

WIPO Summer School Reading Material

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Introduction

The WIPO Worldwide Academy was founded in March 1998 within the World Intellectual Property Organization (WIPO) in response to demand for knowledge and skills in intellectual property (IP). It serves as a center of excellence in teaching, training and research in IP. Its programs cater to different target audiences - inventors and creators, business managers and IP professionals, policy makers and government officials of IP institutions, diplomats, students and teachers of intellectual property and the civil society.

Its objectives are achieved through five core programs - professional training, distance learning, policy development, teaching and research, education and degree. The tailor-made programs, including the summer school; and its distance learning with more than 82,000 participants since its inception in 1999, benefit large numbers of people from all walks of life.

The 2008 summer school programs were offered at several locations outside of WIPO Headquarters in Geneva for the first time (in Croatia, Mexico, Republic of Korea and Thailand). The programs attracted larger audiences in the world and were aimed at providing the highest possible quality and the most updated courses of various components about IP.

The WIPO Worldwide Academy used its vast experience and global perspectives of IP in establishing a unique program for the summer school. Its approach is international, inter-disciplinary and interactive. The curriculum of the summer school program contains valuable and creative ideas as well as most visionary and updated analysis of the current evolution of IP systems.

This document has been prepared for students as a supplementary document to papers and presentations which the core faculties will use in the class in the hope that students could grasp general thoughts about each topic and could further study certain issues of interest in IP outside classroom teaching.

In each chapter of this document, a recent publication of WIPO Worldwide Academy, "Teaching of Intellectual Property, Principles and Methods" (published by Cambridge University Press in May 2008) and recommendations made by the most eminent professors of IP were also taken into account.

IP will continue to evolve and this document is expected to be updated each year. Your comments and suggestions should also enhance the quality of this document. Any textual proposals about the content of this textbook could be made to the coordinator for the summer school program at summerschool.academy@wipo.int

Please enjoy a most stimulating and exciting two weeks at the summer school!

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Chapter 1

The Role of Intellectual Property for Development and Prosperity

Can Intellectual Property (IP) Contribute to Economic Development?

For many years, economists have tried to provide an explanation as to why some economies grow fast while others do not; in other words, why some countries are rich and others poor. It is generally agreed that knowledge and inventions have played an important role in recent economic growth. The renowned economist Paul Romer suggests that the accumulation of knowledge is the driving force behind economic growth. For countries to promote growth, his theory goes, their economic policies should encourage investment in new R&D and subsidize programs that develop human capital.

This can be seen in the economic growth achieved by some countries in the 1990's. Rapid knowledge creation, including the emergence of new technologies, resulted in policy changes regarding IP and the adoption of new knowledge-asset management practices. One of the consequences of the emerging importance of IP and the new pattern of global trade that started in the beginning of the 1990s was the forging of a deliberate connection between the two. Some developed countries began to use trade measures to curb piracy of IP rights abroad. Among other things, this led to the inclusion of the Agreement on the Trade-Related Aspects of Intellectual Property Rights (TRIPs) as one of the World Trade Organization (WTO) agreements resulting from the multilateral trade negotiations under the Uruguay Round.

In the 1990s, an increasing number of policy-makers in emerging economic powers recognized the important role of the IP system in the institutional infrastructure for encouraging private investment in research and development (R&D), especially in the industrial and scientific fields. Many studies suggest a healthy IP system as a key element in encouraging foreign direct investment (FDI).

IP; hidden value

Intellectual assets are gaining ground as a measure of corporate viability and future performance. In 1982, some 62 per cent of corporate assets in the United States were physical assets, but by 2000, that figure had shrunk to a mere 30 per cent. In Europe, at the beginning of the 1990s, intangible assets accounted for more than a third of total

assets and as early as 1992, in the Netherlands, accounted for more than 35 per cent of total public and private investments.

A recent study shows that, on average, 40 per cent of the value of a company – that tied up in its intangible assets - is not shown in any way on its balance sheet. For this reason, IP is sometimes referred to as “hidden value”. Whether hidden or expressly valued, it is now clear that patents, copyright and related rights, trademarks, geographical indications and trade secrets are significant contributors to enterprise value.

