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School of Law

Commercialization of Intellectual Property

3

''शिक्षा मानव को बन्धनों से मुक्त करती है और आज के युग में तो यह लोकतंत्र की भावना का आधार भी है। जन्म तथा अन्य कारणों से उत्पन्न जाति एवं वर्गगत विषमताओं को दूर करते हुए मनुष्य को इन सबसे ऊपर उठाती है।''

— *इन्दिरा गांधी*

"Education is a liberating force, and in our age it is also a democratising force, cutting across the barriers of caste and class, smoothing out inequalities imposed by birth and other circumstances."

– Indira Gandhi

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MIP-108
Management of IPRs

Block

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COMMERCIALIZATION OF INTELLECTUAL PROPERTY

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BLOCK 3 COMMERCIALIZATION OF INTELLECTUAL PROPERTY

Block 3 of this Course deals with commercialization of IP: This block consists of three units.

Unit 8 of this course deals with the concepts of IP & commercialization. In this Unit topics which are covered include abuse of patent rights and compulsory licensing, restriction of patenting of drugs the debate of IPR, whether a natural rights or a social privilege etc.

Unit 9 of this block covers the topic of licensing. In this Unit, the different aspects of licensing is dealt with, different form of license, compulsory licensing, voluntary licensing topics are elaborately discussed and explained with suitable illustration and example.

Unit 10 of this Block deals with portfolio development and licensing, In this Unit, the purpose, benefits and types of patent portfolio are discussed and explained.

UNIT 8 CONCEPT OF INTELLECTUAL PROPERTY AND COMMERCIALIZATION

Structure

8.1 INTRODUCTION

On the onset of the 1860, a strong anti-patent movement emerged in European countries. While only Netherlands succumbed and abolished the patent system, other nations opted for restriction on patent protection. Throughout the 19th century and beyond, the debates and controversies relating to intellectual property were dependent on national legal traditions and on the relationship between socioprofessional groups which contributed to building the frameworks of intellectual property at both national and international levels. This debate revolved around Diderot concept of ownership of 'things of mind' and Lockean concept of 'fruits of labour' till challenged by Condorcet. According to him property right concerning "things of the mind" is for the immaterial objects whose use is essentially collective and the appropriation of such things by a single individual is only a social concession which is justified by their contribution to the common good. However, these debates were still structured by two models – IPR as natural rights *versus* social privilege. In addition, many of these debates concerned the differential definition of intellectual properties. In twentieth century, the trend of restriction on patent protection more or less continued. Many developing nations adopted a stronger intellectual property system at their formation but weakened them in 1960s and

1970s. In this unit, we will study the nature and evolution of IP rights. We will also look into the patent controversies .We will study the trends in the commercialization scientific property. We will see the position of commercialization under the Patents Act 1970.

8.2 OBJECTIVES

After reading this unit, you will able to:

- describe the nature of IP rights;
- explain the evolution of Patent rights; and
- describe the commercialization of scientific property.

8.3 IPR AS NATURAL RIGHTS OR SOCIAL PRIVILEGE!

Debate around the intellectual property is primarily on whether IPR is to be treated as natural rights or social privilege. Two opposing views, regarding the ownership of "things of the mind", are relevant. In 1763 Diderot suggested in his book Letter on the book trade that :

"Indeed, what property may belong to a man, if a work of mind, the only fruit of his upbringing, his education, his vigils, his time, his research, observations, his finest hour, the finest moments of his life, his own thoughts, feelings of his heart, the most valuable part of himself, that which is eternal, immortalized, does not belong to him? What comparison between man, the essence of man, his soul, field, meadow, tree or vine that nature offered at the beginning equally to all, and that the individual appropriated through culture, the first legitimate means of possession? Who is more entitled than the author to have his thing by gift or by sale?"

Diderot's concept of ownership of "things of the mind" is not different from Lockean concept as for John Locke "things are earned by working for them, thus their property is an extension of the property of himself." Accordingly "things of the mind" are justified as the subject of a property as they are the outcome of what a man possesses more intimately. However this theory finds an opposition by Condorcet who said in 1776:

"There can be no relationship between ownership of a work and that of a field which can be cultivated by one man; a piece of furniture that can serve only one man, and whose property, therefore, is based on the nature of the thing. So here it is not a property derived from the natural order, and defended by a social force. It is a property founded by society itself. This is not a real right but a privilege, like the exclusive enjoyment of all that can be removed from the sole possessor without violence."

In other words property right concerning "things of the mind" is for the immaterial objects whose use is essentially collective and the appropriation of such things by a single individual is only a social concession which is justified by their contribution to the common good. However, these rights were still structured by two models of IPR viz as natural rights *versus* social privilege. In addition, many of these debates concerned the differential definition of intellectual properties.

8.4 EVOLUTION OF PATENT RIGHTS

In 19th century, the author and the inventor were seen as Romantic figures of creativity but they were regarded as Yankees facing the hostile people, who do not recognise their genius. In France, where ideology based on Diderot's conception did find support for the so called romantic figures. These two social figures of creativity were able get some semblance of rights with social status. French economist and senator Michel Chevalier was a staunch opponent of the patent and he observed that technical inventions were in fact collective and therefore impersonal and hence inventor's creations should not be eligible for any property rights for the invention. According to him.

"Literary and artistic works have a character of individuality perfectly sliced. For even they are a separate property that the law can recognise. Conversely, there is a lack of individual character in real or supposed discoveries that are the subject of patents, because what one has done today another hundred others will do tomorrow. That is why the monopoly conferred by patents shall in principle be accused of being unfair and can be completely abolished by the legislature without any result against the recognition of literary property."

Balzac in his novel *Illusions perdues* on the other hand insisted on the fraternity of the inventor and the poet. He argued that there was no "lower parity" between a technical invention and a creative work as the former created a need, was useful and, therefore, indispensable to society and the latter quickly become useless to the society and their property would not infringe any interest. According to him:

" Thanks to their uselessness, the author could be accorded the broadest rights, while the inventor, locked in the cage of ophelimity, had to sacrifice his interests to society."

Consequently, literary property right and the right of the inventor took separate transitions where the former without a hitch was recognised for a longer duration but later receive limited period of protection (15 years maximum in France).Historically speaking the English patent system, we find today was, in fact, established to allow English Crown to grant patents to raise funds and to secure control over politically importance industries engaged in production of munitions, gunpowder, saltpeter, leather, glass, alum, and the printing press. Since the grant of the monopolies was purely politically motivated, no attention was paid to protect the interests of inventors. This resulted in widespread dissatisfaction and unrest in the general public leading to enactment of "Statute of Monopolies" of 1624. The US patent system also finds its roots going back to the English system. However, the U.S. constitution made it clear that originators of intellectual products have no natural rights per se. Article I, Section 8, Clause 8 of the U.S. Constitution states:

"The Congress shall have power to promote the progress of science and useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries;..."

The current patent systems, and more broadly "Intellectual Property Rights" in general, are remnants of monopoly privilege. Machlup and Penrose make the following, illuminating point:

"Those who started using the word property in connection with inventions had a very definite purpose in mind: they wanted to substitute a word with a respectable connotation, 'property', for a word that had an unpleasant ring, 'privilege'.

The history of intellectual property clearly suggests that this right is controversial always and everywhere. Rather than spontaneously evolving as real property rights, these rights evolved a system of deliberate creation of scarcity through heavy-handed state action.

Self Assessment Question **(Spend 3 minutes)**

1) Write a note on evolution of Patent Rights.

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8.5 SCIENTIFIC PROPERTY TO COMMERCIALIZATION

At the beginning of the 19th century, the term 'scientific property' originated to represent scientists claims for the recognition of their own work and as a means of promoting their professionalization. The development of scientific professions with the intensification of its relationship with industry resulted in the organisation of capitalism. This change undermined the individualistic conception of property rights and scientists were viewed as new figures of intellectual creativity and technical progress. In the latter half of the 19th century, while the controversy over industrial property was still in full swing, we find various legislative reforms in many countries this area. As the scholarly publications grew the process of scientific professionalization became prominent to such an extent that it took the first step towards emerging as economic sector. Finally, we cannot forget that scientists themselves have used intellectual property rights from early on. Such practices do not necessarily respond to a desire for personal enrichment, but they do reveal scientists' willingness to control the fruits of their discovery. A new regime of propertisation in science was thus emerging. It was characterised by a new form of involvement by scientists in economic matters, especially concerning intellectual property, and by the development of organisations representing scientists. In France, for example, some scientists took part in the debates on industrial property. Finally, it true that some scientists themselves have used intellectual property rights earlier but such use was not for their desire for personal enrichment. In fact it did revealed the willingness of these scientists to control the fruits of their discovery.

8.6 RESTRICTIONS ON PATENTING OF DRUGS

Another issue which caught attention of some of the scientists was the patentability of drugs. The French patent law of 1791 did not prevent patents from being granted for drugs. However, throughout the first half of the 19th century, the

policy of medicine and pharmacy took precedence over the right of the inventor. In 1829, the French Royal Academy of Medicine, registered its opposition to the patenting of invention for drugs. The proponents of the patenting of drugs on the other hand were led by the famous chemist, senator and trustee of SaintGobain Compagny GayLussac, who defended three arguments:

1) It had to distinguish the conception of drugs from how they were run,

2) The patents would encourage the drug market and

3) The right of the inventor had to be defended, even for drugs.

For opponents an exclusion of drugs was essential in order to moralize the drug market. According to them health could not be the subject of exclusive appropriation, even temporarily. These debates highlighted the different attitudes of scientists towards the propertisation of science. While chemists such as GayLussac did supported the patentability of drugs but other practitioners objected it in the name of moral considerations.

8.7 SCIENTIFIC THEORIES AND INVALIDATION OF PATENT

Relationship of scientists to the patent which was reduced to the problem of patenting theories and drugs took a new turn in famous case of the "Fuchsine in 1859. Here the question of scientific precedences to invalidate patent came up before the Parisian Court of Appeal.

Facts of the case

Renard frères et Franc, company obtain a patent for a dyestuff 'Fuchsine' invented by its French chemist Verguin. Company filed infringement cases against many competitors. These competitors in defence raised the plea before the courts that Fuchsine patent was null due to prior chemists' publications on this dyestuff, including Hofmann's works.

Decision of the Parisian Court of Appeal

The Parisian Court of Appeal ruled that the patent held by the company Renard frères et Franc was not invalidated. In order, it said:

"In vain is it claimed that such an interpretation would tend to strip science for the benefit of industry; [...] this distinction is in the nature of things [...] science tends to develop useful knowledge, to advance the arts and industry; [...] in chemistry above all, it often makes observations and watches without considering the industrial results it could produce, by not stopping there, by not formulating them, by not supplementing them but by opening the door for all, and by finding glory in the benefits that others derive; [...] the industry, however, is merely limited to produce, by taking advantage of the ways opened by science and by providing society with the results that the patent law only intended to protect."

The view that a patent based on scientific discoveries may not be invalidated for lack of novelty created a feeling in the scientific circles that that science could not possibly call into question the validity of a later patent.

8.8 SCIENTIFIC PRINCIPLES AND PATENTABILITY

In 19th century, scientific discoveries and principles were not patentable as invention was treated as distinct from discovery. This distinction was suggested by Dugald Stewart, a Scottish philosopher who wrote, in his Elements of the Philosophy of the Human Mind:

"Before we proceed it may be proper to take notice of the distinction between Invention and Discovery. The object of the former, as has been frequently remarked, is to produce something which had no existence before; that of the latter, to bring to light something which did exist, but which was concealed from common observation. Thus we say, Otto Guerricke invented the airpump; Sanctorius invented the thermometer; Newton and Gregory invented the reflecting telescope; Galileo discovered the solar spots; and Harvey discovered the circulation of the blood. It appears, therefore, that improvements in the Arts are properly called inventions; and that facts brought to light by means of observation, are properly called discoveries."

When reforms in French patent legislation were debated and the proposal to keep the principles, methods, systems, designs and theoretical or purely scientific discoveries out of the patent protection was put forth. It was François Arago who was opposed to this proposition but he agreed that an idea without any indication of industrial application should not be patented. According to him :

"If anyone should today discover the square of the hypotenuse, I do not wish it to be patented so that he might have the right to request a salary from astronomers using this proposition in order to measure the height of mountains on the Moon."

He in fact introduced the concept of a scientific idea to be patentable when at least one industrial application is indicated by its author. His proposition can be interpreted as a motivation to the scientists to secure patent protection by giving industrial utility of their findings thus contributing to involvement of scientists industry based economy. The result of Arago's intervention was the adoption of an amendment in French patent law that patents on scientific principles would be null and void unless any industrial application had been indicated. This provided a basis for the inclusion for "patent of principle", in patent law which could protect both an industrial application and its theoretical principle. Accordly Étienne Blanc among other well known lawyers observed that:

"An idea or a system cannot be validly patented in so far as the patent contains a statement of means with which we can apply the idea or the system to the industry. But if the idea or the system are new, the patent taken as mentioned above is what is in practice known as a "patent of principle", whose effect is to effectively protect the idea or the system so that nobody can apply it any longer, even with different means."

Some of the courts shared this opinion, but other lawyers such as Dalloz and Eugène Pouillet strongly attacked this "patent of principle" .

