CHAPTER I

INTRODUCTION

1. CREATIVITY AND IPR, EMERGING OF INFORMATION SOCIETY, PROPERTY TO IPR:

Ideas, inspiration, ingenuity are the seeds from which creations grow. Creativity has been considered in terms of process, product or person. It has been defined as the interpersonal and intrapersonal process by means of which original, high quality, and genuinely significant products are developed. At least three aspects of creativity have drawn much attention: (1) The creative process, receiving the most attention, focuses on the mechanisms and phases involved as one part in a creative act. (2) A second aspect of creativity is the creative person. Here, personality traits of creative people are central. The environmental atmosphere and influence are concerns of a second aspect – the creative situation. (3) Lastly, the criteria or characteristics of creative products have been sought. This area is of particular importance because it is the basis of any performance assessment of real world creativity.

Other related worlds to creativity are creativeness, formativeness, innovation, inventiveness, originality, productivity, craftsmanship, authorship, creatorship, etc. Normally, different ways exit whereby something creative can happen: (1) Generating something wholly new, (2) Combining ideas in a new way, (3) Finding new users for existing ideas, (4) Taking existing ideas to new (different) people, and (5) Combinations of the above. The first of these occurs comparatively rarely.

HUMAN CREATIVITY AND INTELLECTUAL PROPERTY:

Though the connection between intellectual property and creativity does not seem obvious, it is the intellectual property system that sustains and nourishes the creators. In simple terms, intellectual property means the property in intellectual creations, which has some commercial potential and which is protectable by statute or legislation. Intellectual creations result from human ingenuity creativity and inventiveness. It is a product of the intellect, which is owned by an individual or an organization that can them choose to share it freely or to control its use in certain ways. They cover inventions, literary and artistic works, and symbols, names,
images, and designs used in commerce. “Property” means that protected intellectual creations can be used only with the consent of the inventor, author or other owner of the rights.

The rights, which protect intellectual creations through a system of national and international rules, are called intellectual property rights. Intellectual property rights aim at protecting the creative, insightful, unique and inventive creations of the human mind. It is important to understand that it is the rights that are the property, and not the intellectual work they apply to. In fact, intellectual property or IP refers to certain kinds of exclusive rights, which are collectively called intellectual property rights, a legal way of protecting all creations of human mind. Intellectual property rights are like any other property rights- they allow the creator, or owner to benefit from his or her own work or investment. The principal types of intellectual property are patents, copyrights, and trademarks. People need to make money out of their ideas. So they need to be given some form of exclusive rights over their ideas. Therefore, we have copyright, patent, trademarks and other legal proprietary systems. Anyone who writes a song, writes a novel, has an idea, and develops a logo, a brand etc., should be protected. The more the economy move based on ideas, the more its need to ensure that the people who develop those ideas have a good life.

PROPERTY TO IPR
PROPERTY AS AN INSTITUTION

At their basic, social instructions are ‘the humanly devised constraints that shape human interaction they structure incentives in human exchange, whether political social or economic’. Property rights (and therefore intellectual property rights do not just emerge, however; they are constructed to serve particular interests. The logic of efficiency has often been utilized to both justify and to explain the incidence of property rights within economic justifications. But efficiency cannot be the whole picture; goals are more ambiguous than a single end that can be achieved in a particular and efficient manner, and power relations are never absent from social relations. Indeed, power manifests itself in whose efficiency is prioritized, society’s or the individual actor’s. Though there may be a need for efficient operation of economic transactions, this is only one and not necessarily the most important aspect to the history of property as a social institution.
FROM PROPERTY TO INTELLECTUAL PROPERTY

The notion of intellectual property at its simplest suggests that ideas and knowledge can be parceled into separable and transferable knowledge objects which enjoy similar characteristics to material property. Within the debates over intellectual property the justifications of particular positions are familiar. The author’s idea is an expression of herself and as such as aspect of her free intelligence. It should be protected and theft to such expressions should be subject to the sanction of the law. The singularity of the author tends to emphasize the scarcity of the knowledge object produced. However, this cannot be asserted too stringently, as the need to transfer or exchange such property in a market is the way the intellectual producer earns a living - the knowledge object must also be alienable. Thus Lockean justifications are utilized to establish that new ideas will only be produces if the laborers of such creations are duly rewarded by receiving the benefit of such initial ownership when intellectual goods are changed. The originator should be able to transfer the knowledge object to someone of their choosing of a negotiated reward. The protection of intellectual property ensures that those who can use knowledge objects most efficiently can secure an appropriate reward for such usage. And by ensuring the transfer of knowledge to the most efficient users, the public good is maximized along with the totality of social welfare. If it is suggested that commoditization still produces a less than optimal outcome, a comparison is drawn between IPRs and no protection at all to suggest that the alternative is unthinkable (North 1981:165. While there may be problems, this is the best method available for the reward and stimulation of knowledge production.

Publishers and/or manufacturers wish to protect knowledge objects from unlicensed reproduction, reinforce their scarcity and maximize returns from the constructed monopoly rights. The interests of economic exploiters of intellectual property have been grounded in the philosophical justification regarding property as alienable, drawing its line of development from the Lockean or instrumentalist perspective. The self development justification of property, which would not allow full alienability was not nearly as attractive: it would require a continuing right for the originator to limit use, which compromises the rights to the new owner of their intellectual property could be completely disregarded as one of the key reasons that intellectual property could be regarded as scarce was on the basis of the idea having its genesis with a singular author or creator. The most scarce of all physical resources is one’s own body,
from which in the forms of thoughts and ideas intellectual property flows in the first instance (Palmer 1990). Thus, to maintain that the author’s creation is singular and worthy of protection from unauthorized copying, supported by the self developmental justification. If any specific knowledge object was not singular, then the notion of copying or reproduction would be compromised and the logic of protection undermined.

Nevertheless the overall reliance on instrumental justifications produces a paradoxical logic in which limiting the diffusion of intellectual property available for diffusion or as Joan Robinson has put it ;” The justification of the pattern system is that by slowing down the diffusion of technical progress it ensures that there will be more progress to diffuse’ (quoted in Hettinger 1989:48).

**INTELLECTUAL PROPERTY VS INDUSTRIAL PROPERTY**

Intellectual property is used to encompass the rights which may result from intellectual activities in the industrial, scientific, literary and artistic spheres and includes patents, trademarks, commercial names and designations, industrial designs, geographical indications, copyrights and related rights and protection against unfair competition.

Traditionally, the term “intellectual property” is divided into two branches, namely “industrial property” and copyright. As such, the expression ‘industrial property” will cover technological invention and industrial designs, where an invention is defined as a new solution to a technical problem, and industrial design will cover the aesthetic creations determining the appearance of the finished product. The notion of industrial property will also cover matters like trademark. (Mauritius Research Council, “Basics of Intellectual Property Rights”, www.mrc.org.mu/Projects/IPRbooklet.pdf)
2. EVOLUTION OF IPR AND HISTORY
HISTORICAL AND LEGAL BACKGROUND TO TRIPS

The World Trade Organization (WTO) is the legal and institutional foundation for the administration and development of trade relations among its 153 Members, at the multilateral level. It aims to provide fair and stable conditions for the conduct of international trade with a view to encouraging trade and investment that raises living standards worldwide. It is the successor to the former General Agreement on Tariffs and Trade (GATT 1947), a multilateral trade agreement that was concluded in that year. Further trade liberalization was pursued under the auspices of the GATT through ‘trade rounds’ aiming at further tariff cuts and strengthened rules. The Uruguay Round was the eighth round of trade negotiations and by far the most comprehensive. These negotiations were launched in 1986 and completed in 1994.

The main results from the Uruguay Round included a further major reduction of customs tariffs worldwide, and the liberalization of, and development of better rules governing trade in textiles and agriculture – two areas previously largely excluded from the GATT. The trading system was also extended into new areas of trade relations not previously dealt with, notably trade in services and IP. This reflected the growing economic importance of these two areas and their increased share of international trade. Furthermore, the results included the development of a reinforced and integrated dispute settlement system, which is applicable to any agreements covered by the WTO. The Uruguay Round also resulted in the creation of a new organization – the WTO – to administer the agreements. The Marrakesh Agreement Establishing the World Trade Organization (‘the WTO Agreement’) entered into force on 1 January 1995. The ‘GATT’ now refers to an updated agreement on trade in goods, dubbed ‘GATT 1994’ to distinguish it from the earlier GATT, which is only one of a number of agreements annexed to the WTO Agreement.

GATT 1947 INCLUDED SEVERAL PROVISIONS THAT MADE REFERENCE TO IPRS.

For instance, GATT 1947 confirmed that Contracting Parties could have rules on IPRs provided that they were consistent with principles of nondiscrimination. Article III:4 requires treatment for imported products that is no less favorable than that accorded to like products of national origin in respect of all laws, regulations and requirements; this includes IP laws. More specifically, Article XX (d) allows a general exception to the application of GATT obligations
with respect to compliance with laws and regulations that are not inconsistent with GATT provisions, including those that deal with patents, trademarks and copyrights and the prevention of deceptive practices. Additionally, Article IX:6 contains a positive obligation on Contracting Parties to cooperate with each other to prevent the use of trade names in a manner that would misrepresent the true origin of a product, or that would be to the detriment of distinctive regional or geographical names of products protected in other parties’ territories by national legislation.