IP in Business

IP is now one of the most valuable, or often the most valuable, asset in commercial transactions, whether in licensing agreements, manufacturing, purchase or distribution agreements, or mergers and acquisitions. Licenses to use patents, copyrighted material or trademarks are often combined with transfer of know-how in the form of training, and are an increasingly important element of such transactions.

The notion that the IP system confers exclusive rights that are exercised by blocking competitors is increasingly being disproven—in practice, IP is used as often to license products and technologies as to prohibit others from using them. These licenses provide royalty revenues to the owners of the IP, and distribute products and technologies to licensees who might not otherwise have had access to them. In such transactions, the licensees may also gain rights to create improvements or derivative works and to develop their own IP assets, which can then be cross-licensed or licensed to others. This creates a very productive cycle of invention and business transaction.

Knowledge-based Economy and IP Management

Because of the value of IP, IP management is becoming a major element in corporate business management. IP managers help to accumulate hefty corporate IP asset portfolios, for use in mergers and acquisitions, joint ventures, cooperative R&D agreements, and licensing agreements, in much the same way as product managers help to build up product portfolios. IP asset portfolios are developed strategically, targeting cluster areas based on product and technology markets and cross-licensing opportunities. Companies are forging alliances with each other in order to heighten the value of their IP assets and to obtain mutually beneficial competitive advantages through cross licensing. Often such alliances will give the companies involved substantially increased clout in their particular field of technology, or enable them to support technological standards in their particular field.

IP and Global Agenda for Sustainable Development

The international community has made a firm commitment to creating a more peaceful, prosperous and democratic world and to undertake concrete measures to continue finding

ways to achieve the United Nations (UN) Millennium Development Goals (MDGs) with deadline set for 2015.

In the last century, it became clear that development depends on the existence of reliable institutions within which human beings think, interact and carry on business, and that one of the essential elements supporting such institutions is property rights. In this present century, among such property rights, IP rights are gaining increasing importance as our activities become increasingly knowledge-driven. Now, more than ever, our development depends on whether and how our intellect will be expressed and respected in property rights, and how the fruit of our intellectual activities – the results of innovation and creativity – will be used and disseminated in society. Our future, our security and our well-being, lie in our heads – and not only in what used to be the formula for survival: land, labor and capital.

Innovation and creativity have been much more stimulated in this knowledge-based and information-rich century than in previous ones, thanks in part to the physical and virtual networks that allow increasingly easy movement of people, goods and information within and among nations.

One of the weakest links in development strategies is the one between development, on one hand, and innovation, creativity and IP, on the other. Many developing countries have not yet given sufficient priority to mobilizing their domestic intellectual resources or to strengthening the link between innovation and creativity, and national policies, making a clear connection between IP and development strategies. The role of the IP system is to capture the benefits of innovation and channel the necessary resources to meet the needs of consumers, and society as a whole, for innovation.

Better Understanding of IP in Political Context

There are certain misperceptions about IP in some quarters, which seem to discourage its use as a tool for development. IP protection is seen as:

- something only for wealthy countries and not for those of low income; thus, weak IP is somehow better for the national industries of such low income nations;
- an obstacle to access to information and essential drugs; and
- an obstacle to competition.

On the other hand, much as we seek to set out the great benefits that a carefully crafted and managed IP system can bring, we do not pretend that it can solve all of a country's problems or allow it to meet all of its challenges. For example, the following statements do not reflect the true nature of IP:

- the stronger the IP protection, the better the well-being of the society;
- the IP system alone, once set up in accordance with international rules and obligations, will bring benefits through foreign direct investment and transfers of advanced technology; and
- a one-size-fits-all IP system can cater for the different needs of different nations.

IP to be Integrated into National Strategy for Development

As the impact of IP has become multi-dimensional and more widely observable, its integration into national policies and strategies needs to strike an appropriate balance between the various interested parties and public policy objectives. Such a balance may well require not only an efficient IP system, but also interaction between the IP system and other public policies. Given that the optimum balance needs dynamic and delicate fine-tuning in response to economic, social and technological change, the IP system also needs to be constantly reviewed and readjusted, so that it functions optimally to achieve national goals.

The Role of WIPO

The World Intellectual Property Organization (WIPO) is a specialized agency of the United Nations. It is dedicated to developing a balanced and accessible international IP system, which rewards creativity, stimulates innovation and contributes to economic development while safeguarding the public interest.