According to Pouillet, a patent dealing with a theoretical idea could not be granted if it indicated an industrial application, but it could only be valid for the application which had been mentioned. In fact, this discussion of the "patent of principle"

revealed the contradictions regarding the statute of scientific discoveries to be part of the public domain. Even Arago's position appeared contradictory, since he claimed that scientific work could be recognized but refused to pay royalties to anyone discovering a new theory. This French example suggests how complex the early question of the (un)patentability of science was and demonstrates that only few scientists were interested in such a topic.

8.9 SCIENTIFIC DISCOVERIES AND UTILITY

The Fuchsine decision suggested a strong distinction between science, which was regarded as a free domain, and industry. This led into belief that scientists were supposed to work for free and their discoveries can be privatised by industrialists. The confusion caused by such decisions led to the belief that a prior scientific discovery may not be possibly call into question the validity of a later patent. This paradoxical propertisation of the scientific public domain remained unacceptable to the scientists. In this context, the patent taken by Louis Pasteur on a warming process of wine is quite interesting. According to him taking out a patent is a good way to publish his scientific work. Pasteur wrote that the patent "in my opinion is the best method of advertising that a scientist who wants to follow his work patiently can adopt, without resorting to the solemnity of a scientific publication." He also thought that, by abandoning his patent later, he could ensure that his scientific discovery would not be privatised by industrialists. In the 19th century, the boundary between scholarly activity and industrial activity was not very clear. The Pastures example shows that scientists themselves have used intellectual property rights with no desire for personal enrichment.

8.10 PATENT CONTROVERSY

Patent rights have been the subject of many a fierce debate in 18th century where the either side argue their case ardently. Tom Palmer critically analyses three distinct arguments in favour of intellectual property rights. The basic lines of reasoning briefly suggest that the reason of each side is complimentary to each other. Some important reasons of difference are given below:

Arguments in Favour IP	Arguments Against IP
Patent protection provides incentive to innovate further	Patent protection act as serious roadblocks to innovation
Moral desert theory by Locke	Leggett's objection
Personality theory by Kant and Hegel	Palmer's criticism
Utilitarian theory by Bentham and Mill	Creates artificial scarcity by creating monopoly

Incentive to innovate v. Scarcity

Those favouring intellectual property rights asset that it provides an incentive to innovate because existence of IP right boost the chances of expected returns from an innovation by increasing profitability. Hence IP owner would tempt to devote more resources to gain the benefits. The opponents on the other hand fear that patents may retard innovation as permission from the patentee to improve the product would not be easy to obtain.

Illustration

'A' invented a digging machine and obtained a patent. His ownership of a patent gives 'A' the right to prevent a third party from using or practicing the patented digging machine , even if the third party only uses it in his own land. In other words A's ownership of patent rights gives him some degree of control ownership over the tangible property of innumerable others. Patent invariably transfer partial ownership of tangible property from its natural owner to the inventors owning patents. This in other words makes the resources scare.

Moral Desert Theory v. Leggett's objection

According to Locke, "every man has a property in his own person and the fruit of a man's labour belongs to him. In his view, the intellectual property would seem to follow naturally as the individual must be permitted to enjoy the fruits of his mental and physical labour. Lockean further asserts that "An inventor's patent does not deprive others of an object which would not exist but for the inventor." Leggett on the other hand points out that if any one asserts an exclusive right to a particular idea one cannot be sure that the very same idea did not at the same moment enter some other mind. According to him these rights can only be justified if they are implemented in such a way that rights of an individual are protected without infringing on another.

Personality Theory v. Palmer objection

According to Kant and Hegel, artistic expressions of individual are synonymous with his personality, hence they are deserving of protection just as much as the physical person is deserving of protection since in a sense they are a part of that physical person. However Palmer questions this by saying that if a work of art were part of an individual's personality then they would cease to exist after the person died.

Utilitarian Theories v. Scarcity and high price

This theory is advocated by economists such as Jeremy Bentham and John Stuart Mill. According to them the objective of any policy should be the attainment of the greatest good for the greatest number. However these utilitarian arguments can be cut for or against the claims of intellectual property rights. To achieve the balance between individual gain and public good, the utility gains from increased incentives for innovation must be weighed against the losses incurred from monopolisation and their diminished diffusion. This is problematic as the benefits gained by the individual cannot be measured against the losses suffered by general public. Further patents in particular are negative rights which create artificial scarcity through a monopoly on patented products leading to controlled product and higher prices.

For example AT & T obtained many patents in order to ensure its monopoly on telephones since the inception of this company in 1875. This in fact delayed the introduction of radio for about 20 years.

8.11 COMMERCIALIZATION OF INTELLECTUAL PROPERTY IN 20TH CENTURY

At the onset of the 20th century, scientific professions emerged as economic contributor to development. With the development of the concept of industrial

utility with scientific idea a more collective form of innovators the so called "intellectual workers" seeking to obtain industrial property rights emerged on the scene of industrial development. This was evident from the German controversies of the early 20th century regarding employee inventors' rights. In fact, the professionalization of intellectual workers in industry and the propertisation of intellectual work began to structure the intellectual professions based on patents. Leaving the fact aside that there are no easy and precise answers to the above said IP controversies it must be recognized that by end of Nineteenth century almost all the countries adopted IP laws to promote intellectual property protection. However in twentieth century the trend of restriction on patent protection more or less continued. Many developing nations adopted a stronger intellectual property system at their formation but weakened them in 1960s and 1970s.The demand for harmonization of IP laws particularly patent law grew amongst within the developed nations .Many efforts were made to harmonies substantive which resulted in formation of Standing Committee on law of patents in 1998 WIPO. But this harmonization efforts were remained unconclusive. The issue of IP as trade barriers kept agitating in the General Agreement on Tariffs and Trade (GATT) negotiations. The Dunkle draft of December 1991 in GATT became the foundation of the World Trade Organization (WTO). This organization officially commenced on January 1, 1995 under the Marrakech Agreement, replacing the existing GATT Agreement of 1948. In 1995 the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) was also signed. This agreement sets down minimum standards for many forms of intellectual property regulations including Patents. The preamble of TRIPS agreement clearly states to balance the rights and privileges of the right holder with his obligations and responsibilities to the society. It also emphasize the need to promote effective and adequate protection of IPRs and stresses the need to ensure that measures and procedures to enforce IPRs do not themselves become barriers to legitimate trade. It opens up the patent protection for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application. This paved way for removal of restriction on product patents for food, drugs and chemicals by all countries. Thus commercialization of IP took new dimensions in trade and commerce.

8.12 ABUSE OF PATENT RIGHTS AND COMPULSORY LICENSING

Article 2.1 of the TRIPS make Article 5 of the Paris Convention of 1967 as an integral part of the agreement which is applicable to all the members. Article 5A of the Paris Convention, allows member states to take legislative measures to prevent abuse of patent right. The Article 5A(2) Paris Convention of 1883 provides that each contracting State may take legislative measures for the grant of compulsory licenses.

Article 5A. (2)

"Each country of the Union shall have the right to take legislative measures providing for the grant of compulsory licenses to prevent the abuses which might result from the exercise of the exclusive rights conferred by the patent, for example, failure to work."

Further the principles of the TRIPS agreement are laid out in Article 8. Article 8.1 allows the members, to adopt measures necessary to protect health and nutrition,

and to promote the public interest in sectors of vital importance to their socio-economic and technological development, provided that such measures are not inconsistent with the provisions of the TRIPS text. And Article 8.2 recognizes the need to prevent the abuse of IPRs by the patent holder by appropriate measures provided that they are consistent with the provisions of the TRIPS Agreement,

Article 8

Principles

1) Members may, in formulating or amending their laws and regulations, adopt measures necessary to protect public health and nutrition, and to promote the public interest in sectors of vital importance to their socio-economic and technological development, provided that such measures are consistent with the provisions of this Agreement.

2) Appropriate measures, provided that they are consistent with the provisions of this Agreement, may be needed to prevent the abuse of intellectual property rights by right holders or the resort to practices which unreasonably restrain trade or adversely affect the international transfer of technology.

Many patent law systems thus using the flexibility available under the TRIPS provides for the granting of compulsory licenses in a variety of situations. According to historian Adrian Johns, the idea of compulsory licensing "seems to have originated as a serious proposition in the 1830s, although predecessors can be traced back into the eighteenth century," and it was popular in the British anti-patent movement of the 1850s and 1860s. More recently an area of fierce debate on compulsory license (CL) has been on the patented drugs for treating serious diseases such as malaria, bird flu, HIV and AIDS. The proponent of CL argues that such patented drugs are widely available in the western world and CL on these drugs would help to manage the epidemic of these diseases in developing countries. High cost of these drugs is also an issue which found favour with the policy makers to grant CL. Example of recently granted CL are:

Brazil

In 2007, Brazil issued a compulsory license to produce generic versions of Efavirenz, a drug that was costing the Brazilian government US$580 per patient per year. Generic versions of Efavirenz were estimated at less than US$170 per patient per year.

Canada

In 2007, Canada issued a compulsory licence to allow generic manufacturer to export Apo TriAvir, a combination drug for HIV treatment, to Rwanda.

8.13 THE PATENTS ACT, 1970 AND COMPULSORY LICENSE

Indian patent system is also more than 150 years old. Now the Patent system in India is governed by the Patents Act, 1970 (39 of 1970) (as last amended in April 2007) and the Patents Rules 2003 (as last amended in May 2006). The current

Act aims at providing a delicate balance between the rights of the patent holder vis–à-vis his obligation to the public at large. To achieve this, many public interest provisions are found inbuilt in the Act .These provisions includes:

1) **Section 83 General principles applicable to working of the patented invention**

The general principles of granting patents in India aims at encouraging inventions to boost the industrial development by securing their commercialisation in India. It also clearly states that patents are not granted merely to enable patentees to enjoy a monopoly for the importation of the patented article. These principles are given below:

a) that patents are granted to encourage inventions and to secure that the inventions are worked in India on a commercial scale and to the fullest extent that is reasonably practicable without undue delay;

b) that they are not granted merely to enable patentees to enjoy a monopoly for the importation of the patented article;

c) that the protection and enforcement of patent rights 'contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations;

d) that patents granted do not impede protection of public health and nutrition and should act as instrument to promote public interest specially in sectors of vital importance for socio-economic and technological development of India;

e) that patents granted do not in any way prohibit Central Government in taking measures to protect public health;

j) that the patent right is not abused by the 'patentee or person deriving title or interest on patent from the patentee, and the patentee or a person deriving title or interest on patent from the patentee does not resort to practices which unreasonably restrain trade or adversely affect the international transfer of technology; and

g) that patents are granted to make the benefit of the patented invention available at reasonably affordable prices to the public.

2) **Section 84 on working of patents**

The provision on compulsory licensing under Section 84 of the Act provides for grant of licence for the working of the patent after three years from grant if the patent holder fails to work the invention on commercial scale or meet requirement of the public or sell it at a price not reasonably affordable to public. Any interested person can apply to Patent Office for grant of the compulsory license on patented invention to manufacture the product. The rationale for compulsory license provision is to indicate that state undertakes to grant patents to ensure that new patented products are made available to the public at affordable cost and easily.

3) Section 84

1) At any time after the expiration of three years from the date of the sealing of a patent, any person interested may make an application tu the Controller for grant of compulsory licence on patent on any of the following grounds, namely:

   a) that the reasonable requirements of the public with respect to the patented invention have not been satisfied, or

   b) that the patented invention is not available to the public at a reasonably affordable price, or

   c) that the patented invention is not worked in the territory of India.

2) An application under this section may be made by any person notwithstanding that he is already the holder of a licence under the patent and no person shall be estopped from alleging that the reasonable requirements of the public with respect to the patented invention are not satisfied or that the patented invention is not worked in the territory of India or that the patented invention is not available to the public at a reasonably affordable price by reason of any admission made by him, whether in such a licence or other wide or by reason of his having accepted such a licence.

3) Every application under sub-section (l) shall contain a statement setting out the nature of the applicant's interest together with such particulars as may be prescribed and the facts upon which the application is based.

4) The Controller, if satisfied that the reasonable: requirements of the public with respect to the patented invention have not been satisfied or that the patents invention is not worked in the territory of India or that the patented invention is not available to the public at a reasonably affordable price, may grant a licence upon such terms as he may deem fit.

5) Where the Controller directs the patentee to grant a licence he may, as incidental there to, exercise the powers set outin section 88.

6) In considering the application filed under this section, the Controller shall take into account,-

   i) the nature of the invention; the time which has elapsed since the sealing of the patent and the measures already taken by the patentee or any licensee to make full use of the invention;

   ii) the ability of the applicant to work the invention to the public advantage;

   iii) the capacity of the applicant to undertake the risk in providing capital and working the invention, if the application were granted;

   iv) as to whether the applicant has made efforts to obtain a licence from the patentee on reasonable terms and conditions and such efforts have not been successful within a reasonable period as the Controller may deem fit:

Provided that his clause shall not be applicable in case of national emergency or other circumstances of extereme urgency or in case of public non-commercial use or on establishment of a ground of anti-competitive practices adopted by the patentee, shall not be required to take into account matters subsequent to the making of the application.

