consumer. As a general rule, to be able to be registered a design must meet one or more of the following basic requirements, depending on the law of the country: the design must be new; original and have individual character. In addition, it is important to note that some countries exclude handicrafts from design protection, as industrial design law in these countries requires that the product to which an industrial design is applied is "an article of manufacture or that it can be replicated by "industrial means".

Geographical Indications

Qualities and characteristics of certain goods attributable to some geographical locations and reputable to "as produce of certain region" come under Geographical Indications. Only

associations can apply for geographical indications. For example - *Darjeeling Tea, Alfonso Mangoes, Nagpur Santras, Scotch, Havana Cigars, Sherry Wine, Champagne*, etc. Christopher Columbus sailed from Europe to chart out a new route to capture the wealth of rich Indian spices. English breeders imported Arabian horses to sire Derby winners. China silk, Dhaka muslin, Venetian glass, Coramandal pearls were all treasures sought by the entire world. Each geographical reputation was carefully built up and painstakingly maintained by the masters of that region, combining the best of nature and man, traditionally handed over from one generation to the next for centuries. Today we are moving towards an increasingly global economy with a much faster movement of goods, finance, people and brands. Regional specialties have been taken for granted up to now without suffering many losses. But now, protection for the brand of the region for its very own uniqueness has become necessary and inevitable, and without delay, through the protection of geographical indications.

Copyright and Neighbouring Rights

Copyright according to Black's Law Dictionary is the right in literary property as recognized and sanctioned by positive law. An intangible incorporeal right granted to the author or the originator of certain literary or artistic production whereby he invests for a specified period with the sole and exclusive privilege of multiplying copies of the same and publishing and selling them.

Copyright as defined in the Oxford English Dictionary, is an exclusive right granted by law for a certain term of years to an author, composer, etc., (or his assignee) to print, publish and sell copies of his original work.

Copyright Act generally gives the owner of copyright the exclusive right to do and to authorize others to reproduce the work in copies or phono records; to prepare derivative works based upon the work; to distribute copies or phono records of the work to the public by sale or other transfer of ownership, or by rental, lease, or lending; to perform the work publicly, in the case of literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works; to display the copyrighted work publicly, in the case of literary, musical, dramatic, and choreographic works, pantomimes, and pictorial, graphic, or sculptural works, including the individual images of a motion picture or other audiovisual work; and in the case of sound recordings, to perform the work publicly by means of a digital audio transmission.

Copyright protects "original works of authorship" that are fixed in a tangible form of expression. The fixation need not be directly perceptible so long as it may be communicated with the aid of a machine or device. Copyrightable works include literary works; musical works, including any accompanying words; dramatic works, including any accompanying music; pantomimes and choreographic works; pictorial, graphic, and sculptural works; motion pictures and other audiovisual works; sound recordings and architectural works.

Copyright protects all creations of the human mind whatever their form or merit and regardless of the audience they are destined for. Protection is generally immediate and no formal procedure is required as long as the piece of work is original.

Neighbouring rights, also known as rights neighbouring to copyright, were created for three categories of people who are not technically authors: performing artists, producers of phonogrammes, and those involved in radio and television broadcasting.

Emerging Forms

Traditional Knowledge

Traditional knowledge (TK), indigenous knowledge (IK), and local knowledge generally refer to the matured longstanding traditions and practices of certain regional, indigenous or local communities. Traditional knowledge also encompasses the wisdom, knowledge, and teachings of these communities. In many cases, traditional knowledge has been orally passed for generations from person to person. Some forms of traditional knowledge are expressed through stories, legends, folklore, rituals, songs and even laws. Other forms of traditional knowledge are often expressed through different means.

Recently, international attention has turned to intellectual property laws to preserve, protect and promote their traditional knowledge. Three broad approaches to protect traditional knowledge have been developed. The first emphasizes protecting traditional knowledge as a form of cultural heritage. The second looks at protection of traditional knowledge as a collective human right. The third, taken by WTO and WIPO, investigates the use of existing—or novel *sue generis* measures to protect traditional knowledge.

Traditional Knowledge Digital Library

Since time immemorial, India has possessed a rich traditional knowledge of ways and means practiced to treat diseases afflicting people. This knowledge has generally been passed down by word of mouth from generation to generation. A part of this knowledge has been described in ancient classical and other literature, often inaccessible to the common man. Documentation of this existing knowledge, available in public domain, on various traditional systems of medicine has become imperative to safeguard the sovereignty of this traditional knowledge and to protect it from being misused by obtaining patents on non-original innovations, and this has been a matter of national concern. India fought successfully for the revocation of turmeric and basmati patents granted by United States Patent and Trademark Office (US PTO) and neem patent granted by European Patent Office (EPO). As a sequel to this, in 1999, the Department of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homeopathy—AYUSH, erstwhile Department of Indian System of Medicine and Homeopathy—(ISM&H) constituted an inter-disciplinary Task Force, for preparing an approach paper on establishing a Traditional Knowledge Digital Library (TKDL).