WIPO was established by the WIPO Convention in 1967 with a mandate from its Member States to promote the protection of IP throughout the world through cooperation among states and in collaboration with other international organizations. WIPO is an intergovernmental organization that became in 1974 one of the specialized agencies of the United Nations system of organizations.

The origins of WIPO go back to 1883 and 1886 when the Paris Convention for the Protection of Industrial Property and the Berne Convention for the Protection of Literary and Artistic Works, respectively, were concluded. Both Conventions provided for the establishment of an international bureau. The two bureaus were united in 1893 and, in 1970, were replaced by WIPO, which is serviced by an international bureau, by virtue of the WIPO Convention.

WIPO's headquarters are in Geneva, Switzerland. WIPO has its coordination offices in Brussels, New York, Singapore and Tokyo.

As of May 30, 2008, WIPO has 184 member States.

WIPO's believes that IP is an important tool for the economic, social and cultural development of all countries. This shapes its mission to promote the effective use and protection of IP worldwide. Strategic goals are set out in a four yearly Medium Term Plan and refined in the biennial Program and Budget document.

The five strategic goals defined in the 2006 – 2007 Program and Budget are:

- ✓ To promote an IP culture;
- ✓ To integrate IP into national development policies and programs;
- ✓ To develop international IP laws and standards;
- ✓ To deliver quality services in global IP protection systems; and
- ✓ To increase the efficiency of WIPO's management and support processes.

The Concept of IP

IP, very broadly, means the legal rights which result from intellectual activities in the industrial, scientific, literary and artistic fields. Countries have laws to protect IP for two main reasons. One is to give statutory expression to the moral and economic rights of creators in their creations and such rights of the public in access to those creations. The second is to promote, as a deliberate act of government policy, creativity and the dissemination and application of its results and to encourage fair trading which would contribute to economic and social development.

Generally speaking, IP law aims at safeguarding creators and other producers of intellectual goods and services by granting them certain time-limited rights to control the use made of those productions. Those rights do not apply to the physical object in which the creation may be embodied but instead to the intellectual creation as such.

IP has at least one feature completely different from that of classic types of property such as a house and a car. That feature is called “non-rival” by economists. This means that one person's use of it doesn't diminish the ability of other people to use it. For example, one person (owner of a copyright on a new software) use a software to write and send an e-mail message at the same time when other people (who have got a license of the copyright of the software) use the same software. In case of a car, on the contrary, it cannot be used by more than one person at the same time. This feature is important to understand how IP can increase its value by assigning, licensing and sharing it.

IP has a number of branches. The convention establishing WIPO in 1967 stipulates that IP shall include rights relating to the following:

1. Literary, artistic and scientific works
2. Performances of performing artists, phonograms, and broadcasts
3. Inventions in all fields of human endeavor
4. Scientific discoveries
5. Industrial designs

6. Marks and commercial names and designations
7. Protection against unfair competition
8. All other rights resulting from intellectual activity in the industrial, scientific, literary, and artistic fields

In the past, IP was divided into two categories as follows:

- ✓ Industrial property, which includes inventions (patents), trademarks, industrial designs, and geographic indications of origin/source; and
- ✓ Copyright, which includes literary and artistic works such as novels, poems and plays, films, musical works, artistic works such as drawings, paintings, photographs and sculptures, and architectural designs.

Rights related to copyright include those of performing artists in their performances, producers of phonograms in their recordings, and those of broadcasters in their radio and television programs.

In the 1990's, it became common to refer to intellectual property, integrating industrial property and copyright and related rights and thus dispensing with those two separations

Debate on Policy Issues

- ✓ Is the role of IP misunderstood in many societies? If so, why and how could that be improved?
- ✓ Whether and how could IP systems promote economic, social and cultural development in particular in developing countries?