7) For the purposes of this Chapter, the reasonable requirements of the public II be deemed not to have been satisfied—

a) if, by reason of the refusal of the patentee to grant a licence or licences on reasonable terms,-

   i) an existing trade or industry or the development thereof or the establishment of any new trade or industry in India or the trade or industry of any person or class of persons trading or manufacturing in India is prejudiced; or

   ii) the demand for the patented article has not been met to an adequate extent or on reasonable terms; or

   iii) a market for export of the patented article manufactured in India is not being supplied or developed; or

   iv) the establishement or development of commercial activities in India is prejudiced; or

b) if, by reason of conditions imposed by the patentee upon the grant of licences under the patent or upon the purchase, hire or use of the patented article or process, the manufacture, use or sale of materials not protected by the patent, or the establishment or development of any trade or industry in India, is prejudiced; or

c) if the patentee imposes a condition upon the grant of licences under the patent to provide exclusive grant back, prevention to challenges to the validity of patent or coercive package licensing, or

d) if the patented invention is' not being worked in the territory of India on a commercial scale to an adequate extent or is not being so worked to the fullest extent that is reasonably practicable, or

e) if the working of the patented invention in the territory of India on a commercial scale is being prevented or hindered by the importation from abroad of the patented article by-

   i) the patentee or persons claiming under him, or

   ii) persons directly or indirectly purchasing from him; or

   iii) other persons against whom the patentee is not taking or has not taken proceedings for infringement.

Example of compulsory licenses issued in India

In March 2012 a compulsory license was issue to Natco Pharma Ltd for manufacture of generic version of Bayer's patented drug 'Sorafenib Tosylate ' (IN 215758) useful in treatment of Liver and Kidney Cancer. Generic version of this drug would cost only Rs 8800/120 tabs which is much lower than the cost charged by Bayer's Rs 2,80,000/- per month.

8.14 SUMMARY

The history of intellectual property quite clearly suggests that this right is controversial always and everywhere. There are no easy and precise answers to

this debate. However it must be recognised that IP laws are the outcome of long felt need and result of a moral consensus among people. Intellectual property laws were evolved by people living in a civil society gradually. Finally, it is not correct to justify and put a comparative argument that the scarcity of tangible property is the sole explanation for property rights and as intangible property is in abundance, there is no basis for protecting intellectual property. The twenty-first century being the century of knowledge need transformation intellect into public good. The ability of a nation to translate knowledge into wealth and public good through innovations will determine its future. The generation, protection and exploitation of intellectual property is a critical factor for the development of society as whole. Sates are taking measures to check the abuse of the patent rights. Issue of compulsory license by Brazil and India is a good example to reduce the cost of patented drugs.

8.15 TERMINAL QUESTIONS

1) Explain the nature of IP rights.

2) Trace the evolution of IP rights?

3) Explain the term "patent of principle", and its impact on patent law.

8.16 ANSWERS AND HINTS

Self Assessment Questions

1) Refer to Section 8.4

Terminal Questions

1) Refer to Section 8.3

2) Refer to Section 8.4

3) Refer to Section 8.8

UNIT 9 TYPE OF LICENSING

Structure

9.1 INTRODUCTION

IPR allows the creators of intellectual property to appropriate profitable returns of their creations. There are many ways to appropriate the returns from the intellectual property assets. Licensing is one of the options available to the inventor or creator. Two types of licences are identified under the IP laws. Voluntary licence and non voluntary licences. Various type Voluntary licences can be granted by the creator of IP. Licensing allows third party the licensee to use intellectual property right like patents, trademarks, designs and copyrights owned by the licensor which otherwise licensee cannot use. Two further aspects of licence, that are required to be distinguished, are namely enabling and permitting aspects. In the former aspect, the licensor enables the licensee to use the licensed knowhow by disclosing same to the licensee. For example in knowhow license, the licensor transfer the specific knowledge related to transferred technology to enable the licensee to work the invention. In later aspect, the teaching aspect is missing in the license agreement .For example in patent, the licensor is not obliged to teach the licensee anything more than what is disclosed in the patent specification. Similarly a trademark licence merely permits the licensee to use the trademark

and teaches nothing more. Licensing agreements can provide transfer of IP rights to the licenses in different ways such as exclusive, non exclusive or sole licenses. In the unit we will study what is licensing, type licences available in patents, designs trademarks or copyright.

9.2 OBJECTIVES

After reading this unit, you will be able to know:

- what is a license?
- difference between Voluntary licence and non voluntary licences;
- difference between Exclusive Licence and Sole License;
- what is Non Exclusive licence?
- what are the various types of IP licenses; and
- different kinds of patent licences.

9.3 WHAT IS A LICENSE?

The term License is defined as permit. Grant of license means to give permission. Licence refers to the permission granted and to the document recording the terms and conditions on which it is granted. A license may be granted by IP owner ("licensor") to another party ("licensee") based on the written agreement between the licensee and licensor. It may also be defined as an authorization (by the licensor) to use the licensed process/product (by the licensee).A license can perform an activity which otherwise is prohibited under the law. It may require payment of a remuneration called royalty by the licensee to the licensor. A intellectual property license is also a contract as it creates like the contract agreement, the duties and obligations between contracting parties, holder of intellectual property and the licensee. Like contract IP license also records the terms, rights, duties and obligations of the licensee and licensor which regulates their relationship in legally enforceable manner.

Self Assessment Question **(Spend 3 minutes)**

1) What is meant by License?

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9.4 THE LICENSE AS CONTRACT

The main consideration of licensing is fundamentally as stipulated in the contract agreement between the parties. The obvious and fundamental thing to be noted here is that a license is a contract and therefore on conclusion of the license

agreement and its operations are governed by the general principles of contract law. Accordingly, certain basic minimum requirements must be satisfied for valid and legally enforceable agreement. These requirements are as (i) Legal existence and possession of property right ii) Legal capacity of the parties to act, iii) consent by the parties, iv) sufficient consideration or mutual promises, v) the legality of the transaction and vi) the registration of the agreement with intellectual property authorities. All these basic requirements must be satisfied to make a legally valid license. A license is a contract as it creates contractual rights, duties and obligations between the owner of intellectual property, and the licensee. It is these contractual terms, and the rights, duties and obligations which are agreed and recorded, that regulate the relationship between the licensor and a licensee in a legally enforceable way.

Self Assessment Question - (Spend 3 minutes)

2) Is License a contract? Explain.

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9.5 THE LICENSE AS BUSINESS RELATIONSHIP

As discussed above, the license is a contract which defines the legal relationship between the parties. In Intellectual property license, it also manifests a continuing business relationship during the duration of the agreement. The legal clauses in the license agreement cannot define all of the incidents of the business relationship. It cannot fully lay down the terms relating to legal obligations with the ingredients of a successful business relationship. In view of this, it is stressed that a successful license is one that is mutually beneficial to both the parties. Therefore, it is in the interest of both the licensor and the licensee to ensure that business operations using patented technology are successful. The more products sold, the greater the profit to the licensee with more royalty payments to the licensor. In view of this, settlement for remuneration in terms of upfront lump sum payment and royalty is best for both the parties when it is based on production or sales of a product or process containing, or manufactured using the licensed technology. This depends on the attitude of the parties which cannot be put down in legal terms but can be governed by sound business relationship with their desire to make the arrangement work for mutual benefit of the contracting parties. This business relationship is essential where intellectual property license agreement takes place between different nationals or entities. Being a business relationship, such license will be affected by the different commercial and business practices and traditions of the country of each party. A successful legal and business relationship in such circumstances can happen if each party understands the legal and commercial culture and traditions of the other.

9.6 INWARD-LICENSING AND OUTWARD-LICENSING

Usually licensing work as an instrument for transferring technology between licensors who want to leverage their IP assets and licensees who want to enhance their technological advantage. It is used in both inward direction (licenses received by organisation) and outward direction (licenses given away by the organisation). In both the situations, the licensing can be advantageous and disadvantageous depending on the inward or outward nature of licensing. Some advantages and disadvantages of patent licensing – Inward-licensing and outward-licensing are given below.

Advantages of patent licensing – Inward-licensing

1) License payments are less costly than expenditure on in-house R&D.
2) License payment depends on successful sale of the patented products.
3) Royalty payments can be staggered to control risks by designing the payment scheme prudently.
4) Licensing is useful in bringing new products into markets early.
5) It saves the time required for internal R&D.
6) It lowers the risks when an invention has already been commercialized.

Disadvantages of patent licensing – Inward-licensing

1) Some restrictions in licensing agreements may not be favourable to licensee.
2) Allocation of restricted market may lower profits to the licensee.
3) It may erode the confidence and undermine the capabilities of internal R&D units
4) Quantum revenue returns is uncertain.

Advantages of patent licensing – Outward-licensing

1) It ensures high profitable returns from IP assets.
2) It allows revenue generation from multiple licensees at the same time.
3) It is less risky than Foreign Direct Investment (FDI).
4) It is simplicity and cost effective particularly when a licensee does not need technical advice or know-how. In such cases only paper work relating to drafting of contract is sufficient.
5) It is advantageous to SMEs as it lowers risk by eliminating need for downstream production facilities.

Disadvantages of patent licensing – Outward-licensing

1) It may lead to creation of potentially rivals in downstream markets who could erode future profits.
2) Total profit is usually smaller than with successful internal development and launching of the patented product.

3) Failure of licensees to develop and market the invention may affect the royalty payments.

4) Quantum of returns is largely depends on the production and marketing capabilities of the licensee.

9.7 VOLUNTARY LICENSE AND NON VOLUNTARY LICENSE

Voluntary License

A voluntary license is an authorization given by the IPR holder by his own volition to licensee of his choice for allowing him to use/produce the protected intellectual property products. Under this kind of license the licensor usually sets quality requirements and may limit the markets in which the licensee can sell protected intellectual property products. The decision to grant a voluntary license, and the terms therein, can be tailored to favour the licensor.

Non-voluntary License or compulsory license

The term 'non-voluntary license' popularly known as compulsory license refers to an authorization by the state to use the patented subject matter for the purpose of the government or by third party without the consent of the patentee for reasons of public policy. In other words, the patentee is forced to tolerate the grant license on the terms decided by the state. At times non voluntary license is given by the state to check the abuse of the patents rights such as non use. Here grant of license is enforceable as decree of the state. In cases of abuse of IPR, any interested person can approach the State for grant of license where the IPR holder refuses to grant license by his own volition. Person holding compulsory license is allowed use/produce the protected intellectual property products on the terms and conditions decided by the state authority. State is also empowered to fix the remuneration and period for which compulsory license is permitted. In these cases, broader access to the patented subject matter by public at reasonable cost is considered to more important than the private interest of the patentee to control the public access and cost of the patented goods.

Self Assessment Question **(Spend 3 minutes)**

3) Distinguish between Voluntary and Non-voluntary license.

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9.8 EXCLUSIVE LICENSE, NON EXCLUSIVE AND SOLE LICENSES

The license can be termed as exclusive, non exclusive or sole depending on the manner in the licensor wish to transfer his rights. However the kind of license granted greatly influence the quantum of royalty and remuneration the licensor can

seek from the licensee. As a rule, higher the exclusivity granted to the licensee, the higher the remuneration for the licensor.

Exclusive License

Exclusive License is the most popular kind of license which every patent or knowhow licensee wish to have. In this case, the patentee or the owner of secret knowhow does not retain any right to use the licensed technology by him. In such case, the licensor is only left with formally held rights and title in the licensed patents. The licensor in fact lose any right to further development activities related to the licensed product. In other words, the licensee can request the licensor to stop production after the signing of the exclusive license agreement. Such kind of agreement sometime proves fatal to the patentee in case he decides to work the invention himself in future.

Non Exclusive License

Non exclusive licenses are such licenses where the licensor allows licenses to many parties simultaneously. In this case, licensor is not restricted to grant further non exclusive license to third parties in the manner decided by the licensor. In this case, there nothing to prohibit the licensor from disposing the licensed rights in any manner.

Sole License

It is a kind of exclusive license where the licensor grants an exclusive license with exemption that licensor retains the right to continue using the licensed subject matter himself. In such cases the licensor is under obligation not to grant any further sub-licenses. Here the licensor is entitled along with sole licensee to continue using licensed rights himself. This may be called as non exclusive license but with a difference that the licensor undertake not to grant further non exclusive licenses to other parties. This is not an exclusive license in true sense. But there is a legal and private obligation of the licensor towards the licensee not to grant any further licenses. In this case the licensor lose ability to dispose the licensed right in any manner.

9.9 TYPES OF INTELLECTUAL PROPERTY LICENSES

The above discussions were limited to the provisions applicable licenses in general terms. Some provisions of licensing are specific to the type of intellectual property that is being licensed. We will now discuss some of the more important of these provisions with reference to patent license, trademark license and copy right license.

Patent License

The patent right gives the exclusive rights: to use the invention, to manufacture it, to sell it or place it in the market. Generally a patent license authorizes the licensee to perform all such acts. The basic purpose of the patent license is to permit the use of the patented invention. In certain cases, a patent licence is insufficient to work the invention as additional know-how is required, essentially in the form of technical knowledge documentation, software, samples, and consulting services in order to educate and trained the licensee in manufacturing and launching the new product or service in the market. A patent license may be an exclusive

license or a non exclusive license or sole license or a simple license. Exclusive license provide guarantee against any competition even from the licensor. Sole license patent agreement provide assurance to the licensee that licensor would not grant further license to other manufacturers within the agreed territory. A simple license on the other hand simply provides a permission to use the patented invention without any such assurance to the licensee. A non exclusive patent license indicates that another license has been granted for the patented invention in the allowed territory. The right to sue the infringers normally rest with the patentee with an exception that an exclusive licensee can also sue infringers in the name of the patentee. A person holding the patent license can also file infringement suits in his own name where the licensor after being called upon to do so by the licensee fail to do so within the specified period. A person using the patent license may challenge the validity of the patent.