In the Tokyo Round of multilateral trade negotiations (1973 to 1979), the one immediately preceding the Uruguay Round, there was a proposal to negotiate rules on trade in counterfeit goods resulting in a draft Agreement on Measures to Discourage the Importation of Counterfeit Goods. However, negotiators did not reach agreement and this subject was not included in the results of the Tokyo Round when it concluded in 1979. Instead, in 1982, pursuant to a work programme agreed by trade ministers, a revised version of a draft agreement on trade in counterfeit goods was submitted. This draft was referred to a group of experts in 1984, which submitted its report a year later. The group met six times in 1985. It produced a report on Trade in Counterfeit Goods that recommended that joint action was probably needed, but could not decide on the appropriate forum. It left it to the GATT Council to make a decision.

During the early 1980s, negotiators worked on a mandate for negotiations for a new Round, including on aspects of IP. Trade ministers met at Punta del Este, Uruguay, in September 1986, and adopted a decision on future trade negotiations, which included the following mandate under the title ‘Trade-related aspects of intellectual property rights, including trade in counterfeit goods’:

In order to reduce the distortions and impediments to international trade, and taking into account the need to promote effective and adequate protection of intellectual property rights, and to ensure that measures and procedures to enforce intellectual property rights do not themselves become barriers to legitimate trade, the negotiations shall aim to clarify GATT provisions and elaborate as appropriate new rules and disciplines.

Negotiations shall aim to develop a multilateral framework of principles, rules and disciplines dealing with international trade in counterfeit goods, taking into account work already undertaken in the GATT. These negotiations shall be without prejudice to other complementary initiatives that may be taken in the World Intellectual Property Organization and elsewhere to deal with these matters. A negotiating group on ‘trade-related aspects of intellectual property
rights’, or TRIPS, was formed to pursue this mandate. From 1986 to April 1989, the group mainly discussed whether there was a mandate to negotiate rules on IPRs in general, or only on their trade-related aspects. For the developing countries, such ‘trade-related aspects’ only included trade in counterfeit goods or anti-competitive practices in relation to IPRs. However, in the mid-term review of the overall Uruguay Round negotiations, undertaken in April 1989, a decision was adopted that gave the negotiating group on TRIPS a full mandate. This decision is the basis for the current structure of the TRIPS Agreement. Between the spring of 1989 and the spring of 1990, several detailed proposals were submitted by all the major players: EC, United States, Switzerland, Japan and a group of fourteen developing countries (Argentina, Brazil, Chile, China, Colombia, Cuba, Egypt, India, Nigeria, Pakistan, Peru, Tanzania, Uruguay and Zimbabwe). A composite text, based on these submissions, was prepared by the Chairman of the Negotiating Group in June 1990. From then until the end of the Brussels ministerial meeting in December 1990, detailed negotiations were conducted on every aspect of this text. There were six Chairman’s drafts of the agreement between July and November 1990. A revised TRIPS text was then sent to the Brussels Ministerial Conference (MTN.TNC/W/35/Rev.1). There was commonly agreed language for large parts of the agreement, but differences continued on the forum for lodging the agreement and on dispute settlement, as well as on some twenty-five other outstanding issues, mainly relating to some provisions on patents and undisclosed information, copyright, GIs and transition periods. Work continued at Brussels until a sudden breakdown of negotiations in the overall Round due to the failure to reach an understanding on agriculture.

Progress was made on the patent provisions, particularly in autumn 1991 – including on the scope and timing of rights, exceptions from patentability, compulsory licensing/government use, exhaustion of rights, term of protection, and protection of test data, transition periods, and the protection of existing subject matter. The question of forum was resolved with the decision to encapsulate the results of the negotiations within a Single Undertaking, which would also establish a new organization, the Multilateral Trade Organization (MTO)/WTO. A Draft Final Act (MTN.TNC/W/FA) was released by the then Director-General of GATT, Arthur Dunkel, on 20 December 1991, and came to be known as the Dunkel Text. Only two changes were made to TRIPS provisions between the 1991 Draft Final Act and the 1993 Final Act: first, introducing
the text on the moratorium on so-called ‘non-violation complaints’ in dispute settlement cases (Article 64.2–3); and, second, to limit the scope of compulsory licensing of semi-conductor technology (Article 31(c)).

**IPR AND INDIAN CONSTITUTION:**

The constitution of India under entry 49 of the Union list of matters falling within the Union Government of purpose of legislation mentions about Patents, Inventions and Designs, Copyright, Trademarks and Merchandise. It makes no specific mention of intellectual property. Property, in the constitution generally mean tangible property. However, IP as a form of property can be put under Article 300A dealing with property and be entitled to a legal right.

Experts have spotted possibilities of a conflict between the IP, specially the copyright, and the constitutionally guaranteed freedom of speech and expression. The courts have zealously upheld this fundamental freedom. In case of any restriction on speech and expression, the perspective of the rights of broadcasters. Any rights (monoplies) that undermine the rights to freedom of speech and expression may face a challenge. However, such challenge has not yet been mounted.

**Evolution of the IPRs:**

The evolution of the concept of intellectual property rights at international level started during the last quarter of the 19th century. (Some land marks in the world IPR scene is given annexure - I) They are:

i. **Paris convention, 1883 (revised 1967):**

Paris convention was the first international convention on intellectual property rights guaranteeing the protection of industrial intellectual property. Signed by the member countries on March 20, 1883. The convention was later on revised on July 14, 1967 at Stockholm at present, it has 139 member countries. The convention protects patents, trademarks, service marks, trade names, utility models and industrial design. Besides these, it also protects the indication of source or appellation of origin and provides for the repression of unfair competition. The convention permits non-exclusive compulsory license if a patent is not working. In other words, if a patentee does not industrially use his/her patent, the government may grant another person the right to use such patent without such patentee’s permission end / or consent and without compensating such patentee.
ii. **Berne Convention, 1886:**
Berne convention for protection of literary and artistic works, 1886, was entered into to protect the non-industrial intellectual property rights such as copyrights relating to literary and artistic works. It was revised on July 24, 1971. Berne convention is signed by 119 countries and it is based on the principals of discrimination nation treatment.

iii. **Madrid Agreement, 1891:**
Madrid agreement, 1891 calls for the international registration of trademarks thereby allowing imported goods bearing a false origin indicating to be seized on importation. According to this agreements an applicant who has registered a trademark in his home or business country has to get a international registrar with an international office, i.e. WIPO. The trade mark then to be registered in other ember stated that are designated unless a state raises an objection under its normal law with 12 month.

iv. **Universal Copyright Convention, 1952:**
This is another treaty on copyright accommodating US statutory requirements and is based upon the principals of non-discrimination and national treatment. The treaty has been signed by 57 countries and is administered by UNESCO.

v. **Lisbon Agreement, 1958:**
With a 17 countries membership, Lisbon Agreement was entered into in 1958 and provides protection to appellation of origin. The agreement is administered by WIPO.

vi. **Rome Convention, 1961:**
International convention for protection of performers, producer of phonograms and broadcasting organization, 1961 known as Rome convention was signed by 47 countries. It provides protection for the neighboring rights in relation to performers, producers of phonograms ad broadcasting organization. The convention is administered by WIPO, ILO AND UNESCO.

vii. **Geneva Convention, 1971:**
Geneva Convention 1971, provides protection to producers of phonograms against the making duplicates of their phonograms in another country, it has 52 country memberships and is administered by WIPO, ILO and UNESCO.
viii. **IPIC Treaty, 1989:**

IPIC treaty, 1989 protects the intellectual property in respect of integrated circuits. There are eight countries as its initial signatories and it is still open for membership.

ix. **WIPO, 1967:**

World intellectual property organization was established by a convention sighed at Stockholm on July 14, 1967 entitled, “Convention establishing the world intellectual property organization”. It succeeded united international Bureau for protection of intellectual Property which Ws founded I 1893. At present, it is administering nine various conventions, the main objectives of WIPO are:

- To promote protection of Intellectual Property throughout the world through co-operation among states ad where appropriate, in collaboration with other international organizations such as ILO & UNESCO.
- To ensure administrative co-operation among the intellectual property unions.

WIPO is significantly co-operation with developing countries in their efforts for development of Intellectual Property; WIPO has still not lost its relevance even after TRIP’S Agreement.

x. **TRIP’S Agreement:**

The agreement on Trade Related Aspects of Intellectual Property rights (TRIPS) agreement, which is binding on all WTO members, came into force on January 1, 1995. The TRIPS agreement makes protection of intellectual property rights on integral part of the multilateral trading system are embodied in the WTO.

TRIPS is the new agreement on IPR’S in WTO region signed at Marrakesh on 1 January, 1995. Unlike the earlier conventions for ten first time trade is linked with Intellectual property rights.

TRIPS agreement which came into effect on 1st Jan 1995 is to date the most comprehensive multilateral agreement on Intellectual property.