Reference

General information about IP at <http://www.wipo.int/about-ip/en/>

About how IP affects our daily life

IP in everyday life – virtual tour – at <http://www.wipo.int/about-ip/en/>

Free publications for different audiences are made available at <http://www.wipo.int/ip-outreach/en/publications.html>

About a brief history of IP

Chapter 1 of WIPO Publication No. 888, Intellectual Property – a Power Tool for Economic Growth - at http://www.wipo.int/about-wipo/en/dgo/wipo_pub_888/index_wipo_pub_888.html

About WIPO

<http://www.wipo.int/treaties/en/general>

About economic perspectives of IP

Chapter 1 “Why we study intellectual property rights and what we have learned” ,
Carsten Fink and Keith Maskus, Intellectual Property and Development, Lessons from
Recent Economic Research, World Bank, available at

http://www.worldbank.org/research/IntellProp_temp.pdf

About IP and Development

CIPR (2002), Commission on Intellectual Property Rights: Integrating Intellectual
Property Rights and Development Policy, Report of the CIPR, available at

www.iprcommission.org/graphic/documents/final_report.htm

About Economics of IP in the Global Economy

Prof. Keith Maskus recommends the following books (“Teaching of Intellectual
Property” published by the Cambridge University Press)

- ✓ Dominique Foray, *The Economics of Knowledge* (MIT Press, 2004).
- ✓ Keith E. Maskus, *Intellectual Property Rights in the Global Economy* (Institute for
International Economics, 2000).
- ✓ Suzanne Scotchmer, *Innovation and Incentives* (MIT Press, 2004).

Chapter 2

Patents

Introduction

A patent is an exclusive right granted for an invention, which is a product or a process that provides, in general, a new way of doing something, or offers a new technical solution to a problem. In order to be patentable, the invention must fulfill certain conditions. A patent provides protection for the invention to the owner of the patent. The protection is granted for a limited period, generally 20 years.

Patent protection means that the invention cannot be commercially made, used, distributed or sold without the patent owner's consent. These patent rights are usually enforced in a court, which, in most systems, holds the authority to stop patent infringement. Conversely, a court can also declare a patent invalid upon a successful challenge by a third party.

A patent owner has the right to decide who may - or may not - use the patented invention for the period in which the invention is protected. The patent owner may give permission to, or license, other parties to use the invention on mutually agreed terms. The owner may also sell the right to the invention to someone else, who will then become the new owner of the patent. Once a patent expires, the protection ends, and an invention enters the public domain, that is, the owner no longer holds exclusive rights to the invention, which becomes available to commercial exploitation by others.

History

The Venetian Law of 1474 is often referred to as the first systematic approach to protect inventions by a form of patents, as it stipulated an exclusive right of an individual which limited the public interest for the first time. Sixteenth century Tudor England already had a patent system, and the Statute of Monopolies in 1624 was the first written law which provided for the grant of a monopoly for an invention for a limited period of time.

The second half of the 18th century was a golden age of trade and industry for many countries, as well as a time of artistic creativity, scientific innovation, and political revolution. It was during this Age of Enlightenment that some countries established their first patent systems during that time. For example, the first patent law in France, which provided for the protection of inventors' rights, was enacted in 1791, after the French Revolution and the Declaration of the Rights of Man and of the Citizen. In the United

States of America, in 1788 the Constitution specifically provided for patents and the protection of an invention by granting exclusive rights to inventors.

In the second half of the 19th century, goods and workers crossing national borders brought a wave of globalization to industrial powers. Although patent laws had been enacted in several countries, the demand for international protection of inventions began to be felt. In fact, foreign exhibitors refused to attend the International Exhibition of Inventions in Vienna in 1873 because they were afraid their ideas would be stolen and exploited commercially in other countries. This incident resulted in the birth of the Paris Convention for the Protection of Industrial Property in 1883 (the Paris Convention), the first major international treaty designed to help the people of one country obtain protection in other countries for their intellectual creations. Such protection took the form of industrial property rights, known as inventions (patents), marks, and industrial designs.

Why are Patents Necessary?

Patents provide incentives to individuals by offering them recognition for their creativity and material reward for their marketable inventions. These incentives encourage innovation, which assures that the quality of human life is continuously enhanced. As shown in an episode about the Paris Convention, the patent system also provides certain degree of assurance to inventors (such as exhibitors at an international exhibition of inventions) that the disclosure of a new technology would not result in the immediate imitation by competitors.

What Role do Patents Play in Everyday Life?

Patented inventions have, in fact, pervaded every aspect of human life, from electric lighting (patents held by Edison and Swan) and plastic (patents held by Baekeland), to ballpoint pens (patents held by Biro) and microprocessors (patents held by Intel, for example).