Trademark Licenses

Trademark licenses give licensee the permission to use the registered mark or marks in the designated territory. The trademark license will prohibit trading of the goods covered under trademarks outside the designated territory. Even the licensor is also mandated to keep out of the territory designated for the license. Most of the trademarks statutes require the registration of the registered user's agreement relating to the registered trademarks. All the registered users of trade are under obligation not use the licensed mark on products which do not attain the standard of quality prescribed by the licensor. The licensor on the other hand is under obligation to provide on confidential basis all specifications, technical data, and knowhow to the licensee for meeting the prescribed quality standards. The licensee is required to send samples products to the licensor and allow inspection of its factory by the licensor. License is only required to report about any infringement to the licensor who in turn usually conduct all infringement related actions. In trademarks license apart from obtaining the fee /royalty from the user provisions for bearing cost relating to quality control and inspection by skill persons of the licensors is also built in the agreement.

Copyright License

A copyright license generally gives an authorization to the licensee to user of the works the publisher or other license holder to use it in the manner and in accordance to the conditions agreed upon between them. Publisher usually insists on exclusive right to reproduce and publish the protected work. At times, the number of copies to be produced by publishers is also specified for every edition of the work. Licensee may also acquire subsidiary rights such as right of reproduction by means of microfilms, reprographic productions or even the right to storage of the work in computer. Publisher also obtain the right to publish the work in newspapers or periodically entirely or in partly in successive parts. This license does confer on the publisher the right to exploit the work in any accepted adaptation or such dramatization for stage, or film production or sound or television broadcasting or translation rights. The licensee is also obliged to ensure that the title of the work and name of its authors are prominently place in the copy produced.

9.10 NON-VOLUNTARY OR COMPULSORY LICENSING

The term 'non-voluntary' or 'compulsory' licensing refers to the practice by a government to authorise itself or third parties to use the subject matter of a patent

without the authorisation of the right holder for reasons of public policy. It is also referred as an involuntary contract between a willing buyer and an unwilling seller imposed and enforced by the state. The commonly recognised three situations under which a compulsory licence can be sought and granted by the government are where a dependent is blocked, when the patent not worked or where patented invention relates to food, drug or medicines. Further compulsory licences are resorted to by the state to remedy anti- competitive, anti-trust or misuse situations or where the invention is important for national defence or public non commercial use or situation of extreme urgency. In all such cases, the holder of property is entitled to receive the adequate remuneration either from the state or the licensee as the case may be.

9.11 TYPES OF COMPULSORY LICENSING

1) Compulsory license for dependent patent

Dependent patent is one which cannot be worked without infringing the prior patent. This situation arise where it is not possible for the patentee of the later patent to work his invention for want of licensing agreement between the two patent holders. Its ramifications becomes more relevant where improved patent is more valuable than the original patent. In such a situation, this 'holdup' problem is required to remedy by the intervention of the state. Further the refusal to license is seen as detrimental to society as it may prevents the introduction of the improvement until the original patent has expired, and/or delays the introduction due to time spent in litigation; leading to higher consumer cost. The inability to work a dependent patent is due to this hold up, in some countries, is seen contrary to the public interest. To remedy this, many States have adopted compulsory licensing provisions. An example of such a law is Section 91 of the Indian Patents Act 1970 which provides:

Licensing of related patents

1) Notwithstanding anything contained in the other provisions of this Chapter, at any time after the sealing of a patent, any person who has the right to work any other patented invention either as patentee or as licensee thereof, exclusive or otherwise, may apply to the Controller for the grant of a licence of the first-mentioncd patent on the ground that he is prevented or hindered without such licence from working the other invention efficiently or to the best advantage possible.

2) No order under sub-section (1) shall be made unless the Controller is satisfied-

   i) that the applicant is able and willing to grant, or procure the grant to the patentee and his licensees if they so desire, of a licence in respect of the other invention on reasonable terms; and

   ii) that the other invention has made a substantial contribution to the establishment or development of commercial or industrial activities in the territory of India.

3) When the Controller is satisfied that the conditions mentioned in subsection (1) have been established by the applicant, he may make an order on such terms as he thinks fit granting a licence under the first-mentioned patent and a similar order under the other patent if so requested by the proprietor of the first-mentioned patent or his licensee:

Provided that the licence granted by the Controller shall be non-assignable except wilh the assignment of the respective patents.

4) The provisions of Sections 87, 88, 89 and 90 shall apply to licences granted under this section as they apply to licences granted under Section 84.

This type of compulsory license provision is very common. The right of countries to impose these kind compulsory licensing provisions is recognized under Article 31. (l) of the TRIPS agreement which is reproduced below :

Article 31: Other Use *(other than the use allowed under Article 30)* Without Authorization of the Right Holder

l) where such use is authorized to permit the exploitation of a patent ("the second patent") which cannot be exploited without infringing another patent ("the first patent"), the following additional conditions shall apply:

i) the invention claimed in the second patent shall involve an important technical advance of considerable economic significance in relation to the invention claimed in the first patent;

ii) the owner of the first patent shall be entitled to a cross-licence on reasonable terms to use the invention claimed in the second patent; and

iii) the use authorized in respect of the first patent shall be non-assignable except with the assignment of the second patent.

List of the countries having provision of compulsory license for dependent patent is given in Annexure I.

2) **Compulsory license for Non use**

The general principle of working of patent is enshrined in many of the patent legislations. This in fact is linked to interest of every nation to ensure that benefit of new patented invention is available to the society. Additionally, in many nations, grant of patent is subjected to the expressed or implied condition that the patentee would work the invention in the State of grant to benefit community. Thus every country has a strong interest in promoting the working of patents and if the patent holder fails to work his invention, this amounts to breach of this condition. In such non use of patents, States may impose conditions to limit or revoke the grant. These provisions are implemented not only to promote working of the patented inventions but also to ensure public access to essential products which, if not supplied, would be unreasonable or contrary to the public interest. This kind of provisions allows the State to balance the interest of the patentee with national goal to achieve the desired technical and economic development of the country.

'Compulsory working' and 'Compulsory licensing'

The above said legislative provisions can be seen in the patent laws in two forms, i.e. Compulsory working and compulsory licensing.

'Compulsory working' means a patent must be commercially worked within the country granting the patent.

'Compulsory licensing' refers to a non-voluntary licensing granted by the state to third party on fulfilling certain conditions.

9.12 COMPULSORY LICENSE, PARIS CONVENTION AND TRIPS

The right of countries to impose these kind compulsory licensing provisions is recognized under Article 2.1 of the TRIPS agreement which is reproduced below.

"**Article 2: Intellectual Property Conventions**

1) In respect of Parts II, III and IV of this Agreement, Members shall comply with Articles 1through 12, and Article 19, of the Paris Convention (1967)."

Therefore by implication, all the members are bound by provisions of Article 5 of the Paris Convention, which states:

"**Article 5 A. Patents: Importation of Articles; Failure to Work or Insufficient Working; Compulsory Licenses**

1) Member states may legislate measures providing for the grant of compulsory licenses to prevent abuses of the exclusive rights conferred by the patent, for example for failure to work.

2) Forfeiture of the patent will not be provided for except where the grant of compulsory licenses is not sufficient to prevent abuses. Forfeiture or revocation of a patent will not be instituted before the expiration of three years from the grant of the first compulsory license.

3) A compulsory license may not be applied for on the ground of failure to work or insufficient working before the expiration of three years from the date of application for the patent, or four years from the date of the grant of the patent whichever period expires last. It shall be refused if the patentee justifies his inaction by legitimate reasons. Such compulsory license shall be non-exclusive and shall not be transferable even in the form of the grant of a sub- license except with that part of the enterprise or goodwill which exploits such license."

However TRIPS agreement requires the member states to consider provisions of Article 30 and Article 31 while taking legislative measures relating to use of patent without the authorization of the right holder. Article 30 and 31 of TRIPS agreement is reproduced below :

Article 30: Exceptions to Rights Conferred

Members may provide limited exceptions to the exclusive rights conferred by a patent, provided that such exceptions do not unreasonably conflict with a normal exploitation of the patent and do not unreasonably prejudice the legitimate interests of the patent owner, taking account of the legitimate interests of third parties.

Article 31: Other Use *(other than the use allowed under Article 30)* Without Authorization of the Right Holder

Where the law of a Member allows for other use of the subject matter of a patent without the authorization of the right holder, including use by the government or third parties authorized by the government, the following provisions shall be respected:

a) authorization of such use shall be considered on its individual merits;

b) such use may only be permitted if, prior to such use, the proposed user has made efforts to obtain authorization from the right holder on reasonable commercial terms and conditions and that such efforts have not been successful within a reasonable period of time. This requirement may be waived by a Member in the case of a national emergency or other circumstances of extreme urgency or in cases of public noncommercial use. In situations of national emergency or other circumstances of extreme urgency, the right holder shall, nevertheless, be notified as soon as reasonably practicable. In the case of public non-commercial use, where the government or contractor, without making a patent search, knows or has demonstrable grounds to know that a valid patent is or will be used by or for the government, the right holder shall be informed promptly;

c) the scope and duration of such use shall be limited to the purpose for which it was authorized, and in the case of semi-conductor technology shall only be for public noncommercial use or to remedy a practice determined after judicial or administrative process to be anti-competitive;

d) such use shall be non-exclusive;

e) such use shall be non-assignable, except with that part of the enterprise or goodwill which enjoys such use;

f) any such use shall be authorized predominantly for the supply of the domestic market of the Member authorizing such use;

g) authorization for such use shall be liable, subject to adequate protection of the legitimate interests of the persons so authorized, to be terminated if and when the circumstances which led to it cease to exist and are unlikely to recur. The competent authority shall have the authority to review, upon motivated request, the continued existence of these circumstances;

h) the right holder shall be paid adequate remuneration in the circumstances of each case, taking into account the economic value of the authorization;

i) the legal validity of any decision relating to the authorization of such use shall be subject to judicial review or other independent review by a distinct higher authority in that Member;

j) any decision relating to the remuneration provided in respect of such use shall be subject to judicial review or other independent review by a distinct higher authority in that Member;

k) Members are not obliged to apply the conditions set forth in subparagraphs (b) and (f) where such use is permitted to remedy a practice determined after judicial or administrative process to be anti-competitive. The need to correct anti-competitive practices may be taken into account in determining the amount of remuneration in such cases. Competent authorities shall have the authority to refuse termination of authorization if and when the conditions which led to such authorization are likely to recur; .....

The List of the countries having compulsory license provision relating to non use is given Annexure II. Common circumstances under which this provision may be imposed are when the patentee fails to work the patent within the requisite time after the grant of patent or when the patent owner fails to meet the demand for the product or when the patent is being used to block the use of another patent and also the patentee either refuses to issue license requested by others or he is not willing to grant license on reasonable terms.

9.13 COMPULSORY LICENSE PROVISIONS RELATING TO NATIONAL SOVEREIGNTY

Apart from above provisions, patent laws of majority of the nations also provides for grant of compulsory licenses to protect national defense or to promote the public interest or public health, or to meet the situation of national emergency or to correct anticompetitive practices or to export the pharmaceutical products to countries with no manufacturing capacity as per Para 6 of Doha declaration . All these provisions are seen as sovereign prerogatives of the nations to protect their national interest or better access to essential medicines.

9.14 *DE FACTO* COMPULSORY LICENSE

Denial of injunction by Courts – *de facto* Compulsory license

The unlicensed use of patented subject matter normally amounts to infringement. The patentee invariable jet temporary or permanent injunction from the Courts. Even in US where compulsory licenses for the benefit of private competitions are not favored.. Courts motivated by a concern for the public welfare in some cases have denied injunction for unlicensed use. An example of such a case is Milwaukee v. Activated Sludge, where the patent holder of an invention pertaining to sewage treatment was denied injunctive relief as the injunction would block the continued use of the sewage treatment plant and thereby endanger the health of the citizens.. Similarly The High Court of Delhi has denied Roche an injunction seeking to stop Cipla from selling its version of lung cancer drug Tarceva patented by Roche. The judge found that denying lung cancer patients in India the benefits of a cheaper version of a life-saving drug would have been too drastic a step to take. However Cipla was ordered to maintain sales records till the pendency of the suit for patent infringement. In effect, in these cases a de facto compulsory license appears to have been granted in view of the larger public interest.

9.15 SUMMARY

Licensing of Intellectual property is a valuable source of earning monetary benefits. Different types of license agreements are being used by licensor. Normally a voluntary license is obtainable. Where patentee refuses to grant license on reasonable terms State imposed compulsory licenses can be obtained. The unauthorized use of the patented matter is also permissible under the provisions of Article 30 and 31 of the TRIPS agreement but certain conditions referred in Article 5 of the Paris Convention must also required to be complied with by the States imposing the Compulsory licensing provisions.

9.16 TERMINAL QUESTIONS

1) What is a sole license and how it is different from exclusive license?

2) Explain the types of intellectual property licenses?

3) What is purpose of compulsory license?