The area of Intellectual property that it covers are; copy right and related rights (i.e. the rights of performers producers of sound recordings and broadcasting organization) trademarks including service marks, geographical indicates indications including appellation of origin industrial designs, patent including the protection of new varieties of plant, the layout designs of integrated circuits, and undisclosed Information including trade secrets and test data.
TRIP’S agreement requires each members state to apply minimum standard of protection for intellectual property which in general, exceed the standards set by Berne and Paris conventions and other principal International agreement of this protection and as part of the WTO package is equipped with binding dispute settlement procedures. The agreement constitutes a complex legal system provisions of which are set almost untested and which for the trade policy officials who operate the other elements of the WTO system, is largely unfamiliar territory.

xi. **The General Agreement on Tariff’s and Trade (GATT):**

GATT originated after World War II (1939-45). The Agreement was originally a part of a draft chapter for an International Trade Organization (ITO). The “Havana chapter” of the ITO contained the GATT, which on governed trade and also wide ranging rules relating to employment, commodity agreements, restrictive business practices, International investment and services. GATT was signed by 23 National at a Trade Conference in 1947 and become effective in January 1948. The 1994 GATT treaty was one of the most ambitious agreements to be signed by such a large number states to 1994 GATT agreement eventually transferred membership to the WTO.

xii. **Biodiversity convention:**

The convention which was proposed in 1992 at the Rio Earth Summit, has been ratified by more than 169 countries. Among its key features are:

a. The conservation and sustainable of different components of bio diversity.

b. Fair and equitable sharing of benefits arising out of the utilization of genetics resources.

xiii. **European Patent Convention (EAPC):**

It was formed by the members of the Common Wealth of independent states (CIS) on August 12, 1995 at Moscow. For patenting in all member states of EAPC, an inventor need to file only one patent application with a single payment. The official to file system. The term of is 20 years.

xiv. **The organization Africaine de la Property Intellectual (OAPI):**

It was formed in 1958 by the twelve former French overseas Territories that gained independence. A single patent granted by OAPI from any of its regional offices became
separate effective in all the member states. However, when a member states revokes a patent in its territory, it remains effective in the other member states.

xv.  **Locarno Agreement:**

The Locarno Agreement establishing an International classification for Industrial Design concluded in 1968 and then it was amended in 1979. The agreements establish a classification for Industrial design. It also comprises an alphabetical list of goods with an indication of the classes and subclasses into which these goods fall.

xvi. **Nairobi treaty:**

The Nairobi treaty on the protection of the Olympic symbol came into existence in 1981. The treaty is open to any state member of WIPO the Paris union, the United Nations or any of the specialized agencies brought into relationship with the United Nations. All states which are obligation to protect the Olympic – five interlaced ring against use of commercial purpose without the authorization of the International Olympic Committee. The treaty also provides that, whenever a license fee is paid to the International Olympic committee for its authorization to use the Olympic symbol for commercial purpose, part of the revenue must go to the interested nation Olympic committee. India is a sign among to the Nairobi treaty.

xvii. **Nice agreement (1961):**

The Nice agreement concerning the international classification of goods and services for the purposes of the registration of marks calculated on June 15, 1957. The agreement entered into force on April 8, 1961 countries party to the nice agreement are required to include in the official documents and publication concerning the registration of marks which the numbers of the classes of the classification which the goods or services for which the mark is registered belongs.


It is an agreement between three countries namely the USA, Canada and Mexico. Agreement came into force in January 1994 with the objective of harmonizing the Intellectual property rights in the member states by providing a framework for efficient utilization of resources through trade liberalization.
xix. Strasbourg Agreement:
The agreement established the international patent classification (IPC) which divides technology into eight sections with approx, 67,000 sub-divisions. The appropriate symbols are allotted by the national or regional industrial property office that publishes the patent document. Every year over 1,000,000 appropriate symbols are issued.

xx. Vienna Agreement:
The agreement established a classification for marks which consist of or contain figurative elements. The classification consists of 29 categories, 144 divisions.

This was created under the Lusaka Agreement on Dec. 7, 1976. It consists of the English speaking African nations. The ARIPO is mainly concerned with pre-patent grant proceedings on behalf of the member states. Once the patent is granted it comes under the Jurisdiction of the national laws of each of the member states.

xxvi. The Patent Cooperation treaty (PCT):
PCT come into force on Jan 14, 1978. It becomes operational with 18 contracting states on June 1, 1978 the treaty speaks to simplify the filling and processing of patent application worldwide. PCT becomes relevant only when one is interested in filling patent applications in several countries. As on March 23, 2003 there were 108 contracting states party to the PCT. India joined the PCT with effect from Dec. 7, 1998.

xxvii. The Agreement concerning the International Deposit of Industrial Designs – 1928:
It was adopted within the framework of Paris convention on Nov, 6, 1925. The agreement entered into force on June 1, 1928 its main aim is to enable protection to be obtained for one or more industrial designs in a number of states through a single deposit field with the international Bureau of WIPO.

xxviii. The treaty on International Registration of Audio-visual Works (Geneva):
This treaty was held on April 20, 1989 genera and brought into force in 1992. The treaty is primarily concerned with the registration of audio-visual works at the international level.
- Paris convention 1883 (to facilitate protection of industrial property); revised several times – in 1900 at Brussels, in 1911 at Washington, in 1925 at Stockholm, the last amendment in 1979. India became a member of the Paris Convention on Dec. 07, 1998.
- Berne Convention, 1886 (for the protection of literary and artistic work); revised from time to time in 1896, 1908, 1928, 1948, 1967, 1971 and amended in 1979 (for protection of artistic works).
- Huge agreement, 1925, (concerning the international deposit of industrial designs). This agreement is now to being implemented by the WIPO.
- Universal Copyright Convention (UCC), under the auspices of UNESCO, 1952 (Came into force from 16th September 1955), revised at Paris in 1971.
- Madrid Agreement, 1991 (for repression of false or deceptive indications of source of goods). The agreement covers both trademark and service marks.
3. THEORIES OF INTELLECTUAL PROPERTY

The term “intellectual property” refers to a loose cluster of legal doctrines that regulate the uses of different sorts of ideas and insignia. The law of copyright protects various “original forms of expression”, including novels, movies, musical compositions, and computer software programs. Patent law protects inventions and some kinds of discoveries. Trademark law protects words and symbols that identify for consumers the goods and services manufactured or supplied by particular persons or firms. Trade-secret law protects commercially valuable information (soft-drink formulas, confidential marketing strategies, etc.) that companies attempt to conceal from their competitors. The “right of publicity” protects celebrities’ interests in their images and identities.

The economic and cultural importance of this collection of rules is increasing rapidly. The fortunes many businesses now depend heavily on intellectual-property rights. A growing percentage of the legal profession specializes in intellectual-property disputes. And lawmakers throughout the world are busily revising their intellectual-property laws.

Partly as a result of these trends, scholarly interest in the field has risen dramatically in recent years. In law reviews and in journals of economics and philosophy, articles deploying “theories” of intellectual property have proliferated. This essay canvasses those theories, evaluates them, and considers the roles they do and ought to play in lawmaking.

Tom Palmer critically analyses three distinct arguments in favour of intellectual property rights.

They are as follows:

Ethics of Intellectual Property

- Moral Desert Theory
- Personality Theory
- Utilitarian Theories
- Social Contractarian Theories
(a) Moral Desert Theory

Locke created a provision which limited the extent of property that may be taken into ownership by an individual, so that enough was left for others. In fact Locke held that each man should be entitled to whatsoever he could make use of. But of course he was writing in an era when there were still technical limits on the extent to which any individual could by his own labour convert land to agricultural usage. An alternative means of deciding how to divide contested property is given in his social justification for the proviso: “He that has as good left for his improvement, as was already taken up, needed not complain…” (Locke, p.291). In other words, it might plausibly be argued that a Lockean interpretation would divide the receipts from a simultaneously discovered resource equally amongst the discoverers (unless of course a prior agreement over division has been made). Another interpretation of the provision would be to accept the justice of limits of breadth and time on intellectual property, so that even though a new invention be made individually, the exclusive rights of marketing product based on it should be limited in scope and time, so as to enable other who might have been thinking along similar lines to develop their inventions side-by-side and in procession.

(b) Personality Theories

Personality theories, and specifically those of Kant and Hegel, derive from the claim that an individual’s personality is intrinsically linked this thoughts and ideas as they are expressed in external phenomena. Thus, for Hegel, “It is only through the development of his own body and mind, essentially through his self-consciousness’s apprehension of itself as free, that he takes possession of himself and becomes his own property and no one else’s”. If one’s artistic expressions are synonymous with one’s personality, then they are deserving of protection, since in a sense

(c) The Utilitarian Approach

This approach “employs the familiar utilitarian guideline that lawmakers’ beacon when shaping property rights should be the maximization of net social welfare. Pursuit of that end in the context of intellectual property, it is generally thought, requires lawmakers to strike an optimal balance between, on one hand, the power of exclusive rights to stimulate the creation of inventions and works of art and, on the other, the partially offsetting tendency of such rights to curtail widespread public enjoyment of those creations.”
(d) Social Contractarian Theories
This theory suggests that IPRs should be shaped to help foster the achievement of a just and attractive culture. “Social-planning arguments also figure prominently in current debates concerning the appropriate scope of intellectual-property rights on the Internet.” Fisher notes that in legislative and judicial materials, arguments reflecting these four theories are typically blended. However, contemporary theoretical writings will usually separate and juxtapose these theories. Proponents of the four theories will usually present their arguments as guides that legislators and judges can use in modifying or extending legal doctrines in response to new technologies and circumstances. However, Fisher argues that these theories have all proved to be less helpful in practice than their proponents claim.