All patent owners are obliged, in return for patent protection, to publicly disclose information on their invention in order to enrich the total body of technical knowledge in the world. Such an ever-increasing body of public knowledge promotes further creativity and innovation in others. In this way, patents provide not only protection for the owner but valuable information and inspiration for future generations of researchers and inventors.

How is a Patent Granted?

The first step in securing a patent is the filing of a patent application. The patent application generally contains the title of the invention, as well as an indication of its technical field; it must include the background and a description of the invention, in clear language and enough detail that an individual with an average understanding of the field could use or reproduce the invention. Such descriptions are usually accompanied by visual materials such as drawings, plans, or diagrams to better describe the invention. The application also contains various “claims”, that is, information which determines the extent of protection granted by the patent.

What Kinds of Inventions can be Protected?

An invention must, in general, fulfill the following conditions to be protected by a patent. It must be of practical use; it must show an element of novelty, that is, some new characteristic which is not known in the body of existing knowledge in its technical field. This body of existing knowledge is called “prior art”. The invention must show an inventive step which could not be deduced by a person with average knowledge of the technical field. Finally, its subject matter must be accepted as “patentable” under law. In many countries, scientific theories, mathematical methods, plant or animal varieties, discoveries of natural substances, commercial methods, or methods for medical treatment (as opposed to medical products) are generally not patentable.

Who Grants Patents?

A patent is granted by a national patent office or by a regional office that does the work for a number of countries, such as the European Patent Office and the African Regional Intellectual Property Organization. Under such regional systems, an applicant requests protection for the invention in one or more countries, and each country decides as to whether to offer patent protection within its borders. The WIPO-administered Patent Cooperation Treaty (PCT) provides for the filing of a single international patent application which has the same effect as national applications filed in the designated countries. An applicant seeking protection may file one application and request protection in as many signatory states as needed.

How can a Patent be Obtained Worldwide?

At present, no “world patents” or “international patents” exist. In general, an application for a patent must be filed, and a patent shall be granted and enforced, in each country in which you seek patent protection for your invention, in accordance with the law of that country. In some regions, a regional patent office, for example, the European Patent Office (EPO) or the African Regional Intellectual Property Organization (ARIPO), accepts regional patent applications, or grants patents, which

have the same effect as applications filed, or patents granted, in the member States of that region.

Further, any resident or national of a Contracting State of the Patent Cooperation Treaty (PCT) may file an international application under the PCT. A single international patent application has the same effect as national applications filed in each designated Contracting State of the PCT. However, under the PCT system, in order to obtain patent protection in the designated States, a patent shall be granted by each designated State to the claimed invention contained in the international application.

Procedural and substantive requirements for the grant of patents as well as the amount of fees required are different from one country/region to the other. It is therefore recommend that you consult a practicing lawyer who is specialized in IP or the IP offices of those countries in which you are interested to get protection.

What is a Utility Model?

A utility model is a “petty” patent which confers an exclusive right and allows the right holder to prevent others from commercially using the protected invention, without his authorization, for a limited period of time. In its basic definition, which may vary from one country (where such protection is available) to another, a utility model is similar to a patent. In fact, utility models are sometimes referred to as “petty patents” or “innovation patents.”

The main differences between utility models and patents are the following:
The requirements for acquiring a utility model are less stringent than for patents. While the requirement of “novelty” is always to be met, that of “inventive step” or “non-obviousness” may be much lower or absent altogether. In practice, protection for utility models is often sought for innovations of a rather incremental character which may not meet the patentability criteria.

The term of protection for utility models is shorter than for patents and varies from country to country (usually between 7 and 10 years without the possibility of extension or renewal).

In most countries where utility model protection is available, patent offices do not examine applications as to substance prior to registration. This means that the registration process is often significantly simpler and faster, taking, on average, six months. Utility models are much cheaper to obtain and to maintain. In some countries, utility model protection can only be obtained for certain fields of technology and only for products but not for processes. Utility models are considered particularly suited for SMEs that make “minor” improvements to, and adaptations of, existing products. Utility models are primarily used for mechanical innovations.