9.17 ANSWERS AND HINTS

Self Assessment Questions

1) Refer to Section 9.3

2) Refer to Section 9.4

3) Refer to Section 9.7

Terminal Questions

1) Refer to Section 9.8

2) Refer to Section 9.9

3) Refer to Section 9.10

ANNEXURE I

List of Countries Having Provisions for Compulsory License for Dependent Patents

Country	Compulsory Licensing : Dependent Patent
African Intellectual Property Organization (AIPO)	May be granted to the extent necessary to allow the later patentee to use his invention, (earlier patentee may cross license).
Albania	The patentee is granted a patent of dependence and may only practice the invention with the consent of earlier patentee.
Algeria	May be granted to the extent necessary to allow the later patentee to use his invention, (earlier patentee may cross license).
Argentina	Resolved by grants of patents of addition.
Austria	A compulsory license may be granted to a patentee of an invention of considerable commercial or industrial significance which cannot be worked without the use of the invention patented earlier. A cross license may be granted.
Barbados	If the invention is an important technological advance the Director of the Industrial Property Office may, if requested, grant a statutory license to prevent infringement of the earlier patent. A cross license may be granted.
Belgium	Compulsory license will be granted to the extent necessary to exploit the patented invention, patentee will receive adequate compensation in an amount fixed by either the parties or the Court.
Bulgaria	The patentee is granted a patent of dependence and may only practice the invention with the consent of earlier patentee.
China	Where the later patented invention is technically superior to an earlier patented invention, the junior patentee may obtain a compulsory license, senior patentee may obtain a cross license. **Note:** Documents must be given to the Patent Office showing that the entity requesting the compulsory license was unable to conclude a license contract with the patentee on reasonable terms.
Columbia	Owner may apply for a License of Authority.
Costa Rica	Both the junior and senior patentee may acquire a compulsory license if the licensee is required to work the patent industrially in Costa Rica.

Croatia	An application for compulsory license may be submitted 4 years after the filing date or 3 years after the registration date, (whichever is later), and may be granted if it is shown that the patent cannot be used without the license, and the invention represents a significant technical progress of special importance to the economy. A cross license is available to the Senior Patentee.
Cuba	If related to a technologically important accomplishment an obligatory license may be granted.
Czechoslovakia	The patentee is granted a patent of dependence and may only practice the invention with the consent of earlier patentee.
Denmark	Junior patentee may obtain a compulsory license, senior patentee may obtain a cross license.
Egypt	If working the invention is of great importance to the industry, and if the owner refuses to license on reasonable terms, a compulsory license may be granted. If the earlier patent is of greater importance, the earlier patentee may be granted a compulsory license.
El Salvador	Three years from grant or 4 years from application of the earlier patent, the junior patentee may obtain a non-exclusive compulsory license to the extent necessary to practice his invention, provided he can show the invention represents an important technological advance. The senior patentee may then obtain a cross license
France	Junior patentee may obtain a compulsory license, senior patentee may obtain a cross license.
Greece	May be granted to the extent necessary to allow the later patentee to use his invention, (earlier patentee may cross license).
Guatemala	Owner may apply for a License of Authority. Compulsory license will be granted to the extent necessary to exploit the patented invention, patentee will receive adequate compensation in an amount fixed by either the parties or the Court.
Hungary	Compulsory license will be granted to the extent necessary to exploit the patented invention; patentee will receive adequate compensation in an amount fixed by either the parties or the Court.
Iceland	The patentee is granted a patent of dependence and may only practice the invention with the consent of earlier patentee.

India	May obtain a license, must cross license on reasonable terms.(see Section 91 given above).
Iraq	If working the invention is of great importance to the industry, and if the owner refuses to license on reasonable terms, a compulsory license may be granted. If the earlier patent is of greater importance, the earlier patentee may be granted a compulsory license.
Israel	May be granted to the extent necessary to allow the later patentee to use his invention (earlier patentee may cross license).
Italy	If concerning an important technological improvement a compulsory license may be granted, it may be granted on the condition of a cross license. **Note:** Both patents must actually be granted before compulsory licensing provisions may be initiated.
Japan	If needed to work the invention a compulsory license may be granted, the earlier patentee may obtain a cross license.
Korea, Republic of	If a patentee wishes to obtain a license and the other party refuses to grant such a license without cause, and if the invention covered by the junior patent constitutes a substantial technical advance as compared with the senior party's patented invention or registered utility model, then the patentee may demand a trial for granting a nonexclusive license within the scope of what is necessary to work the patented invention. A cross license may be granted.
Kuwait	If the invention is of great importance, a compulsory license may be granted.
Malaysia	If the invention is an important technical advance in relation to the invention claimed in the earlier patent, a compulsory license may be granted to the extent necessary to avoid infringement of the earlier patent.
Netherlands	Patentees are bound to license and cross license, but only to the extent required to use the licensee's patent. Patentee is not required to license a European patent until the period for opposition has ended. A compulsory license granted on the grounds of dependence shall not terminate if the dependent patent lapses through no fault of the owner.
New Zealand	Three years after the date of sealing a patent any person interested may obtain a compulsory license if the working of an invention which makes a substantial contribution to the art is hindered and if the patentee refuses to license the required patent. This may be subject to a requirement to cross license.

Nigeria	If the 2 inventions serve different industrial purposes a compulsory license may be granted to the extent required to practice the invention, if the industrial purposes are similar a cross license will be required.
Norway	Junior patentee may obtain a compulsory license, senior patentee may obtain a cross license.
Peru	A license may be granted to the extent required to practice the invention, the national office will fix the terms of the agreement.
Philippines	So long as the invention serves a different industrial purpose, or concerns an important technological improvement, a compulsory license may be granted to the extent required for working the invention.
Poland	May be granted if the compulsory license is needed to apply an invention subject to an earlier patent.
Russia	If the patentee may not use the invention, utility model, or industrial design without infringing the rights of another patentee, he has the right to require the latter to conclude the license agreement.
Slovenia	If the working of the later patented invention is of special importance for the economy or is in the public interest with respect to meeting the social needs of health service or national defense, then a compulsory license may be granted. If such a license is granted, a cross license may also be issued.
South Africa	Commissioner may grant a compulsory license, which may only be used to work the patent.
Spain	May be granted to the extent necessary to allow the later patentee to use his invention, so long as the invention has distinctive industrial objectives or represents considerable technical progress in comparison with the earlier patent. The compulsory license is only to be sufficient to allow working of the dependent invention. The earlier patentee may obtain a cross license.
Sudan	If the invention concerns an important technological improvement or will effect a different industrial purpose, a compulsory license may be granted.
Sweden	Junior patentee may obtain a compulsory license, senior patentee may obtain a cross license.
Switzerland	When the invention serves a different industrial purpose or represents a great advance, a compulsory license may be granted. If the inventions serve the same industrial purpose a cross license may be required.
Taiwan	If the invention is a manufacturing process which would promote the public welfare, the Process Patentee may

	ask the Patent Office to fix the appropriate compensation to permit the product to be processed through the patented process.
Tangier Zone	Junior patentee may obtain a compulsory license, senior patentee may obtain a cross license.
Thailand	If the invention is important, or can satisfy the people's need, if the right of another patentee will not be unreasonably damaged, and if the applicant cannot reasonably exercise his invention without the license, a license may be granted. **Note:** Applicants for the compulsory license must first attempt to seek licenses from the patentee before applying for same with the Director, General.
United Kingdom	Three years after the date of sealing a patent any person interested may obtain a compulsory license if the working of an invention which makes a substantial contribution to the art is hindered and if the patentee refuses to license the required patent. This may be subject to a requirement to cross license.
Venezuela	Applicant must prove the need to use the other patent, and prove that they were unable to obtain a license from the patent owner under reasonable conditions. The license will be nonexclusive and the licensee must pay the owner of the patent adequate compensation.
Yugoslavia (Serbia)	An application for compulsory license may be submitted 4 years after the filing date or 3 years after the registration date, (whichever is later), and may be granted if it is shown that the patent cannot be used without the license, and the invention represents a significant technical progress of special importance to the economy.

ANNEXURE II

List of Countries Having Provisions for Compulsory License of Patented Subject Matter

1. African Intellectual Property Organization (AIPO)
2. Algeria
3. Australia
4. Austria
5. Barbados
6. Belgium
7. Bolivia
8. Brazil
9. Bulgaria
10. Canada
11. Chile
12. China
13. Columbia
14. Croatia
15. Cuba
16. Czechoslovakia
17. Denmark
18. Ecuador
19. Egypt
20. El Salvador
21. Finland
22. France
23. Germany
24. Greece
25. Guatemala
26. Guyana
27. Honduras
28. Hungary
29. Iceland
30. India
31. Indonesia
32. Iraq
33. Ireland
34. Israel
35. Italy
36. Japan
37. Jordan
38. Korea, Republic of
39. Lesotho
40. Luxembourg
41. Malawi
42. Malaysia
43. Malta
44. Mexico
45. Monaco
46. Namibia
47. Netherlands
48. Nigeria
49. Norway
50. Pakistan
51. Paraguay
52. Peru
53. Philippines
54. Poland
55. Portugal
56. Romania
57. Russia
58. Slovenia
59. South Africa
60. Spain
61. Sri Lanka
62. Sudan
63. Sweden
64. Switzerland
65. Taiwan
66. Thailand
67. Turkey
68. United Kingdom
69. United States of America
70. Uruguay
71. Venezuela
72. Viet Nam
73. Yugoslavia (Serbia)
74. Zimbabwe

UNIT 10 PORTFOLIO DEVELOPMENT AND LICENSING/CROSS LICENSING

Structure

10.1 INTRODUCTION

Success of any high-tech company depends on its systematic and strategic patent portfolio development. A strong patent portfolio not only prove to be an effective tool in protecting the core technologies or core products and business practices of the company but also assist in enabling the company to force cross-licensing arrangements with competitors. This also helps in establishing strategic alliances with companies which supplements their technology supremacy interest. No doubt the IP based high-tech companies adopt defensive, offensive and cooperative approaches in the development of the patent portfolio. The objectives of obtaining patents differ for countries to countries. For instance the objectives of patents vary between the US and Europe and so are purposes of patent utilization. In the US the patent tactics have under gone a sea change during the last decades. Earlier patents were used for prevention of copying and blocking but now patents are being used for strategy implementation. In Europe however patents are still seen as legal tools. In US they are considered patents as strategic intellectual assets. In this unit we will study the IP strategies of the companies for development patent portfolio with particular emphasis on patenting tactics, licensing and cross licensing.

10.2 OBJECTIVES

After reading this unit, you will be able to:

- describe the benefits of patent portfolio;
- explain cross-licensing;
- discuss the patent tactics followed by big or small firms;
- describe a licence agreement is;
- explain the essential elements of a typical license agreement; and
- explain the structure and content of typical licence agreement.

10.3 PURPOSE OF PATENT PORTFOLIO

Purpose of developing strong and sturdy patent portfolio includes maintaining supra-competitive prices, generating license revenue, securing investment and financing, using as a shield, bullying, blocking and preemptive patenting, using as a substitute for nondisclosure agreements and for enhancing the company's image. In addition, instead of building a patent portfolio, a company may adopt a strategy for diminishing the risk of infringing on others' patents and avoiding the costs involved. The basic purpose of portfolio management is to use patents so that company's competitive advantage is enhanced and maintained. The approach also known as "no patents strategy" in reality form part of the overall patent strategy of the company. In fact negative decisions about patenting, licensing or asserting patent rights is also strategic patenting policy matter of a company. In such cases patents may form part of company's risk management strategy.

10.4 BENEFITS OF A PATENT PORTFOLIO

The patent portfolio are beneficial to companies as:

1) They brings a company more freedom to operate
2) They create better licensing and cross-licensing opportunities
3) They are dominant in influencing the business environment
4) They reduce over all costs
5) They facilitate standardisation of a technological field
6) They enhance the market value of the company
7) Larger the portfolio better the income
8) It has potential to protect company from infringement suits from competitors by representing a threat of the company a countersuit
9) They are attractive in seeking venture capital and finances
10) They pre-empt infringement proceedings and encourage negotiations for cooperation

Self Assessment Question **(Spend 3 minutes)**

1) Explain the benefits of patent portfolio.

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10.5 COMPANY-SPECIFIC PATENT STRATEGY

For many startup and small technology companies, especially in the high tech sector , the intellectual property (IP) is one of the most important assets .In many star up companies the patented invention serve as the foundation and first mover advantage for the company's business model. In other IP based companies patent portfolio is one of the important aspects of a company's ability to attract investors and allow the business to develop and introduce new products. Fob other companies it may serve as primary source of income generation through the licensing or sale. It may be noted that commercialization of information relating to the IP-protected products or services have significant impact on improving e the company's market share or profit margins, and maximizing the return for investors in the event of a sale, merger or acquisition, or even dissolution. But too many startup and small technology companies have used IP on ad-hoc basis rather than using it as a strategic part of their business model.

10.6 TYPES OF PATENT TACTICS

According to Soininen, patent tactics are basically divided into three categories: defensive, offensive, and transactional strategies.