INTELLECTUAL PROPERTY - A POWER TOOL FOR ECONOMIC GROWTH

The Process of Economic Growth

For many years, economists have tried to provide an explanation as to why some economies grow fast while others perform badly; in other words, why some countries are rich and others are not. Different theories and models of economic growth have been suggested. It may be that taken together, economic history and new growth theory provide a more complete picture of technological change than one can give on its own.

It is generally agreed that technology and knowledge have played an important role in recent economic growth. This chapter will address the relation between economic growth and knowledge (or in the broadest sense, technology) by introducing several economic growth theories that have been proposed and discussed over the last 50 years. It will then examine the role of intellectual property (in particular, patents) in facilitating the creation of knowledge, paying particular attention to the recent technology revolution and to the increasing degree of sophistication in both “hard” and “soft” industries.

Intellectual property could be called the Cinderella of the new economy. A drab but useful servant, consigned to the dusty and uneventful offices of corporate legal departments until the princes of globalization and technological innovation – revealing her true value – swept her to prominence and gave her and enticing new allure. Not so long ago, protecting and managing intellectual property was a fairly quiet field of endeavor not given to making headlines or causing ripples on the stock market. However, in the space of a few years, IP issues have come
to feature regularly as major news items and have taken their place as a key element in corporate strategy, affecting company ratings

CLASSICAL THEORIES:

In the days of classical economists such as Adam Smith, Ricardo, and Marx, capital played an important role in theories of growth. Although writing from different perspectives, classical economists believed that capital and technological progress contributed to the way an economy grew. Smith, for example, believed that improved technology would lead to increased labor productivity. He saw division of labor as the accelerator of invention, and hence, technological progress. Despite the belief that technological progress contributed to increased productivity, classical economists, in particular Ricardo and Malthus, thought that in the long term, increased population would outpace the productivity of labor, which would lead to what is known as the law of diminishing returns. Based on the law of diminishing returns, it was thought that there could not logically be infinite growth, and that growth would diminish at some point. Donella Meadows in The Limits to Growth postulated that limitless growth was not only undesirable, but also unsustainable. Unrestrained growth would exhaust the earth’s supply of life-sustaining resources and would in the end annihilate the human race by driving it into extinction. A mood of pessimism prevailed in the face of an exploding world population that was seeking to be sustained by resources that were at best constant, but in reality could well be dwindling.

TWO SCHOOLS OF THOUGHT:

It is important to look at how these earlier economists viewed the role of technology in the growth of an economy, because the insights they provided prepared the ground for growth theories that were developed in the last century while focusing on the contribution of technology to economic growth. These theories may be grouped into two models, known as exogenous and endogenous growth theories (see Chart – 2.1); both theories agree that technology is the engine of growth, but differ on how to treat technological progress as a factor in economic growth.

Endogenous growth theory: According to this theory, technological change is included in the new capital stock. From this perspective, technological change is induced by previous economic conditions. In other words, economic growth originates from within the system, usually a nation-state, and technological progress is regarded as an endogenous factor.
Endogenous growth theory focuses on education, on-the-job training, and development of new technologies for the world market, as major factors which determine the rate of growth of a nation – sate.

Exogenous growth theory: According to this theory, technological change contributes to increased output without any change to the input of labor and capital in the production process. In other words, technological progress leads to increased output while using the same amount of labor and capital. However, the theory does not specify and particular transmission mechanism by which technological progress takes place; rater, such progress is disembodied and assumed to fall like “manna from heaven”. This perspective sees technology as an exogenous factor.

CHART – 2.1 TWO MODELS OF GROWTH THEORIEW:

Endogenous: Internal Power > Exogenous: “Manna From Heaven”

The work of Joseph A. Schumpeter, which is discussed below, has laid the necessary groundwork for the endogenous growth theorists. It explains why he saw technological progress as an endogenous process.

INNOVATION FOR CREATIVE DESTRUCTION:

Schumpeter developed a growth theory centered on innovation and entrepreneurship. He saw a dynamic economy not as one in equilibrium, but rather, as one that is constantly disrupted by technological innovation. Entrepreneurs took advantage of a basic invention, be it a new product or a new technique, transforming it into economic innovation. Invention were economically irrelevant until entrepreneurs got involved, to make them operational and to market them, in his view, entrepreneurs were motivated by the potential to make a profit. These new innovations would then be imitated, and in the process, this would lead to a boom in the economy, though the imitators would curtail the entrepreneurial profits. Although agreeing that several factors were necessary for economic development, Schumpeter regarded entrepreneurial zeal for profit as the driving force of most innovation.

Recently, some economists, in have attempted to introduce the role of the entrepreneur into the growth process. They have postulated that in IP system is to be regarded as an important factor influencing the behavior of the entrepreneur in encouraging innovators, applying the
innovation, introducing it into the economy and marketing the product in a creative or innovative way.

TECHNOLOGICAL PROGRESS – AN IMPORTANT ECONOMIC VARIABLE:

In the 1950s, the neoclassical economists, led by Robert Solow, started focusing on technological progress as an important variable in economic growth. Unlike his neoclassical predecessors who treated capital as the main contributing factor in economic growth, Slow, based on his study of gross domestic product (GDP) data for the United States of America from 1909 to 1949, suggested that the growth in capital stock contributed to less than 20 percent of the growth of GDP per person employed, and argued that the growth in labor and capital explained only half of the growth in total GDP. He concluded that the remaining unexplained portion of growth, which came to be known as the Solow residual, resulted from technological progress.

NEW ENDOGENOUS GROWTH THEORIES IN THE 1980s

In the 1980s, after several economists made contribution on the importance of technological progress to economic growth, new growth theories, theories, also known as new endogenous growth theories, emerged, formulating technological progress as an endogenous variable, which could be influenced by government policy. These theories suggested that a country’s long-term growth rate could be influenced by government policies, among others the protection of intellectual property, taxation, maintenance of law and order, fiscal and monetary policies.

Introduced a model which suggested that the accumulation of knowledge was the driving force behind economic growth. The paper reopened the debate on the contribution of technological progress to the economic growth of a nation-state. His model assumes a monopolistic competitive environment and suggests that R&D activities, and the accumulation of human capital through education and training, play important roles in generating long-term growth in per capita income.

The studies made in several industries including machine tools, aircraft, synthetic chemicals, metallurgy, and semiconductors, which showed that the driving force behind investment in new technology was the potential of earning profit. They argue that among the
factors which determine the profitability of such investment, and thus affect the pace and
direction of technological change, are the institutional, legal, and economic environments.
Various models of endogenous growth have been introduced so far and the debate on the
relevance of exogenous or endogenous growth theories in explaining the factors determining the
growth of countries is far from over.

4. (a) **Meaning, Definition, Principles and Features:**

   Intellectual Property (IP) refers to the protection of creations of the mind, which have
both a moral and a commercial value. IP law typically grants the author of an intellectual
creation exclusive rights for exploiting and benefiting from their creation. However, these rights,
also called monopoly right of exploitation, are limited in scope, duration and geographical
extent.

   IP confers on individuals, enterprises or other entities the right to exclude others from the
use of their creations. Consequently, intellectual property rights (IPRs) may have a direct and
substantial impact on industry and trade as the owner of an IPR may - through the enforcement
of such a right - prevent the manufacture, use or sale of a product which incorporates the IPR.

**Definition**

   Intellectual property is the product of the human intellect including creativity concepts,
inventions, industrial models, trademarks, songs, literature, symbols, names, brands,...etc.
   Intellectual Property Rights do not differ from other property rights. They allow the rights owner
to completely benefit from his product which was initially an idea that developed and
crystallized. They also give him the right to prevent others from using, dealing or tampering with
his product without prior permission from him. He can in fact legally sue them and force them to
stop and compensate for any damages.

   A right that is had by a person or by a company to have exclusive rights to use its own
plans, ideas, or other intangible assets without the worry of competition, at least for a specific
period of time. These rights can include copyrights, patents, trademarks, and trade secrets. These
rights may be enforced by a court via a lawsuit. The reasoning for intellectual property is to
encourage innovation without the fear that a competitor will steal the idea and / or take the credit
for it.
Protection of Intellectual Property Rights

Protection of intellectual rights allows the author, brand owner, patent holder and copyrighter to benefit from his work, labor and investment, which does not mean monopoly of the intellect. Such rights are set out in the International Declaration of Human Rights, which provides for the right to benefit from the protection of the moral and physical interests resulting from author’s work, literal or artistic product.

Principles of IPR:

In the recent past, universities have undergone a profound transition in their attitudes toward and interactions with a variety of organizations external to the university. Policies concerning intellectual property rights, conflicts of interests, and patents/licenses agreements, to name but a few, have begun to consume enormous amounts of time and thought.