TKDL is a collaborative project between *National Institute of Science Communication and Information Resources* (NISCAIR), Council of Scientific and Industrial Research, Ministry of Science & Technology and *Department of AYUSH*, Ministry of Health and Family Welfare, which is being implemented at NISCAIR. An inter-disciplinary team of Traditional Medicine (Ayurveda, Unani, Siddha, Yoga) experts, patent examiners, IT experts, scientists and

technical officers are involved in creation of TKDL for Indian Systems of Medicine. The project TKDL involves documentation of the knowledge available in public domain on traditional knowledge from the existing literature related to Ayurveda, Unani and Siddha, in digitized format in five international languages, which are English, German, French, Japanese and Spanish. Traditional Knowledge Resource Classification (TKRC), an innovative structured classification system for the purpose of systematic arrangement, dissemination and retrieval has been evolved for about 10,500 subgroups against one group in International Patent Classification (IPC), i.e. *AK61K35/78* related to medicinal plants.

Digital Copyright

Over the centuries copyright law – originally tailored to the technology of print – has been adapted several times, in order to respond to technological changes. Now it is yet again challenged by the advance of digital technologies. These represent something completely new in respect of the fact that they allow the entire information (text, sound and visuals) to be generated, altered and used by and on one and the same device irrespective of whether it is provided online or offline. As a result, creators of intellectual property are afraid of an increase in the unlawful reproduction of works, and also Internet service providers (ISP) as well as private and public (libraries, archives etc.) content providers are confronted with a variety of problems.

Domain Name

The domain name in the online world, just like the trade name in the offline world, serves to identify the goods/services provided by the company.

To access a website, one requires a web address. This web address comprises of domain names. As the number of Internet users increased, the importance of domain name also increased. People started identifying the domain name with its owner. With the Internet being used in a big way businessmen for not only advertising and promoting their products, but also for selling them, the principles of trademark, infringement of trademark and passing off are being applied even in the online environment. One of the primary areas is domain names, which has been legal protection equal to that of a trademark.

WIPO (WORLD INTELLECTUAL PROPERTY ORGANIZATION)

The World Intellectual Property Organization (WIPO) is an international organization dedicated to promoting the use and protection of works of the human spirit. These works—intellectual property—are expanding the bounds of science and technology and enriching the world of the arts. Through its work, WIPO plays an important role in enhancing the quality and enjoyment of life, as well as creating real wealth for nations.

Core Activities of WIPO

The core activities of WIPO are:

1. Development of international IP laws and standards

WIPO is responsible for promoting the progressive development and harmonization of IP legislation, standards and procedures among its member states. This includes development of international laws and treaties regarding patents, trademarks, industrial designs, geographical indications and copyright and related rights.

WIPO is also working with member states (184 countries) to explore IP issues in the area of traditional knowledge, traditional cultural expressions and genetic resources.

WIPO handles the administration of 24 international treaties (16 on industrial property; 7 on copyright; plus the convention creating WIPO).

2. Delivering global IP protection services

WIPO administers fee-based services, based on international agreements, which enable users in member countries to file international applications for patents (PCT), and international registrations for trademarks (Madrid System), designs (Hague System), and appellations of origin (Lisbon System).

WIPO administers four IP classification systems, which organize the mass of information concerning inventions, trademarks, and industrial designs into indexed, manageable structures for easy retrieval. WIPO's Arbitration and Mediation Center offers dispute resolution services to businesses and individuals, including in the growth area of Internet domain name disputes.

3. Encouraging the use of IP for economic development

WIPO runs a range of programmes aimed at increasing the effective use of IP by developing nations as a tool for economic development. Programmes include technical assistance in support of member countries' initiatives to improve their IP legislative, institutional and human resources framework; strategies for innovation promotion and IP exploitation; economic studies and material to inform public policy choices.

INTELLECTUAL PROPERTY RIGHTS AND DEVELOPMENT

Intellectual Property Rights (IPRs) became economically and politically very important for developing countries after the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPs) was concluded during the Uruguay Round of negotiations in 1994. This Agreement incorporated IPRs into the multilateral trading system. Since then, their relationship with a wide range of public policy issues has elicited great concern over their pervasive role in people's lives and in society in general. They are frequently mentioned in discussions and debates on topics as diverse as education, health, trade, industrial policy, traditional knowledge, IT and media industries. In a knowledge-based economy, an understanding of IPRs is indispensable to informed policy-making in all areas of human development.