Offensive patent Tactics

Offensive patent tactics refers to utilization of patents for direct revenues gains to a company. Under this patent strategy, firms seeks active utilization of patents in order to prevent other companies from imitating company's products and processes, and thus protecting its competitive advantage based typically on differentiation. Additionally offensive use of patents includes using patents for generating licensing revenues. The latter has become rather common in the ICT industry, particularly among US-based companies. The enforcer of patent does not necessarily require that the alleged infringer stops using the patented invention but offers a license. The companies that seek extra revenues in addition to those revenues that accrue from their products that are interested in improving their licensing programs. The companies that base their operations entirely on technology/ patent licensing have emerged using offensive patent tactics. An offshoot of this strategy resulted into development of Patent trolls. These companies actually do not have their own R&D department, but build patent portfolio by merely acquiring interesting patents, typically from bankrupt firms, and claim infringement.

Example

Hyperlink Patent

The British Telecom Plc a global giant company holding over 15000 patents adopted the offensive patent tactics to build a strong patent portfolio around the core technology of telecommunication. The interesting fact about difficulty in managing this kind of large portfolio became apparent only after the company realized that they have obtained a patent in UK and USA for use of hyperlink way back in 1986 . Hyperlink is used in every webpage for all internet pages for linking with other internet pages. By the time management realized their mistake it was too late as UK patent had already expired and only US patent was valid till 2006. However BT requested many Internet Service Providers to seek license from BT. When later refused BT sue one of the ISP named Prodigy Communications but did not succeed in impressing upon the court and lost the case. It is interesting to note that patent was issue to BT in 1989 when the Internet was not born. Perhaps unaware of the treasure it held BT allowed this goldmine patent to gather dust under the huge patent portfolio it held. This cases highlight the danger of losing sight of important patents when the large patent portfolio is established using offensive patent tactics.

Defensive patent Tactics

Defensive patent tactics refers to the utilization of patents for guaranteeing company's freedom to operate and innovate in certain markets. Patents are acquired and used for achieving more leverage against potential infringement claims. The hope is that a strong patent position would influence other companies not to claim patent infringement. It is also claimed that if a company infringes on someone's patents, its large patent portfolio may give that company an opportunity to offer something in return. Defensive patent strategy has become essential particularly in the US where the amount of granted and applied patents is constantly rising, and many companies use patents offensively. In addition, in the ICT sector, companies are often dependent on other companies' patents due to the fact that typical ICT products are essentially 'assembly based' and involve multiple patented inventions. According to a recent survey of US ICT sector companies it was found that it is practically not possible to be aware of all the field and granted patents so that a company could be sure that it does not infringe on anyone's patents.

Examples

Sildenafil Patent

Pfizer developed Sildenafil for the treatment of hypertension and angina. But during clinical trial it was observed that it could be useful for erectile dysfunction. Pfizer obtained patent for compound Sildenafil **(Viagra)** itself following defensive patent tactics and latter obtained second patent for the use of the compound for treatment of erectile dysfunction. The second patent was revoked by UK High Court in 2000 but main patent is still in force. This revocation will practically have no effect on the market of Sildenafil till the core patent expires in 2013.It is common for Pharma companies to file core patent for the New molecule and latter file patent applications for its process of manufacture, new uses and new formulations before the expiry of the original patent. Former practice is termed as defensive patent tactics and the latter is called as offensive patent tactics. The latter strategy is useful for the competitors also provided they are vigilant and obtain patents for the improvements before the original patentee.

Vacuum cleaner patent

Dyson the original inventor of the dual cyclone suction technology for vacuum cleaners patented the core product in many countries. Later obtained a patent for improved Root cyclone suction technology for vacuum cleaners. Dyson successfully sued the Hoovers for sale of the similar product under the name Triple Vortex vacuum for infringement of its patented improvement and received record damages of over £ 4 million. In this case the Dyson patent filling was defensive as it protected the core technology and its improvement also. Had Hoover being vigilant and used the offensive patent tactics and obtained patent for the improved Root Cyclone technology, the situation would have been different as Hoover would have prevented Dyson from developing the original concept of dual cyclones to incorporate a number of smaller cyclones to increased suction and even stopped them from selling the improved product after the expiry of the main patent.

Transactional patent Tactics

Transactional patent tactics refers to obtaining patents to attract financing from for investors and potential buyers. This in fact guide them in making investment in the company or purchasing it as patent portfolio is a dependable tools to secure good market positions. A good patent portfolio assists in finding partners or acquiring finances for the firms. Patents being public documents, facilitate companies in licensing negotiations. Patent holders' are in a better position to focus on the technology backed by patents more openly than companies that rely merely on trade secrets. This possibility for open discussion is an advantageous as many companies resist to sign a non-disclosure agreements (NDA) during early negotiations as they find NDA's would restrict their ability to utilize their own inventions. Transactional patent strategy is commonly adopted by small and start-up firms. Large companies also find patents portfolio useful in enhancing the image of firms as an innovative firms.

Self Assessment Question **(Spend 3 minutes)**

2) What are the different types of patent tactics?

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10.7 APPROACHES TO PATENT FILING

Defensive approach

Companies with limited financial resources normally adopt this approach where the time lag to catch the first mover advantage is large and the competitors are not likely to copy the core products of the company. These companies systematically develop their patent portfolio by:-

1) Filing patent applications to protect and expand their core technology base.

2) Adopting the practice of filing provisional patent applications to gain first mover advantage.

3) Adopting strategic publications means to publish various improvement features of the patented inventions

4) Filling patent applications for even the incremental innovations so as to prevent competitors from gaining improvement patents

5) Filing oppositions to grant the patent to block the competitor from using the core technologies.

6) Obtaining Freedom-to-operate (FTO) opinions from legal experts to ensure the company's ability to function in the marketplace in view of the patent rights of others.

Offensive approach

This type of approach the is normally adopted by companies having significant resources like staff and funds to create a new technology space and create wall of patent protection covering key differentiating features of the inventive products. It is necessary for reinforcement and establishment the brand competitiveness of key products and improvements. Additionally, key methods and processes of manufacturing, are required to be patented. With an offensive patent tactics in the position a firm can fight off competitors by an active utilization of patents. These companies systematically develop their patent portfolio by:-

1) Filing large number patent applications relating to improvement of core technology patent owned by them.

2) Filling every possible patent applications for incremental innovations to prevent competitors from gaining improvement patents.

3) Filing increment /improvement patent application on the patents owned by competitor patent to block the competitor from using the core technologies.

4) Filling increment /improvement patent application in order to "fence" or restrict the future mobility plans of the competitor.

5) Filling increment /improvement patent applications in order to obtain cross licenses.

'No patent' approach

Decision not to file a patent is also a patent tactics. Here the company opt the disclosure option to make the invention/improvement public to prevent the competition either to obtain patent or improve on the patented product. No patent approach is strategic approach as it would result in saving expenditure of a company. When a company decide not to file patents, it prefer publication route to put their inventions in public domain so that other are prevented from taking patents. This strategic approach save money when compared to a strategy where money is sunk in unutilized patents In other words it is not essential for accompany to obtain patents for it to have a patent strategy.

10.8 SOME WELL KNOWN PATENT TACTICS

We have observed that most of the firms adopt certain kind of patenting tactics. Some of these tactics are given below.

i) "Picket Fencing"

Some organisations resort to practice of filing patents on incremental/ advancements, in an effort to erect a fence around their basic patent to check and scare their competitors. Some other use the picket fence patents by the filing of numerous patent applications incremental to the patented invention of the competitors technology in order to "fence" or restrict his future mobility plans. Such organizations obtain patents on all commercially viable improvements or small incremental innovations cover the core technology of a competitor. In other words, putting a fence around the competitor patent to serve as a barrier to the effective use of the competitor's core technology. The owner of the picket fence patent is benefited as he will be in a convincing position to adduce a cross-license of patents to acquire the competitor's core technology required its own use.

For example, This practice is rampant in the field of biotechnology where the practice is to claim

1) New mAb technology (broad)

2) mAb CDR sequences (more narrow)

3) Specific mAb clones (most narrow)

Other examples can be found in patents relating to chemicals and pharmaceuticals where patents for new chemical entity is followed by patents on its salts and polymorphs or other forms of the active compounds.

Defense against the picket fence

This tactic to devalue a competitor's patent through "picket fence" is useful for defensive purpose as well. When on defensive the competitor seeks to surround the pioneering patent with many patents covering incremental innovations, to limit the freedom to operate or freedom to advance the technology along logical trajectories. In order to ward off competitors, the core tech company usually engage in making the information public by publishing technical disclosures. This in fact provides the most cost-effective protection against the picket fence. Public disclosure of technical information surrounding a core patent put a bar on subsequent patent on the surrounding technology. Thus a company retains the value of the core patent by rendering the surrounding technology unpatentable. For example, a company owning patent on a paint additive aggressively publishes technical disclosures on its second or subsequent use whenever it discovers it. Otherwise the company would soon find that its customers have patented many uses of the additive. Other customers would then be forced to find alternative additives for their own use, causing a decline in market share for the company's additive.

ii) Disclosure of Incremental improvements

This is a defensive approach where companies after the issue of core patent makes technical information on the further improvement having incremental value public. This disclosure not only work as tool that prevent obtaining of incremental patents by third party but also save the cost of patenting the noncore inventions. By this approach, the patentee of the core patent deliberately make noncore invention improvements into the public domain

which prevents others from patenting around the core patent as well as using the improved patented process or product. It was the larger firms like IBM, Motorola, and Siemens that made use of defensive publishing frequently. Prior to the year 2000 out of the 118000 disclosure in Research Disclosure, Delphion and IP.com 78% belonged to these firms.

iii) "Ad hoc" patenting

When an organisation small resources for financing R&D activity it resort to this strategy. This strategy is called *ad hoc* as need based efforts are made on *ad hoc basis* to protect one or more patents for an innovation as a special case. Such patent tactics is liable to face future problems as it leaves open wide possibilities to invent around their invention. This tactic is popular among small firms with limited resources. Small and medium size firms often lack any formal patent process. They usually manage their patents on an ad-hoc and opportunistic basis.

iv) "Sniper" strategy

Like ad hoc patenting, many firms use the "sniper" patenting tactics. Most of the big firms at times resort to this tactics as they rely on a few patents to cover their core technology. They do not rely on protecting all possible modifications or improvements of that core technology. This patent tactics some time prove to be risky particularly if the core patents are found wholly or partially invalid, and firm is left with no additional patents to cover improvements or modifications of the original technology. Another risk, which is inherent with this approach is the patented technology is likely become obsolete if it is not regularly upgraded.

v) "Shotgun" strategy

This patent tactics is most commonly followed by IT companies. According to this tactics, the firms go all the way to obtain as many patents as possible in a core field of technology. The basic purpose of this approach is to give an impression of minefields in area of technology as it is so littered with patents that it is practically impossible for third party to patent anything in the field of technology or avoid infringement of one or more of the existing patents

vi) "Blanketing" and "flooding"

This patent tactics is most commonly followed by biotech and chemical companies. This approach is similar to shotgun approach as in this case also the efforts are made to turn an patent area into a jungle or a minefield of patents but here the approach is more or less systemic as it involves bombarding of every possible step in a manufacturing process with patents. This strategy useful technologies like bio-tech where uncertainty is high particularly in relation to R&D directions that would be are fruitful or in situations where the economic importance patent is not certain.

vii) "Surrounding"

This most commonly used offensive patent tactics where third party interested in cross licensing the important central patent obtain patents to erect fence or surrounded by other patents, which may not be important but have potential to collectively block the effective commercialisation of the central

patent. This strategy is applied when an organisation does not intend to practice the patents, but it uses them as viable alternatives to block their competitors.

viii) "Prestige" Strategy

For big firms obtaining patent is mark of their prestige and leadership in field of technology they operate. These firms believes that strong patent portfolio would help their business and provide the driving push to stay competitive. This approach is applicable particularly to academic and research institutions who are known for filing patent applications to gain recognition of their research work. The researchers usually seek patents to gain recognition for their work and enhance the their prestige. The start-ups are also seeking patent protection for emerging technologies to woo potential investors and to gain recognition for the uniqueness of its technology in the market.

ix) "Scarecrow" Strategy

Some of the patentees do not have any intention to enforce their rights, but instead use it as "scarecrow" to keep competitors away the scope of their patent protection. The patent portfolio in such cases merely act as tool to keep competitors away from the patentees business. This strategy of often adopted by firms unaccustomed to large-scale patent filings and frequent patent disputes. Big companies are more likely to seek ways to design around the patent. The small companies on the contrary prefer to keep away from such activity to check investment in expensive design-around analysis.

10.9 LICENSING

If a company holds a large patent port folio, it would be practically not possible to utilise all the inventions. In such situations, the management take a decision to either weed out the unutilised patents and stop payment of annuities or make them available to other through license or sale. Licensing is also a patent tactics to earn revenue for the company. IBM, the worlds one of largest patent holding company, has reported to have earned over 1bn through license and sale of its IP assets. Patent rights licensed to a firms may vary on the following dimensions:

1) Nature of the technology
2) Exclusivity
3) Payment structure
4) Duration of patent protection
5) Field of use
6) Territory
7) Other restrictions

License Agreement

A license agreement is a contract between the patentee and the licensee. The terms of the contract lays down the scope of the permission to use the patented

invention. The licensee financially compensates the patentee for the use of the patent. Patentee is usually a passive partner in this legal relationship. Patentee does not necessarily participate in further development and marketing of the patented product. However, license agreements creates contractual rights, duties and obligations between the patentee and the licensee.