Some academic institutions have all but abandoned their traditional role as the place in society for free and independent generation and critique of ideas. In contrast, others have taken time to examine their role and to reaffirm their commitment to basic principles.

Indiana University hereby reaffirms its commitment to certain basic principles appropriate to the pursuit of its academic goals. These principles stand before and make subservient to them all other rules, guidelines, procedures, etc., which the university might make in the areas of intellectual property rights.

Principle 1: Indiana University is first and foremost an academic institution. Its fundamental missions are research, teaching, and service in furtherance of its principle aim of the advancement of knowledge and toward the ultimate aim of the greater public good. All decisions concerning the operation of the university, including those on funding and resource allocation, shall be made in line with this principle.

Principle 2: Academic freedom is one of the most basic principles governing academic institutions and in maintaining their role in society as independent critic. It must not be abridged. The rights of individual scholars to select their topics of research and sources of research support, draw conclusions for which they bear sole responsibility, and be protected from
impositions on their work of external goals or criteria are paramount to this academic community.

**Principle 3:** The free and open exchange of ideas and information is fundamental to the very reason for being of a university. Faculty must be free to discuss their ideas with whomever they wish without fear of reprisal from any quarter. They must be free to publish, in whatever form they deem appropriate, their results, conclusions, and interpretations, subject only to constraints of protection of privacy or confidentiality of personal data, protection of sponsor's confidential information, and, in some cases, brief delays for the protection of intellectual property rights.

**Principle 4:** Stewardship of intellectual property shall be consistent with the teaching, research, and service missions of Indiana University. Indiana University policies concerning intellectual property ("University Intellectual Property Policies") shall be developed by the Policy Committee on Intellectual Property, approved by the University Faculty Council, and adopted by the Board of Trustees.

**Common Features of Intellectual Property Rights**

If intellectual property is akin to property in tangibles, these features should carry over to intellectual property rights. The thesis appears at first blush to be plausible enough. But intellectual property rights present a special twist because their objects are intangibles, more precisely information structures created by human ingenuity and effort.

It is instructive first to look at information as a special commodity, to understand what adaptations the property rights logic requires to cope with the peculiarities of information (A) and then to examine some special features of intellectual property rights (B).

**A. Information as a Special Commodity**

In its broadest sense, information is the basic ingredient of all human decisions. Information is subjective: What informs you may be redundant to me and vice versa. This means that where decisions must be made affecting lots of individuals at once, be they what objects to manufacture or what services to provide for our collective welfare, arrangements must be put in place through which individuals can reliably reveal their preferences. Markets are such an arrangement; in various social contracts, procedures have to be invented through which individuals can voice their opposition to particular plans (or their support for them).
B. Encouraging Creation

Innovators may earn a reward by being the first to bring an innovation to market (lead time giving a head start). But this may not be enough, in the eyes of some. Where the creation of information needs to be especially encouraged, various avenues have been tried in the course of history. Different techniques may be apposite depending on the type of innovations to be simulated: scientific and engineering inventions, musical and artistic creations, exploits of various kinds. Here is a list of such stimulative techniques: grants, subsidies or stipends; prizes and medals; lotteries; private employment, sponsorship or pensions for artists or engineers; monopolies for teaching trades or crafts; procurement contracts, in particular for military developments; and finally, intellectual property rights, tentatively from the late Middle Ages on, and systematically as from the 18th century, with international treaties consolidating the movement across national boundaries from the late 19th century.

Formulated in this way, it is obvious that of property right would appear to have the advantage: it is available automatically (at least without discrimination or paternalism) and gives the rights holders a direct stake in convincing the community of the quality or usefulness of their creations; the better the creation, the higher the reward. This lesson acts prospectively to attract people into such activities.

This suggests that we should transpose the property rights logic into the field of creation. The incentive and information effects of property rights, and their ability to quell conflict would appear to be desirable qualities in this field as well. But since only some creations require special encouragement, the property logic should apply selectively. Affording rewards to activities that would be forthcoming without them will encourage rent-seeking, which is entirely undesirable.

C. Public Good Qualities of Information

For property rights to be viable, the prospective object must lend itself to being reserved to the owner. With information this is not to be taken for granted. The secret one share with a friend is out of your control and may become common knowledge shortly. After the Napster experience on the Internet, those who had any doubts will now be convinced that the copy of the music ‘bought’ can readily become the source of many copies of equally good quality elsewhere. The intellectual content does not appear to be naturally scarce. And the cost of copying is falling as we discuss, and has become to all practical intents negligible. This creates the temptation for
some to free ride on the creative efforts of others. How then will the latter be paid for their efforts? There appear to be problems with the exclusivity of information.

A further peculiarity of information is that its use by one person does not preclude use by others. Unlike the apple you are now eating, the music you copied in MP3 format and now listen to is still available to the original holder to listen to as well. This is true for most forms of information, including culture, various skills, scientific knowledge. It does not work for stock market tips and other information where it is important to be the first to use it, even as the information will become publicly known subsequently. Trade secrets are useful precisely because competitors do not have access to the information. But these ‘early bird’ forms of information would appear to be the exceptions. Most information is what economists call non-rivalrous: it can be used without diminishing its utility for others.

D. The Cumulative Nature of Creation

The conditions for getting a right in the first place is, the time for which it is afforded and the types of information structure for which it is available. Rights in tangibles are available upon legitimate acquisition, without limitation in time and in virtually all objects (save those reserved for public use).

For intangibles, the story is more complicated since virtually all creations build on earlier ones. Opening the door more widely for the protection of existing creations will make it more difficult to produce follow-on and altogether new creations, which nonetheless build on existing ones. In our desire to support current creators, we may foreclose openings for future creators and reduce overall creativity. Creativity requires direct encouragement but also a large public domain from which one can liberally draw ideas. This explains why, in intellectual property law, pure ideas and principles are left in the public domain, as are collections of facts. Where particular ideas can only be expressed in one or a few ways, that expression is open to free use by followers. American law uses the expression ‘scènes à faire’ for it. Similarly, the graphic user interface for micro-computers, once jealously guarded by Apple as its exclusive preserve for the Macintosh, is now considered part of common culture and no longer separately protected.
4. (B) TRIPS AGREEMENT

The TRIPS Agreement (hereinafter referred to as, the Agreement) is an international agreement administered by WTO that sets down minimum standards for many forms of IP regulations. The Agreement, which came into effect on 1st January, 1995 is till date the most comprehensive multilateral agreement on IP. The Agreement covers the following areas of IP:

- Copyrights and Related rights (i.e. the rights of performers, producers of sound recordings and broadcasting organizations)
- Trademarks (including service marks)
- Geographical Indications (including appellations of origin)
- Industrial Designs
- Patents (including the protection of new varieties of plants)
- Layout-designs of Integrated Circuits
- Undisclosed Information (including Trade Secrets and Test Data)

With respect to the above areas of IP, the Agreement governs the following issues:

- Basic principles of the trading system and other international IP agreements should be applied.
- How to give adequate protection to IPR.
- How countries should enforce IPR adequately in their own territories.
- How to settle disputes on IP between members of the WTO.
- Special transitional arrangements during the period when the new system is being introduced.

The Agreement is the first agreement under WTO under which the member nations are required to establish relatively detailed norms within their national legal systems, as well as to establish enforcement measures and procedures meeting minimum standards.

**The three main features of the Agreement are:**

- **Standards.** In respect of each of the main areas of intellectual property covered by the TRIPS Agreement, the Agreement sets out the minimum standards of protection to be provided by each Member. Each of the main elements of protection is defined, namely the subject-matter to be protected, the rights to be conferred and permissible exceptions to those rights, and the minimum duration of protection. The Agreement sets these standards by requiring, first, that the substantive obligations of the main conventions of
the WIPO, the Paris Convention for the Protection of Industrial Property (Paris Convention) and the Berne Convention for the Protection of Literary and Artistic Works (Berne Convention) in their most recent versions, must be complied with. With the exception of the provisions of the Berne Convention on moral rights, all the main substantive provisions of these conventions are incorporated by reference and thus become obligations under the TRIPS Agreement between TRIPS Member countries. The relevant provisions are to be found in Articles 2.1 and 9.1 of the TRIPS Agreement, which relate, respectively, to the Paris Convention and to the Berne Convention. Secondly, the TRIPS Agreement adds a substantial number of additional obligations on matters where the pre-existing conventions are silent or were seen as being inadequate. The TRIPS Agreement is thus sometimes referred to as a Berne and Paris-plus agreement.

- **Enforcement.** The second main set of provisions deals with domestic procedures and remedies for the enforcement of intellectual property rights. The Agreement lays down certain general principles applicable to all IPR enforcement procedures. In addition, it contains provisions on civil and administrative procedures and remedies, provisional measures, special requirements related to border measures and criminal procedures, which specify, in a certain amount of detail, the procedures and remedies that must be available so that right holders can effectively enforce their rights.

- **Dispute settlement.** The Agreement makes disputes between WTO Members about the respect of the TRIPS obligations subject to the WTO's dispute settlement procedures.