Currently, a small but significant number of countries and regional organizations provide utility model protection. These include: Argentina, Armenia, Australia, Austria, Belarus, Belgium, Brazil, Bulgaria, China, Colombia, Costa Rica, Czech Republic, Denmark, Estonia, Ethiopia, Finland, France, Georgia, Germany, Greece, Guatemala, Hungary, Ireland, Italy, Japan, Kazakhstan, Kenya, Kyrgyzstan, Malaysia, Mexico, Netherlands, Peru, Philippines, Poland, Portugal, Republic of Korea, Republic of Moldova, Russian Federation, Slovakia, Spain, Tajikistan, Trinidad & Tobago, Turkey, Ukraine, Uruguay, Uzbekistan, OAPI and ARIPO.

The Role and Rationale of the Patent System in Economic, Social and Cultural Development

The patent system is based on a dynamic economic process. The process starts with the grant of exclusive, legally enforceable rights to an inventor to make, use or sell products incorporating his invention for a limited period of time. Thus, the inventor receives an advantage in market competition. The patent system provides the inventor with an opportunity to gain revenues at three levels:

First, the inventor may recoup his cost (the expenses he incurred in developing the invention, usually capital, time, equipment and labor).

Second, the patent system makes it more likely that the inventor will make a profit (a positive return on the investment) from his unit sales of products incorporating the invention. The ability to achieve this profit (through higher volume of sales or higher prices than the seller of a similar product would otherwise have achieved) depends on whether the invention actually enhances the desirability of products, and whether there are substitutes or alternatives to the invention and the products.

Third, the patent system gives him the ability to gain revenues from licensing or assigning (selling) the patent to others who will exploit it in markets that the inventor does not wish to exploit, using distribution resources that the inventor does have, or combine the invention with other inventions and products to create new inventions and products. Such licensees and assignees pay royalties (payments in the form of a share of his sales) and fees to the inventor.

The inventor's reward is financial gain, and he is motivated to repeat the process again, investing some of his gain in new research and development for new inventions. This process becomes a dynamic cycle of change which generates changes in other areas. He is also likely to hire and train others, or transact business with others, who will in turn be motivated to invent and create products by the prospect of financial gain. Not only will the research and development lead to associated inventions by others, it is also likely to stimulate other economic consequences such as increased employment and training, and increased competitiveness of related products.

Patents are not Means of Monopoly in the Market

However, it is a myth that the patent system is a tool to grant a simple exclusive right to an inventor. The exclusive rights granted by a patent are valid only for a limited duration (as discussed above, generally 20 years). They also are limited to and valid in only the country or jurisdiction that issued the patent. In the rest of the world, in all countries in which the invention is not protected by a patent, the invention may be used freely. As discussed below, the patent system is designed to strike the proper balance between the inventor's interest and the public interest.

Described in another way, using a different metaphor, the patent gives the inventor a temporary shelter from the forces of market competition. The shelter is a small one, limited to the precise terms of the claims of his patent, but it is sturdy and durable for many years. In this shelter, the inventor can market his inventions without fear that his investment will be swept away by competitors, or ravaged by price predators. He can work in the shelter, secure enough to be able to create new inventions, as well as to hire and train others to help him. Without the shelter, the inventor would have no incentive to make new inventions and start the process again. He would pack up his tools and go back to his secure job elsewhere.

The patent system does not grant an unqualified market advantage to the inventor or the outright monopoly in the market. The "shelter" is exactly as big as the scope of the invention that the inventor has created. The patent only covers the invention exactly as it is "claimed" in the patent. There is nothing to prevent competitors from developing competitive inventions and products, and obtaining patents on such inventions, if they wish, as long as they do not duplicate all of the claims of the patent. Indeed, as will be explained below, the patent system actually seems to generate competitive innovations.

Further, patents are only granted when the invention meets the strict requirements for patentability; generally that the invention must be "new, useful and non-obvious." A patent does not issue simply because of hard work or large amounts of capital. The inventor must actually create something original based on his research and imagination, although he will invariably draw upon old data and inventions. The invention cannot be merely theoretical, but must be practically do-able. The exclusive right is time-limited; in most cases it lasts for 20 years. The exclusive right generally does not extend to "fair use" - research and academic use of the patent. The patent is only valid in the country in which it is filed and issued, so business and industry in other countries are free to use the patent.