Contents of A License Agreement

A typical licence agreement has following essential clauses

- **Naming clause** – which establish the clear identity of the contracting parties with address
- **Background clause** – Which states the background of the deal and the purpose of the agreement
- **Definitions clause** – Clearly define the terms used in the agreement. It also state the present and future patents rights associated patent under license.
- **Grant clause** – This clause specify the type of licence (exclusive or non exclusive), field (where applicable),territorial limits, sub-licensing rights
- **Consideration clause** – Which states quantum of fixed payments (upfront, milestones, annual payments) and running royalties with anti stacking provision clause (if applicable)
- **Payments clause** – States the currency and exchange rates and timing and mode of payments
- **Accounting clause** – which states the timing, procedure and form of accountings
- **Books of Accounting and Audits clause** – provides for the procedure relating to form and deposition of books of accounts; timing and procedure of audits; confidentially clause and penal provisions for errors in payments made
- **Registration of license Clause** – Records signature of the parties to the agreement and identify who will pay registration costs
- **Patent Rights related clause** – for identification of who will prosecute / maintains patents and pay costs involved related thereto; stating duty to cooperate and report the status of patent rights
- **Further proceeding clause** – states right to bring action or defend patents and duty to keep inform
- **Confidentiality clause** – Specify what is confidential and exceptions and the period of confidentiality
- **Guaranties and Warranties clause** – stating power and authority to enter into agreement; approvals and consents obtained; passion/ownership of patent rights; no known defects in patent right and further assurance.
- **Termination clause** – which states ground and time for termination of agreement; and lay dawn mechanism to cure breaches
- **Notices** – form and procedure

- **Miscellaneous clause** – contain provisions relating to waiver; Force Majeure; assignablity; and loss of license for validity challenges
- **Governing Law** – identify the applicability of governing law
- **Jurisdiction clause** – Applicable courts
- **Terms and effective date** – of entry into force of the agreement

10.10 CROSS LICENSING

In patent law, a cross-licensing is a licensing agreement according to which two or more parties grant a license to each other for the exploitation of the subject-matter claimed in one or more of the patents each owns. The necessity of cross licensing is inevitable as the patents that each party holds covers different essential aspects of a given commercial product. This particularly is more import if the commercial product is basically an assemble product .Cross-licensing is patent tactics wherein companies exchange licenses to allow mutual use of patented technology. There are number of reason when companies adopt this patent tactics. Primarily companies resort to cross licensing to pre-empt any infringement suit against them. Some companies find it more convenient than inventing around the original patent. By cross-licensing the patented product, companies save themselves from the risk of patent infringement or the risk of 'reinventing the wheel'. The benefit of cross licensing are significant in development of new and emerging technologies.. In other words by cross licensing, each party is free bring the commercial product to market. In cross licensing neither of party pays any royalties to the other party. A cross-licensing agreement is a contract between two or more parties where each party grants rights to their intellectual property to the other parties. Sample of this kind of agreement is given in Annexure I.

Example:

Auto Industry

Without patent cross-licensing in the auto industry, the production of generic parts would not have been possible. Emergence of ancillary industries in auto mobile sector resulted in cutting down costs thus giving freedom to users of automobiles to purchase a wider range of products for maintenance and service.

Cross licensing between Microsoft and JVC

Microsoft Corp. and Victor Company of Japan Ltd. (JVC) have reported to have signed a patent cross-licensing agreement to further the development of each company's current and future product lines, which will expand their technological innovation with mutual Innovation and collaboration. This is also seen as an attempt to eliminate the risk of infringement suits and to share technology for the benefit of customers and consumers.

Benefits of Cross-licensing

1) Cross-licensing contribute to faster development of innovation
2) It is beneficial to both the companies which provide access to materials and companies which are working on it to produce the final product
3) It relive the companies from the pains of infringement suits
4) It frees up inventors to develop new and better products

5) It facilities two companies to jointly collaborate on a project and gain access to all the components essential for the success of the project

6) Cross licensing facilitate sharing of technology which will improve the industry as a whole

7) Cross licensing promote formation of patent pool and establishment of standards for particular industry

Drawbacks of Cross-licensing

The major drawback of cross-licensing is that it can create barriers to new entrant the field. The newcomer must pay substantial licensing costs to all cross-licensed patent holders if he wish gain access to technology used in the industry. Government takes legislative measure to prevent formation "patent thicket" which makes it extremely hard to innovate and invent further in the field. Example US Anti-trust Law, Indian Competition law.

10.11 SUMMARY

If patents are perceived as an instrument for protection on one hand, they on the other hand are seen as effective tool for 'research and innovation' support and strategy implementation. Although the strategic aspects of patenting favors creation of a strong patent portfolio but many companies fails to turn their patent portfolios into actual profit. It is partly attributed to high cost of patenting and partly due to inherent uncertainties relating to value of a patent. The large number of useful R&D results often creates flood of patenting activity. Good patents often get lost in large patent portfolio and bad patents are not removed. Whilst big firms follow various patent tactics for optimum protection, however these tactics often proves to be quite expensive for a SME. Therefore, it is essential to adopt a patent tactics which is cost-effective. The best patent portfolio management strategy is one which is commercially realistic and maintain a delicate balance between the "all eggs in one basket" approach and "patent anything and everything", approach. Patent strategy is company-specific and it never fits into only one category. Practically speaking companies' may adopt patent strategies which are offensive or defensive, active or passive, adaptive or static depending upon the nature of technology involved. In general, when faced with a fundamental patent of another for a new technology, the impulsive firms strategy is to file patent applications on every conceivable improvement so that as the technology develops, the competitor will not be able to improve upon the original invention without obtaining a license. In any case patent strategy is in variably directed towards either generating more revenue or saving expenditure. The money so saved may be invested in R&D and development of strong patent portfolio.

10.12 TERMINAL QUESTIONS

1) What are the essential elements of typical license agreement?

2) What is cross licensing? Explain with example its benefits and drawbacks.

3) Write short notes on

   a) Picket fencing

   b) Blanketing and "flooding"

10.13 ANSWERS AND HINTS

Self Assessment Questions

1) Refer to Section 10.4

2) Refer to Section 10.6

Terminal Questions

1) Refer to Section 10.9

2) Refer to Section 10.10

3) a) Refer to Section 10.8

   b) Refer to Section 10.8

ANNEXURE I

Sample of Patent Cross License agreement

[This is only a sample agreement students are advised to collect more such agreements for better understanding]

LICENSE AGREEMENT ("Agreement") dated

("Agreement Date") between INTERNATIONAL BUSINESS MACHINES CORPORATION, a New York corporation ("IBM"), and INTERGRAPH CORPORATION, a Delaware Corporation ("INTERGRAPH").

Each of the parties (as "Grantee") desires to acquire a nonexclusive license under patents of the other party (as "Grantor"). In consideration of the premises and mutual covenants herein contained, IBM and INTERGRAPH agree as follows:

Section 1. Definitions

1.1 "Information Handling System" shall mean any instrumentality or aggregate of instrumentalities primarily designed to compute, classify, process, transmit, receive, retrieve, originate, switch, store, display, manifest, measure, detect, record, reproduce, handle or utilize any form of information, intelligence or data for business, scientific, control or other purposes.

1.2 "IHS Product" shall mean an Information Handling System or any instrumentality or aggregate of instrumentalities (including, without limitation, any component, subassembly, computer program or supply) designed for incorporation in an Information Handling System. Any instrumentality or aggregate of instrumentalities primarily designed for use in the fabrication (including testing) of an IHS Product shall not be considered to be an HIS Product.

1.3 "Licensed Patents" shall mean all patents, including utility models and typeface design patents and registrations (but not including any other design patents or registrations):

(a) issued or issuing on patent applications entitled to an effective filing date prior to .....(date) ; and

(b) under which patents or the applications therefor a party hereto or any of its Subsidiaries has as of the Agreement Date, or thereafter obtains, the right to grant licenses to Grantee of or within the scope granted herein without such grant or the exercise of rights thereunder resulting in the payment of royalties or other consideration by Grantor or its Subsidiaries to third parties (except for payments among Grantor and its Subsidiaries, and payments to third parties for inventions made by said third parties while employed by Grantor or any of its Subsidiaries).

Licensed Patents shall include said patent applications, continuations-in-part of said patent applications, and any patents reissuing on any of the aforesaid patents.

1.4 "Licensed Products" shall mean either IBM Licensed Products or INTERGRAPH Licensed Products as the context indicates.

1.5 "IBM Licensed Products" shall mean IHS Products and any combination thereof. Any such combination shall be considered an IBM Licensed Product even though its elements are leased, sold or otherwise transferred at different times.

1.6 "INTERGRAPH Licensed Products" shall mean IHS Products and any combination thereof. Any such combination shall be considered an INTERGRAPH Licensed Product even though its elements are leased, sold or otherwise transferred at different times

1.7 "Subsidiary" of a party hereto or of a third party shall mean a corporation, company or other entity:

(a) more than fifty percent (50%) of whose outstanding shares or securities (representing the right to vote for the election of directors or other managing authority) are, now or hereafter, owned or controlled, directly or indirectly, by a party hereto or such third party, but such corporation, company or other entity shall be deemed to be a Subsidiary only so long as such ownership or control exists; or

(b) which does not have outstanding shares or securities, as may be the case in a partnership, joint venture or unincorporated association, but more than fifty percent (50%) of whose ownership interest representing the right to make the decisions for such corporation, company or other entity is now or hereafter, owned or controlled, directly or indirectly, by a party hereto or such third party, but such corporation, company or other entity shall be deemed to be a Subsidiary only so long as such ownership or control exists.

1.8 "Authorized Assembler" shall mean a third party that, pursuant to a written contract with a Grantee, assembles Grantee's Licensed Products, in accordance with written specifications provided by said Grantee, for sale under Grantee's brand nam

1.9 "Effective Date" shall mean .....

Section 2. Grant of Rights

2.1 IBM, on behalf of itself and its Subsidiaries, grants to INTERGRAPH, a nonexclusive and worldwide license under IBM's Licensed Patents:

(a) to make (including the right to use any apparatus and practice any method in making), use, import, offer for sale, lease, license, sell and/or otherwise transfer INTERGRAPH Licensed Products; and

(b) to have INTERGRAPH Licensed Products made by another manufacturer for the use, importation, offer for sale, lease, sale and/or other transfer by INTERGRAPH only when the conditions set forth in Section 2.2 are met

A particular Licensed Product shall be licensed under only those of IBM's Licensed Patents which, but for the license granted herein, would have been infringed (including contributory infringement) if INTERGRAPH had made, used, imported, offered for sale, leased, sold and/or otherwise transferred such product in the country where such Licensed Patents exist

The license granted by IBM to INTERGRAPH is fully paid up.

2.2 The license granted in Section 2.1(b) to INTERGRAPH to have products made by another manufacturer:

(a) shall only apply to products sold to INTERGRAPH after the Agreement Date;

(b) shall only apply when the designs, working drawings, and/or detailed

specifications for such INTERGRAPH Licensed Products originated with and were designed by INTERGRAPH (either solely or jointly with one or more third parties) and that such designs are in sufficient detail that no substantial additional design is required by the manufacturer;

(c) shall only be under claims of IBM's Licensed Patents, the infringement of which would be necessitated by compliance with such specifications; and

(d) shall not apply to (i) any methods used, or (ii) any products in the form manufactured or marketed, by said other manufacturer prior to INTERGRAPH's furnishing of said specifications

Unless INTERGRAPH informs IBM to the contrary, INTERGRAPH shall be deemed to have authorized said other manufacturer to make INTERGRAPH's Licensed Products under the license granted to INTERGRAPH in this section when the conditions specified in this Section 2.2 are fulfilled. In response to a written request identifying a product and a manufacturer, INTERGRAPH shall in a timely manner inform IBM of the quantity of such product, if any, manufactured by such manufacturer pursuant to the license granted in Section 2.1(b).

2.3 Intergraph Properties Company, Inc.,Intergraph Hardware Technologies, Inc., and Intergraph Software Technology Company Inc. (hereinafter collectively referred to as "COMPANIES") and INTERGRAPH, each on behalf of itself and its Subsidiaries grants IBM a nonexclusive and worldwide license under INTERGRAPH and COMPANIES Licensed Patents

(a) to make (including the right to use any apparatus and practice any method in making), use, import, offer for sale, lease, license, sell and/or otherwise transfer IBM Licensed Products; and

(b) to have IBM Licensed Products made by another manufacturer for the use, importation, offer for sale, lease, sale and/or other transfer by IBM only when the conditions set forth in Section 2.4 are met

A particular Licensed Product shall be licensed under only those of INTERGRAPH and COMPANIES Licensed Patents which, but for the license granted herein, would have been infringed (including contributory infringement) if IBM had made, used, imported, offered for sale, leased, sold and/or otherwise transferred such product in the country where such Licensed Patents exist.

2.4 The license granted in Section 2.3(b) to IBM to have products made by another manufacturer:

(a) shall only apply to products sold to IBM after the Agreement Date;

(b) shall only apply when the designs, working drawings, and/or detailed specifications for such IBM Licensed Products originated with and were designed by IBM (either solely or jointly with one or more third parties) and that such designs are in sufficient detail that no substantial additional design is required by the manufacturer;

(c) shall only be under claims of INTERGRAPH and COMPANIES Licensed Patents, the infringement of which would be necessitated by compliance with such specifications; and

(d) shall not apply to (i) any methods used, or (ii) any products in the form manufactured or marketed, by said other manufacturer prior to IBM's furnishing of said specifications.