In addition the Agreement provides for certain basic principles, such as national and most-favoured-nation treatment, and some general rules to ensure that procedural difficulties in acquiring or maintaining IPRs do not nullify the substantive benefits that should flow from the Agreement. The obligations under the Agreement will apply equally to all Member countries, but developing countries will have a longer period to phase them in. Special transition arrangements operate in the situation where a developing country does not presently provide product patent protection in the area of pharmaceuticals.

The TRIPS Agreement is a minimum standards agreement, which allows Members to provide more extensive protection of intellectual property if they so wish. Members are left free
to determine the appropriate method of implementing the provisions of the Agreement within their own legal system and practice.

TRIPS AGREEMENT AND INDIA

India became a party to the TRIPS Agreement in April 1995. The Patent Act of 1970 was in contravention with the Article 27 of the Agreement. Hence India needed to take some measures to make its IPR laws compliant with the Agreement. The Agreement provided a three stage framework for developing countries like India which did not allow product patents in the areas of pharmaceuticals and agricultural chemicals before the Agreement came into force.

These three stages included:

Introduction of Mail-Box facility from 1st January, 1995 for product patent applications in the field of pharmaceuticals and agricultural chemicals. These Mail-Box applications were not examined till the end of 2004. But Exclusive Marketing Rights (EMR) could be granted for the Mail-Box applications for which a patent had been granted in at least one member nation and the application was not rejected in the member nation where the patent protection was sought by the applicant for the reason of invention being not patentable.

Compliance with the other obligations of the Agreement such as, rights of patentee, term of protection, compulsory licensing, etc. from 1st January, 2000. Full implementation of product patents in all technological domains including pharmaceuticals and agricultural chemicals came with effect from 1st January, 2005. All the Mail-Box applications were to be taken for examination from 1st January, 2005.

Thus the Agreement came into force in India from 1st January, 2005. The Agreement changed the face of the IP regime in the world. Many developing countries, including India, which had weaker IPR systems (for example, patents) had to extensively revise their patent laws, or where there were no IPR regimes (the most important examples being plant variety protection, layout designs and geographical indications) had to put in place new IPR systems. The implications of the Agreement have their own pros and cons.

On the positive side, with the revision of patent laws, a stronger patent protection system came into existence which is of international standards, because of which the foreign investors were encouraged to invest in India. It may be expected that while domestic investment
may not respond to a stronger patent regime in a big way in either the short or long term, Foreign Direct Investment (FDI) might.

Further, the research and development expenditures of the domestic players tremendously increased in post agreement period as compared to the pre - Agreement period. The other positive implication of a technological nature is the availability of better products which might not have been available with weaker IPR protection. However, the prices of these better and patented products may not be affordable for majority of population. Domestic private sector investment and foreign investment in the seeds sector has risen. The post Agreement environment has encouraged domestic private sector and foreign firms to invest in research and development for the development of better seeds. Some of the geographical indications belonging to India which are of importance for domestic industry have got protection and have encouraged investment in these sectors, for example, Darjeeling Tea. On the negative side, the most immediate impact of post Agreement may be seen on prices of drugs. The new and required drugs will have product patent protection unlike the earlier scenario and so the prices might escalate.

The TRIPS agreement:

The TRIPS agreement, the GATS, and GATT 1994 from the tripod that will serve as a basis for the WTO. The TRIPS agreement follows the GATT tradition of adopting the multilateral discipline of nondiscrimination (as embedded in the MFN and the national treatment principals) and a commitment to transparency. Nut TRIPS is also an innovation, having established minimum standards of protection and guidelines for enforcement, while giving member countries discretion in how these standards are implemented. The agreement goes beyond the comity approach of most IPR conventions. Moreover; the pursuit of minimum standards of protection requires that governments take positive action on IPRs, in contrast with the discipline-based approach for trade in goods (GATT 1994) or trade in services (GATS), which does not “require governments to pursue specific polices” (Hoekman 1994).
The TRIPS agreement consists of seven parts and seventy-three articles

The Structure of the Agreement of Trade – Related Aspects of Intellectual Property Rights

Part I: General Provisions and Basic Principles

Part II: Standards Concerning the Availability, Scope and Use of Intellectual Property Rights

   i. Copyright and related rights
   ii. Trademarks
   iii. Geographical indications
   iv. Industrial designs
   v. Patents
   vi. Layout designs (topographies) of integrated circuits
   vii. Protection of undisclosed information
   viii. Control of anticompetitive practices in contractual licenses

Part III: Enforcement of Intellectual Property Rights

   i. General obligations
   ii. Civil and administrative procedures and remedies
   iii. Provisional measures
   iv. Special requirements related to border measures
   v. Criminal procedures

Part IV: Acquisition and Maintenance of Intellectual Property Rights and Related Inter Parties Procedures

Part V: Dispute Prevention and Settlement

Part VI: Transitional Arrangements

Part VII: Institutional Arrangements; Final Provisions

Source: GATT 1994a, p.365
5. Forms of IPR:

Intellectual Property Rights are legal rights, which result from intellectual activity in industrial, scientific, literary & artistic fields. These rights safeguard creators and other producers of intellectual goods & services by granting them certain time-limited rights to control their use. Protected IP rights like other property can be a matter of trade, which can be owned, sold or bought. These are intangible and non-exhausted consumption.

TYPES/TOOLS/FORMS OF IPRs:


a. **Patents:** A patent is an exclusive right granted for an invention, which is a product or a process that provides a new way of doing something, or offers a new technical solution to a problem. It provides protection for the invention to the owner of the patent. The protection is granted for a limited period, i.e. 20 years. Patent protection means that the invention cannot be commercially made, used, distributed or sold without the patent owner's consent. A patent owner has the right to decide who may - or may not - use the patented invention for the period in which the invention is protected. The patent owner may give permission to, or license, other parties to use the invention on mutually agreed terms. The owner may also sell the right to the invention to someone else, who will then become the new owner of the patent. Once a patent expires, the protection ends, and an invention enters the public domain, that is, the owner no longer holds exclusive rights to the invention, which becomes available to commercial exploitation by others. All patent owners are obliged, in return for patent protection, to publicly disclose information on their invention in order to enrich the total body of technical knowledge in the world. Such an ever-increasing body of public knowledge promotes further creativity and innovation in others. In this way, patents provide not only protection for the owner but valuable information and inspiration for future generations of researchers and inventors.

b. **Trademarks:** A trademark is a distinctive sign that identifies certain goods or services as those produced or provided by a specific person or enterprise. It may be one or a combination of words, letters, and numerals. They may consist of drawings, symbols,
three-dimensional signs such as the shape and packaging of goods, audible signs such as music or vocal sounds, fragrances, or colours used as distinguishing features. It provides protection to the owner of the mark by ensuring the exclusive right to use it to identify goods or services, or to authorize another to use it in return for payment. It helps consumers identify and purchase a product or service because its nature and quality, indicated by its unique trademark, meets their needs. Registration of trademark is prima facie proof of its ownership giving statutory right to the proprietor. Trademark rights may be held in perpetuity. The initial term of registration is for 10 years; thereafter it may be renewed from time to time.

c. **Copyrights and related rights:** Copyright is a legal term describing rights given to creators for their literary and artistic works. The kinds of works covered by copyright include: literary works such as novels, poems, plays, reference works, newspapers and computer programs; databases; films, musical compositions, and choreography; artistic works such as paintings, drawings, photographs and sculpture; architecture; and advertisements, maps and technical drawings. Copyright subsists in a work by virtue of creation; hence it’s not mandatory to register. However, registering a copyright provides evidence that copyright subsists in the work & creator is the owner of the work. Creators often sell the rights to their works to individuals or companies best able to market the works in return for payment. These payments are often made dependent on the actual use of the work, and are then referred to as royalties. These economic rights have a time limit, (other than photographs) is for life of author plus sixty years after creator’s death.

d. **Geographical Indications (GI):** GI are signs used on goods that have a specific geographical origin and possess qualities or a reputation that are due to that place of origin. Agricultural products typically have qualities that derive from their place of production and are influenced by specific local factors, such as climate and soil. They may also highlight specific qualities of a product, which are due to human factors that can be found in the place of origin of the products, such as specific manufacturing skills and traditions. A geographical indication points to a specific place or region of production that determines the characteristic qualities of the product that originates therein. It is important that the product derives its qualities and reputation from that place. Place of origin may be a village or town, a region or a country. It is an exclusive right given to a
particular community hence the benefits of its registration are shared by the all members of the community. Recently the GIs of goods like Chanderi Sarees, Kullu Shawls, Wet Grinders etc have been registered. Keeping in view the large diversity of traditional products spread all over the country, the registration under GI will be very important in future growth of the tribes / communities / skilled artisans associated in developing such products.

e. **Industrial Designs:** Industrial designs refer to creative activity, which result in the ornamental or formal appearance of a product, and design right refers to a novel or original design that is accorded to the proprietor of a validly registered design. Industrial designs are an element of intellectual property. Under the TRIPS Agreement, minimum standards of protection of industrial designs have been provided for. As a developing country, India has already amended its national legislation to provide for these minimal standards. The essential purpose of design law it to promote and protect the design element of industrial production. It is also intended to promote innovative activity in the field of industries. The existing legislation on industrial designs in India is contained in the New Designs Act, 2000 and this Act will serve its purpose well in the rapid changes in technology and international developments. India has also achieved a mature status in the field of industrial designs and in view of globalization of the economy, the present legislation is aligned with the changed technical and commercial scenario and made to conform to international trends in design administration. This replacement Act is also aimed to enact a more detailed classification of design to conform to the international system and to take care of the proliferation of design related activities in various fields.