Intellectual Property refers to the creation of human intellect. These could be ideas or expressions or devices. As per the Convention, establishing the World Intellectual Property Organization (WIPO), 'intellectual property' shall include the rights relating to:

- Literary, artistic and scientific works;
- Performances of performing artists, phonograms, and broadcasts;
- Inventions in all fields of human endeavour; scientific discoveries; industrial designs;

- Trademarks, service marks, and commercial names and designations;
- Protection against unfair competition; and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields. (World Intellectual Property Rights Treaties, n.d.).

RATIONALE OF PROTECTION

Like movable and immovable properties, intellectual property is also the result of effort by one or more human beings, with or without using equipments or machines. Therefore, like the producers of the two other forms of property, the creators of intellectual property also have the right to insist on payment for the product of their labour or for the labour itself. Remuneration for creators of intellectual property became economically significant when cheap, multiple copies of a work could be made and it made sense for the creator to be rewarded for his/her intellectual effort and be protected from potential free riders.

TRIPS AGREEMENT

The Agreement on Trade Related Aspects of Intellectual Property Rights of 1994 made protection of IP an enforceable obligation of the member states of the World Trade Organization. The objective of the Agreement was to reduce distortions and impediments to international trade, and to ensure that, while effective and adequate protection of intellectual property rights is needed, measures and procedures to enforce intellectual property rights do not themselves become barriers to legitimate trade (Preamble). It encompassed within its purview standards concerning the availability, scope and use of Copyrights and Related Rights, Trademarks, Geographical Indications, Industrial Designs Patents, layout designs of Integrated Circuits, protection of undisclosed information and control of Anti-Competitive Practices in Contractual Licenses.

This focuses only on copyrights and related rights, geographical indications and patents from the above regimes and agriculture and genetic resources and traditional knowledge and folklore, which are as yet not considered within the ambit of this regime but are currently of great importance and are affected by IPR issues and need protection.

IPR regimes affect different countries in varied ways. The classification of the countries has been drawn from the UNCTAD-ICTDS Project on IPRs and Sustainable Development which has divided various countries into groups based on their technological activity, industrial performance and technology imports. The low technological activity group is the third tier of countries and comprises 58 very diverse countries. We assumed that these countries are likely to have both significant costs and potential long-term benefits from stricter patents, depending on the level of domestic technological capabilities and their reliance on formal technology inflows. Those that are building their innovation systems on the basis of local firms copying foreign technology and importing technologies at arm's length would gain less than those with a strong transnational corporation (TNC) presence.

This group has large countries with heavy industrial sectors like China, India and Egypt, along with dynamic export-oriented economies like Thailand and Indonesia and some countries with small industrial sectors and weak industrial exporters.

CONSEQUENCES OF IPR PROTECTION IN DEVELOPING COUNTRIES

A review of this presents the following consequences of IPR protection for developing countries.

1. **Innovations:** According to the ICTSD-UNCTAD Project on IPRs and Sustainable Development, there is stimulation of private innovation with stronger IPR regimes. The importance of this rises with the pace of technical change and with the 'imitability' of new technology, particularly in such activities as software. It also grows with globalization, which leads innovators to gear their R&D to the world rather than national markets. This leads to increases in the use of the new knowledge in productive activity, leads to higher incomes, employment, and competitiveness for the economy as a whole. This is a step to the dissemination of new knowledge to other agents and increases local diffusion by providing an enforceable legal framework. This is likely to be of special significance for technology-intensive products and activities, where innovators are averse to selling technology to countries with weak IPRs, where leakage is a real possibility. Finally, there is the stimulation of innovation by other enterprises based on information or on seeing the application of the innovation.
2. **The needs of developing countries:** Research study found that developed and developing countries have different technological needs. If protection of IPRs is absent, developed countries would lack the incentives to develop the technology largely needed by the developing countries. Further, firms from developed countries may react to the lack of IPRs in the developing countries by making their technologies more difficult to imitate, which can result in lower research productivity and in less efficient research, technology and less innovation. Also, even if greater protection of IPRs does not directly benefit the developing countries, it could still increase global welfare. Therefore, there are gains from international cooperation that tightens IPRs in developing countries.
3. **Socio-economic consequences:** Many researchers have stated that the lack of enforcement of IPRs in the domestic economy orients activity towards foreign markets, where such protection is available, or towards the high end of the home market. Here the artist is protected from the unauthorized copying by the uniqueness of his or her skill and appreciation of his or her customers for the objects that skill can render. This can move capital and skill out of the country. Another consequence of weak IPR regime is increase in piracy and counterfeiting. These cost the national governments heavily in tax revenues, as they are mostly clandestine businesses and mostly conducted in the informal/black markets.
4. **Trade:** Governments all over the world compete fiercely to attract foreign direct investment, hoping that multinational corporations will bring new technologies, management skills, and marketing know-how. The data available indicate that investors