Unless IBM informs INTERGRAPH to the contrary, IBM shall be deemed to have authorized said other manufacturer to make IBM's Licensed Products under the license granted to IBM in this section when the conditions specified in this Section 2.4 are fulfilled. In response to a written request identifying a product and a manufacturer, IBM shall in a timely manner inform INTERGRAPH of the quantity of such product, if any, manufactured by such manufacturer pursuant to the license granted in Section 2.3(b).

2.5 Under this Agreement, COMPANIES shall be considered as Subsidiaries of INTERGRAPH, notwithstanding that they are Grantors under Section 2.3. COMPANIES shall not be considered to satisfy the term party or parties for any other section of this Agreement. For the avoidance of doubt INTERGRAPH Licensed Patents shall include all patents of COMPANIES as defined by Section 1.3.

2.6 Except as expressly provided herein, no license or immunity is granted under this Agreement by either party, either directly or by implication, estoppel or otherwise to any third parties acquiring items from either party for the combination of such acquired items with other items (unless such other items are acquired from either party hereto).

2.7 Subject to Section 2.8, the licenses granted herein shall include the right of each party to grant sublicenses to its Subsidiaries existing on or after the Agreement Date, which sublicenses may include the right of sublicensed Subsidiaries to sublicense other Subsidiaries of said party. Each sublicensed Subsidiary shall be bound by the terms and conditions of this Agreement, other than Section 4 and 5, as if it where named herein in the place of the party with whom the sublicense originated. No sublicense shall be broader in any respect at any time during the life of this Agreement than the license held at that time by the party that granted the sublicense

2.8 A sublicense granted to a Subsidiary shall terminate on the earlier of:

(a) the date such Subsidiary ceases to be a Subsidiary; and

(b) the date of termination or expiration of the license of the party or Subsidiary that granted the sublicense.

If a Subsidiary ceases to be a Subsidiary and holds any patents under which a party hereto is licensed, such license shall continue for the term defined herein.

2.9 In the event that neither a party nor any of its Subsidiaries has the right to grant a license under any particular Licensed Patent of the scope set forth in Section 2, then the license granted herein under said Licensed Patent shall be of the broadest scope which said party or any of its Subsidiaries has the right to grant within the scope set forth above.

2.10 If, after the Agreement Date, a party or any of its Subsidiaries("Acquiring Party") either acquires an entity or acquires substantially all of the assets from an entity, and said entity is, immediately prior to the date of acquisition, licensed by the other party ("Licensor") under one or more Licensed Patents through an existing agreement pursuant to which royalties or other payments are made by said entity to Licensor, then the license and other rights granted herein to the

Acquiring Party with respect to said Licensed Patents shall apply to products manufactured by said entity or through the use of said assets, provided that such royalties or other payments shall continue to be made by the Acquiring Party or said entity to the Licensor with respect to such products notwithstanding that the Acquiring Party may have been licensed for the same Licensed Products before the acquisition.

2.11 If, subsequent to the Agreement date, a party (the "Transferring Party") either: (i) transfers a product line to a third party without transferring a Subsidiary to said third party; or (ii) spins off a Subsidiary(either by disposing of it to a third party or in some other manner reducing ownership or control so that the spun-off entity is no longer a Subsidiary); and if such transfer or spin off includes at least one marketable product in a product line and tangible assets having a net value of at least ———— US dollars then after written request to the other party hereto jointly by the Transferring Party and either: (i) such third party in the case of a transfer; or (ii) such ex-Subsidiary in the case of a spin off; and where, in either case, such request is within sixty (60) days following the transfer or spin off, the other party hereto shall grant a royalty-free license (under the same terms as the license granted to the Transferring Party herein) under its Licensed Patents for the field (as such field is defined between the Transferring Party and the other party or ex-Subsidiary) of such product line to such third party or such ex-Subsidiary, (the "Recipient") provided that:

(a) such field shall not be defined more broadly than appropriate to cover the particular product line being transferred or spun off, including extensions thereto based on the same technology;

(b) the license granted shall be limited in the twelve (12) months immediately following such transfer or spin off to a volume of licensed products having an aggregate selling price equal to no more than the aggregate selling prices of such products by said one party in the twelve (12) months preceding such transfer or spin off plus ten percent (10%); and shall be limited, in each of the successive twelve-month periods following such transfer or spin off, to a volume of licensed products having an aggregate selling price equal to no more than the limit for the immediately preceding twelve-month period plus ten percent (10%);

(c) the Recipient shall grant to such other party a royalty-freelicense (under the same terms as the license granted to such other party herein) under all Recipient Patents for all products licensed herein to such other party on the date of the product line transfer or spin off. "Recipient Patents" shall mean all patents throughout the world under which, at any time commencing with the date of the product line transfer or spin off, the Recipient or any of its Subsidiaries has the right to grant such licenses;

(d) this Section 2.11, Section 3, and Section 4 shall be omitted from the license granted to the Recipient; and

(e) the license granted to the Recipient shall terminate if the license granted to the Transferring Party terminates or is terminated for any reason.

Notwithstanding the foregoing provisions of this Section 2.11, the transfer by one party of substantially all of its assets to any third party shall not be considered to be a transfer of a product line or a spin off of a Subsidiary under this Section 2.11, and the other party shall have no obligation to grant a license under its Licensed Patents to such third party as a result of such transfer.

2.12 A product which, if assembled by Grantee, would be licensed to Grantee hereunder shall also be licensed hereunder if assembled by an Authorized Assembler, provided the product is sold under Grantee's brand name.

2.13 If, pursuant to a license granted by Grantee to a third party, copies are made of all or part of a computer program provided by Grantee, such copies will be treated for purposes of this Agreement as if they had been transferred directly by Grantee, provided:

(a) such copies are transferred or used by such third party as products of Grantee; and

(b) there is an accounting back to Grantee for all copies so made.

2.14 Confidential Information

Section 3. Releases

3.1 Each party (as "Releasor") on behalf of itself and its Subsidiaries which are Subsidiaries on the Agreement Date, irrevocably releases the other party, its Subsidiaries which are Subsidiaries on the Agreement Date and its and their respective customers from any and all claims of infringement of Releasor's Licensed Patents which claims are based on acts prior to the Effective Date, which, had they been performed after the Effective Date would have been licensed under this Agreement.

The release contained herein shall not apply to any person other than the persons named in this Section 3 and shall not apply to the manufacture of any items by any person other than the parties and their Subsidiaries. The releases granted shall be effective immediately.

Section 4. Payment

4.1 IBM shall pay to INTERGRAPH the total sum of ———US Dollars in the following installments:

(a) .....US dollars within 30 days after signing of this Agreement; and

(b) ..... US dollars on or before .....

Section 5. Term of Agreement; Acquisition of a Party

5.1 The term of the licenses granted under this Agreement shall be from the Effective Date until the expiration of the last to expire of the Licensed Patents, unless earlier terminated under the provisions of this Agreement.

5.2 If one party (the "Acquired Party") is acquired by a third party:

(a) the Acquired Party shall promptly give notice of such acquisition to the other party; and

(b) the license granted to the Acquired Party and all sublicenses (if any) granted to the Acquired Party's remaining Subsidiaries shall automatically become limited to only those products manufactured and marketed by said Acquired Party prior to said acquisition

Section 6. Means of Payment and Communication

6.1 Payment shall be made by electronic funds transfer. Payments shall be deemed to be made on the date credited to the following account:

[Account Number details]

6.2 Notices and other communications shall be sent by facsimile or by registered or certified mail to the following addresses and shall be effective upon mailing:

For IBM:

Name

Address

For INTERGRAPH:

Name

Address

6.3 A License Reference Number will be assigned to our agreement upon execution. This number should be included in all communications, including wire transfer payments, royalty reports, tax credit certificates, letters, faxes and E-Mail messages

Section 7. Miscellaneous

7.1 Neither party shall assign or grant any right under any of its Licensed Patents unless such assignment or grant is made subject to the terms of this Agreement.

7.2 Neither party shall assign any of its rights (other than the right to receive payments) or delegate any of its obligations under this Agreement. Any attempt to do so shall be void. However, a party which undergoes reorganization may assign such rights and delegate such obligations to its legal successor, provided that after the reorganization, the successor and its Subsidiaries will have essentially the same assets as such party and its Subsidiaries had prior to the reorganization.

7.3 Except as otherwise agreed in writing, neither party shall use or refer to this Agreement or any of its provisions in any promotional activity.

7.4 Each party represents and warrants that it has the full right and power to grant the license and release set forth in Sections 2 and 3. Each party(as a Grantor) further represents and warrants that prior to the Agreement Date, it has informed the other party of any patent originating from inventions made by employees of Grantor or its Subsidiaries, which patent is or was owned by Grantor or its Subsidiaries as of the Effective Date, and which patent, owing to prior arrangements with third parties, does not qualify as a Licensed Patent of Grantor under which licenses are granted in Section 2. A listing of such patents owned by IBM is attached as Attachment A. Neither party makes any other representation or warranty, express or implied, nor shall either party have any liability in respect of any infringement of patents or other rights of third parties due to the other party's operation under the license herein granted.

7.5 Nothing contained in this Agreement shall be construed as conferring any rights by implication, estoppel or otherwise, under any non-patent intellectual

property right, or any patents or patent applications, other than the Licensed Patents. Neither party is required hereunder to furnish or disclose to the other any technical or other information (including copies of Licensed Patents) except as specifically provided herein.

7.6 Neither party shall have any obligation hereunder to institute any action or suit against third parties for infringement of any of its Licensed Patents or to defend any action or suit brought by a third party which challenges or concerns the validity of any of its Licensed Patents. Neither party shall have any right to institute any action or suit against third parties for infringement of any of the other party's Licensed Patents. Neither party, nor any of its Subsidiaries, is required to file any patent application, or to secure any patent or patent rights, or to maintain any patent in force.

7.7 Each party shall, upon a request from the other party sufficiently identifying any patent or patent application, inform the other party as to the extent to which said patent or patent application is subject to the licenses and other rights granted hereunder. If such licenses or other rights under said patent or patent application are restricted in scope, copies of all pertinent provisions of any contract or other arrangement creating such restrictions shall, upon request, be furnished to the party making such request, unless such disclosure is prevented by such contract, and in such event, a statement of the nature of such restriction shall be provided.

7.8 If a third party has the right to grant licenses under a patentto a party hereto (as a "Licensee") with the consent of the other party hereto, said other party shall provide said third party with any consent required to enable said third party to license said Licensee on whatever terms such third party may deem appropriate. Each party hereby waives any right it may have to receive royalties or other consideration from said third party as a result of said third party's so licensing said Licensee within the scope of the licenses granted under Section 2 of this Agreement.

7.9 This Agreement shall not be binding upon the parties until it has been signed hereinbelow by or on behalf of each party. No amendment or modification hereof shall be valid or binding upon the parties unless made in writing and signed as aforesaid, except that INTERGRAPH may amend Section 6.1 and either party may amend its address in Section 6.2 by written notice to the other party.

7.10 The Licensed Products of a party to this Agreement, which are leased, sold or otherwise transferred by such party or its sublicensed Subsidiary during the term of this Agreement, shall be considered to be licensed under any of the others party's Licensed Patents which at any time covers such Licensed Products, notwithstanding that the Licensed Product has been re-leased, re-sold or re-transferred by any entity in the same or another country.

7.11 If any section of this Agreement is found by competent authority to be invalid, illegal or unenforceable in any respect for any reason, the validity, legality and enforceability of such section in every other respect and the remainder of this Agreement shall continue in effect so long as the Agreement still expresses the intent of the parties. However, if the intent of the parties cannot be preserved, this Agreement shall be either renegotiated or terminated.

7.12 This Agreement shall be construed, and the legal relations between the parties hereto shall be determined, in accordance with the law of the State of New York, USA, as such law applies to contracts signed and fully performed in New York.

7.13 The headings of sections are inserted for convenience of reference only and are not intended to be a part of or to affect the meaning or interpretation of this Agreement.

7.14 Each party agrees not to disclose this Agreement to any third party (other than its Subsidiaries) without the prior written consent of the other party. This obligation is subject to the following exceptions

(a) disclosure is permissible if required by government or court order, provided the party required to disclose first gives the other prior written notice to enable it to seek a protection

(b) disclosure is permissible if otherwise required by law;

(c) disclosure is permissible if required to enforce rights under this Agreement;

(d) each party may use similar terms and conditions in other agreements; and

(e) each party may disclose this Agreement or its contents to the extent reasonably necessary, on a confidential basis, to its accountants, attorneys, financial advisors, its present or future providers of venture capital and/or potential investors in or acquirers of such party or product lines which qualify under Section 2.8.

This Agreement and its attachments embody the entire understanding of the parties with respect to the Licensed Patents, and replaces any prior oral or written communications between them.

Agreed to: INTERGRAPH CORPORATION	Agreed to: INTERNATIONAL BUSINESS MACHINES CORPORATION
By:	By:
Name:	Name:
Title:	Title:
Date:	Date:

As Grantors:

Agreed to: INTERGRAPH CORPORATION	Agreed to: INTERGRAPH CORPORATION
By:	By:
Name:	Name:
Title:	Title:
Date:	Date:

ATTACHMENT A

List of patents owned by IBM which are not licensed patents

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