f. **Trade Secrets:** It may be confidential business information that provides an enterprise a competitive edge may be considered a trade secret. Usually these are manufacturing or industrial secrets and commercial secrets. These include sales methods, distribution methods, consumer profiles, advertising strategies, lists of suppliers and clients, and manufacturing processes. Contrary to patents, trade secrets are protected without registration. A trade secret can be protected for an unlimited period of time but a substantial element of secrecy must exist, so that, except by the use of improper means, there would be difficulty in acquiring the information. Considering the vast availability of traditional knowledge in the country the protection under this will be very crucial in
reaping benefits from such type of knowledge. The Trad secret, traditional knowledge are also interlinked / associated with the geographical

g. **Layout Design for Integrated Circuits**: Semiconductor Integrated Circuit means a product having transistors and other circuitry elements, which are inseparably formed on a semiconductor material or an insulating material or inside the semiconductor material and designed to perform an electronic circuitry function. The aim of the Semiconductor Integrated Circuits Layout-Design Act 2000 is to provide protection of Intellectual Property Right (IPR) in the area of Semiconductor Integrated Circuit Layout Designs and for matters connected therewith or incidental thereto. The main focus of SICLD Act is to provide for routes and mechanism for protection of IPR in Chip Layout Designs created and matters related to it. The SICLD Act empowers the registered proprietor of the layout-design an inherent right to use the layout-design, commercially exploit it and obtain relief in respect of any infringement. The initial term of registration is for 10 years; thereafter it may be renewed from time to time. Department of Information Technology Ministry of Communications and Information Technology is the administrative ministry looking after its registration and other matters.

h. **Protection of New Plant Variety**: The objective of this act is to recognize the role of farmers as cultivators and conservers and the contribution of traditional, rural and tribal communities to the country’s agro biodiversity by rewarding them for their contribution and to stimulate investment for R & D for the development new plant varieties to facilitate the growth of the seed industry. The Plant Variety Protection and Farmers Rights act 2001 was enacted in India to protect the New Plant Variety; the act has come into force on 30.10.2005 through Authority. Initially 12 crop species have been identified for regt. i.e. Rice, Wheat, Maize, Sorghum, Pearl millet, Chickpea, Green gram, Black gram, Lentil, Kidney bean etc. India has opted for sui- generic system instead of patents for protecting new plant variety. Department Agriculture and Cooperation is the administrative ministry looking after its registration and other matters.

7. **An overview of the Patents in India**

The Intellectual Property has grown tremendously in the present decade. With the rapid growth of industrialization and international trade, it has become indispensable for the protection of public interest at large. All that which is produced or originated by labours, Skill,
Judgment and efforts of man is called the intellectual property. Intellectual property is therefore ‘a property created by human brain’. It is no similar to that of land or house. The subject matter of Intellectual property is very wide and includes literary and artistic works, films, Computer programmes, inventions, designs, trademarks, Lands, Houses etc. Immovable properties and vehicles, watches etc. movable properties can be sold or mortgaged leased from one person to another person. In the similar way, the intellectual property also can be sold, mortgaged, leased from one person to another person. Intellectual property law concerns the legal rights associated with create effect or commercial reputation and goodwill. Intellectual property creates rights and duties. If A – an author writes a book X, A exercises all rights over it. These rights are right in them. There is a duty upon every person not to copy it and not to take unfair advantage of the work – X or reputation of A. The Intellectual property law explains all these rights and duties. Intellectual property law is now integral part of economical life all over the world. It products use of ideas and information that are of commercial value. It covers patents, copy rights, trade marks, designs, know – how and so on. These intangible property rights are becoming increasingly valuable in the market place. It’s utility has been recognized not only in the economically developed countries but also in the developing country like ours. If Intellectual property rights are not protected, that could be if few persons willing to spend their time and energy required in writing and original literary work and inventing anything for the benefit of masses. Hence, protection should granted in order to encourage the development of Intellectual property.

**Definition, Meaning and Object of Patent**

Patent is one form of Intellectual property. It is a monopoly for commercial exploitation an invention. It gives an exclusive right to use and sell invention granted to a person for a limited period in consideration of the discloser of the invention. The word patent is derived from the latin term “Patene” which means ‘to open’. The concept of patent system is very old one ; which was originating in England during the reign of Queen Elizabeth I . A patent is a legal document issued by the government to an inventor, heirs, and assignee, etc. it defines an ‘Invention’ and grants the right to prevent others from making, using or selling the ‘Invention’ in the country. The idea in conferring such exclusive right is to stimulate technological progress by inducing the inventor to disclose his discoveries instead of keeping them as trade secrets. It
The专利是政府授予的和保护的法律权利，可以阻止其他人实践 - 即，制造、使用、雇佣或销售 - 专利覆盖的发明。专利是国家授予发明家的独家权利，由国家授予发明家，前提是发明符合一定的条件，如新颖性、发明性以及实用性，由法律规定。这种权利仅限于一定的时间。然而，专利的使用或探索可能受其他国家法律的制约。这些法律可能涉及健康、安全、食品、安全等。

**History of Patent Law in India**

印度最早的一项专利法是1856年的第6号法案，该法案授予少数发明者为期14年的独家特权。该法案被1859年的第15号法案取代，该法案在很大程度上基于1852年的英国专利法。这项法案的主要目的是使英国专利持有者能够控制印度制造商。根据这一法案，只有英国专利持有者可以寻求在印度注册，而不反之。1872年通过了专利和设计保护法。之后，1911年的《专利和设计法》由当时的英印政府通过。此后就没有进一步的规则。独立后，印度政府决定根据需要修改1911年的专利法，以服务于国家利益。议会成立了两个专家委员会，由司法部长Tec Chand和Rajagopal Iyenger领导，他们发现外国跨国公司滥用印度的专利法。这引发了议会内外的激烈辩论。结果，1970年的印度专利法被通过，独立于1911年的专利和设计法。1970年的专利法纳入了防止滥用专利的若干新规定。它在1999年进一步修正。

**Salient Features of a Patent**

在Imperial Chemical Industries Vs. Controller General of Patents, Designs and Trade Marks案中，法院裁定专利应符合以下规定。

1. 专利必须是对一项发明的，而不是对一项发现的。
2. 对一项单一发明有且只有一个专利。
3. 专利单一定是指物质，或在意义上指过程。
4. 但不能将专利分开，说一个涉及物质，另一个涉及过程。
5. In the order to have a complete patent, and state that one relates to the substance and other to the process.

6. It is the claims, and claims alone which constitute the patent.

**Kinds of Patents**

Generally, the patents can be classified into two types viz (i) process patents, and (ii) product patents.

i. **PROCESS PATENTS:** Process patent means that when a substance is invented or produced, a patent is not granted to the substance itself but it is only the method or the process of manufacture of a substance that is granted a patent. Therefore, the patent is granted to the process but not to the product, in this kind of patent.

ii. **PRODUCT PATENTS:** In product patents, the patent is granted not to the method or process of manufacture of a substance but to the substance itself. Therefore, in this kind of patent, it is the product that is covered and protected.

The invention for which patent is claimed may be a product or an article or a process. In the case of an article, the patent is the end product or the article. In the case of a process, the patent does not lie in the end product, but only in the process by which it is carried in section 5 of the patent Act, 1970 (3).

**Procedure for Obtaining a Patent**

It starts with the filing of application and ends with the grant and sealing of the patents. The patent right is territorial in nature and inventors/their assignees will have to file separate patent applications in countries of their interest, along with necessary fees, for obtaining patents in those countries. The various stages in the acquisition of a patent may be explained briefly as follows:

i. Filling an application accompanied by provisional or complete specification.

ii. Examination of an application.

iii. Acceptance and advertisement in official Gazette.

iv. Opposition to grant of patent on any reasonable grounds.

v. Granting and sealing of patent.
Rights of Patentees

We have already discussed that a patent is a grant conferring certain monopoly rights on the grantee for a definite period, subject to certain conditions. A grant of patent gives the patentee the exclusive right to make or use the patented article or use of the patented process. Apart from this right a patentee has also the powers to assign the patent, grant licences under and deal with it otherwise, for any consideration. However, these rights are not absolute and are circumscribed by various conditions and limitations. The Patent Act, 1970 contains various provisions in section 24,

Rights of the patentees are summarized below:
(i) Right to exploit the patent.
(ii) Right to assign and licence.
(iii) Right to surrender the patent.
(iv) Right before sealing.
(v) Right to applying for “patent of addition”.
(vi) Rights in case of “Infringements”.
(vii) Rights to make a convention application.
(viii) Rights to be issued duplicate patent.
(ix) Rights to be supplied copies and certificates.

Surrender and Revocation of Patents

A patent in the law is a property right and hence can be gifted, inherited assigned old or licensed. As the right is conferred by the state, it can also be revoked by the state, though under very special circumstances, even if the patent has been sold or licensed or manufactured or marketed in the mean time.

Infringement of Patent and Remedies thereof

Infringement of the violation of the rights conferred by the grant of a patent. If the rights in relation to a patent are infringed, the patentee has a right to take recourse to legal action by
instituting suits either in District Court or High Court. Infringer is a person who manufactures a patented article without authorization, or uses a patented process likewise. Any one who uses, exercises, sells or distributes a patented article or process without any lawful authority would be an infringer. Sections 104 to 115 of Chapter XVII, deal with the suits concern of patents.

The main impact of TRIPs Agreement on patents in India will be:

- A patent term of 20 years, Full cover of products, Micro-organism to be patented, Effective sui generis system for protections as “working a patent”, Compulsory licensing to be confirmed to special circumstances(e.g.,emergency or abuse patent rights), and Reversal of the burden of proof in infringement actions relating to process patents (obliging the defendant to prove that the to process is non-infringing). The adoption of these provisions would bring indian patent law close to general practice in the industrialized world.

EXCLUSIVE MARKET RIGHTS (EMR)

A patent confers exclusive right in respect of making , selling , using distributing, exercising, offering for scale, etc., for full term of patents whereas an EMR is a limited right for five years an restricted only to sell and distribute the product. According to the patent (Amendment)Act,1999,the provisions of section 5 have been amended by adding sub-section(2) for the grant of patent for pharmaceutical products which facilitate the applicants to file their applications for the grant of exclusive marketing rights (EMR) upto 31.12.2004.An EMR can be granted if following conditions are complied with:

i. Application has been filled in India or after 1.1.1995,

ii. The patent has been granted in a convention country,

iii. Marketing approval has been granted in that country, and

iv. Marketing approval has been obtaining in India.

On receipt of request for EMR the controller being satisfied with the report of the Examiner grants an exclusive right to sell or distribute the article or substance.

Though the provision of TRIPs Agreement relating to grant of patent and EMR appear to be very ideal but they ignore the ground reality of breeding to tendency to create monopolistic trade practices in favour of the inventor to the prejudice of whole mankind. Multinational corporations are sole beneficiaries in the majority of cases which belong to developed countries. Developing countries and it’s citizens are at the receiving end. Just imagine if a person invents
something new. He will have EMR for a period of 5 years and a monopoly right for commercial exploitation for a period of 20 years against the whole world.

The patent law in India is clearly not yet well developed and Indian Courts have followed the British Principle without much controversy. But it must be remembered that every monopoly is liable to be abused and patent monopoly is no exception. Therefore, sufficient safeguards in law are required to ensure that patent inventions are properly worked in the country to protect the public interest in case of patents on drugs and pharmaceuticals which are essential to the life and health of the community, there is every need to prevent such abuse of monopoly rights. The law has to reconcile the conflicting interest of the holder of the patent and the interest of the public. It is therefore necessary to include patents on plans and plant products in the list of non patentable items as they are not within the ambit of inventions to qualifying for patenting. At the same time a comprehensive legislation in respect of geographical indications is must for the protection of rich bio-diversity of India.

Science and technology are a shared heritage of all mankind. Our past in this area is a result of equal participation of all and our future lies in joint endeavour of diverse people throughout the globe. The recent global trend in IPRs has made it necessary to bring the disparities within the IPR law to the minimum to develop an atmosphere of understanding and friendliness amongst nations. Here it may be appropriate to quote the statement of Hon’ble Ex-Chief Justice E.S. Venkataramiah who has said, “it has to be observed that Indian laws on copy right, patent and designs have taken into consideration, the public interest in a developing country like India and also the right of author of invention to claim the benefit of the working of the invention to a reasonable extent. After all, the law is not all logic. It is experience. The views on some of the controversial matters relating to Intellectual property cannot be same all over the world. They depend upon the degree of industrialization of the country concerned. The national aspiration and the good of the community. One view is that the entire world should be considered as one family. Political or national boundaries should be considered irrelevant when human rights are involved. Nobody should feel that he is being exploited”.

**Product v/s Process Patent under Indian Patent Law**

The issue relating to protection of a product and the protection of a process is very relevant only in the case of inventions in the chemical field. The basic philosophy behind the grant of a patent for the process for the preparation of a product is that the said product can be
manufactured by a totally new, different and innovative method. When one refers to a patent as product patent it means that he has developed a new product. Similarly, when one refers a patent as process patent, it implies that he has developed a new and improved process for producing a known product. In the case of a product patent, one will have claims (defining the area of the legal protection) for the new product and if he desires can also have claims for the process for preparing the said product. Of course if he does not claim the process is mandatory that the process for the preparation of the new product should be disclosed in the text of the document (specification).

Whereas, in the case of a process patent, one can have only claims for the process and not for the product, as the product prepared by the said process is already known and therefore there is no novelty in such a product. With the coming into force of the product patent regime in India only those products which are new on the date of filing of the application for patent for that product will be patentable and not others. The exception to this fact is the WTO applications (meaning those applications claiming new pharmaceutical/agricultural chemical products) which have filed since 1-1-1995. In other words, the products which are already known prior to 31-12-2004 (except the above said WTO applications) cannot be patented as their novelty has been lost. On the other hand, the rights in the process patent are confined to the use of that particular process of preparing the product and nothing else. Therefore, anybody else can develop an alternate process and if it satisfies the criteria of patentability, he can secure a patent for that alternate process. In this context, it should be noted that in this case the product obtained by the processes is already known. Therefore, nobody gets the protection for the said product and hence the commercial production of the said compound by the alternate process is possible without the fear of any infringement, even though there is patent for another different process of preparing the same substance is in force in the same country. The possession of a patent confers on the patentee not merely certain valuable monopoly rights and privileges, but also certain obligations and duties.12 It is also to be noted that if the alternate process for a product developed is very efficient and the said product is very useful having good commercial potential. (P.Narayanan)

Patent holders for the respective inventions (one for the product and another for the improved process) can come together and have a joint agreement (cross licensing) and bring the new product to the market and share the profits amongst themselves. Such an exercise will benefit the society at large, in getting the fruits of the research work and will, instead of
hampering research and development (R&D) in developing alternative processes for a product, under the product patent regime, will enhance developmental activities. As mentioned above, in many countries including India, the patent law excludes certain specific kinds of inventions from being patentable even though the inventions satisfy all the three essential criteria for patentability, namely, Novelty, inventive step (non obvious) & Utility. Examples of such non patentable inventions are: inventions relating nuclear transformation, treatment of human beings, plants & animals etc. The types of inventions which are not patentable are stipulated in the patent legislation of the country concerned.13 In India, the inventions for which patents can be secured is defined in Section 2(1)(j)(ja) of the Act. The term “process” may be defined as one or more steps or acts performed on materials / substances to produce a result (product/composition/material/ substance). The process should be regarded as an artificial process or operation of an industrial nature wherein certain starting materials/substances are subjected to the process or operation to convert the starting materials/substances in such a manner to produce a new or known and useful article or substance or substance or product which is tangible. If the starting materials/substances used in the process remains unaltered and the resulting product also remains the same as the starting materials/substances, then, the process may not be an invention for which patent protection can be secured.

8. INTELLECTUAL PROPERTY AND PUBLIC HEALTH

Inadequate healthcare systems and epidemics of serious diseases have placed significant pressure on governments and on industry to take immediate and effective action. TRIPS Agreement states that production under compulsory licensing must be predominantly for the domestic market. This prevents countries from manufacturing patented pharmaceutical products for export to countries, which do not have the capacity to manufacture these themselves, without the authorization of the patent holder. This is evidenced in the debate on cross border compulsory licensing under Paragraph 6 of the WTO Declaration on TRIPS and Public Health, resulting in the 30 August 2003f the WTP General Council adopting the so-called Motta text in light of the accompanying WTO General Council Chairman’s Statement. This was by a further decision of the WTO members on December 6, 2005, made permanent by an amendment to the TRIPS Agreement. Implementation of the December 6, 2005 decision should be done in good faith as to assist developing and least-developed countries in meeting their public health needs,
while ensuring commitment to intellectual property protection in general, including the provisions of the TRIPS Agreement.

The role of the patent system in making medicines available to needy consumers, particularly in poor countries, has been the subject of intense debate. In this respect, the linkages between intellectual property rights and public health are being addressed in several fora. The WHO Commission on Intellectual Property Rights, Innovation and Public Health, CIPIH, was set up in early 2004 to study a number of topics, including interfaces and linkages between intellectual property rights, innovation and public health, with emphasis on the importance and effectiveness of intellectual property rights regimes in stimulation of research and creation of new medicines against diseases which particularly affect developing countries. The CIPIH final report was published in April 2006. The issue of public health and access to medicines calls for a variety of policies, including those unrelated to intellectual property. The business community has an important perspective to contribute to the discussion, having participated in a number of public-private partnerships, and as well as in private sector initiatives for supplying needed drugs to developing countries. Business and industry is also providing free or affordable access to biomedical and healthcare information for institutions in low-income countries through public-private initiatives. (Karki, M.M.S)

In this line the present research work has been undertaken to analysis the Trade related Intellectual Property Rights and their impact on Pharmaceutical Industries.