Even where the patent right applies, patent holders are often motivated to license others to use patents, as such licensing is often a profitable aspect of patent ownership and a way to reach "unserved or underserved markets" (geographic or sectoral markets that the patent owner may not wish to invest in or in which he does not have resources or capacity to invest). In such cases, the patent right is effectively shared and its benefits distributed. Further, patents may provide economic and technological benefits in the form of information because they are public documents.

Most patent systems require that the patent application and patent disclose how to practice the patent, and most countries have the legal requirement that the patent fully disclose the invention in a manner sufficiently clear and complete for the invention to be carried out by a person skilled in the area of technology of the invention. The requirement of public disclosure is one of the justifications for the patent right and the proper balance built in the patent system, because the patent holder trades the disadvantage of full public disclosure of his invention and how it works (sacrificing trade secret protection), in exchange for the grant of a legal right on its use.

Obviously, the decision to seek patent protection in a country in which there is inadequate enforcement of patent rights involves a risky leap of faith on the part of the inventor. Finally, abuse of the patent right combined with acts of unfair competition may be checked in some countries by anti-trust or competition law. In sum, for many reasons, the patent right is a limited one and permits quite a bit of flexibility in the use of the claimed invention by persons other than the inventor.

If one accepts as true that people are motivated by financial gain, then it is apparent that the opportunity to gain from innovation will have the effect of stimulating innovation and, if conducted on a broad scale, also stimulating the economy. Conversely, a high risk of losing an investment will de-motivate inventors. A society that provides no legal shelter for its inventors is likely to have a weak economy.

Conditions of Patentability

An invention must meet several criteria if it is to be eligible for patent protection. These include, most significantly, that the invention must consist of patentable subject matter, the invention must be new (novel), it must exhibit a sufficient “inventive step” (be non-obvious), it must be industrially applicable (useful) and the disclosure of the invention in the patent application must meet certain standards.

Patentable Subject Matter

In order to be eligible for patent protection, an invention must fall within the scope of patentable subject matter. Patentable subject matter is established by statute, and is usually defined in terms of the exceptions to patentability, the general rule being that patent protection shall be available for inventions in all fields of technology (see Article 27.1 of the TRIPS Agreement). While there are differences between countries, the following are generally excluded from patentability (see also Article 27.2 and 27.3 of the TRIPS Agreement):

- ✓ discoveries of materials or substances already existing in nature;
- ✓ scientific theories and mathematical methods;
- ✓ aesthetic creations (which may be protected by industrial designs);
- ✓ schemes, rules and methods for performing mental acts;
- ✓ newly discovered substances that occur naturally in the world;

- ✓ any invention that may affect public order, good morals or public health;
- ✓ diagnostic, therapeutic and surgical methods of treatment for humans or animals (but not products for use in such methods);
- ✓ Plants and animals other than microorganisms, and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes.

Novelty

Novelty is a fundamental requirement in any examination as to substance and is an undisputed condition of patentability. It must be emphasized, however, that novelty is not something which can be proved or established; only its absence can be proved. An invention is considered to be new (or novel) if it does not form part of the prior art. The prior art is, in general, all the knowledge that has been made available to the public prior to the filing date (or priority date, if the priority of an earlier application was claimed) of the relevant patent application.

Inventive Step (or non-obviousness)

An invention is considered to involve an inventive step (or to be non-obvious) when, having regard to the prior art, the invention is not obvious to a person skilled in the particular field of the invention. The non-obviousness requirement is meant to ensure that patents are only granted in respect of truly inventive achievements, and not to developments that a person with ordinary skill in the art could easily deduce from what already exists.

The question as to whether or not the invention “would have been obvious to a person having ordinary skill in the art” is perhaps the most difficult of the standards to determine in the examination as to substance. The expression “person having ordinary skill” is intended to exclude the “best” expert that can be found. It is intended that the person be limited to one having the average level of skill reached in the field in the country concerned.

The expression “inventive step” conveys the idea that it is not enough that the claimed invention is new, that is, different from what exists in the state of the art, but that this difference must have two characteristics. Firstly, it must be “inventive,” that is, the result of a creative idea, and it must be a step, that is, it must be noticeable. There must be a clearly identifiable difference between the state of the art and the claimed invention. This is why, in some jurisdictions, there is the concept of an “advance” or “progress” over the prior art. Secondly, it is required that this advance or progress be significant and essential to the invention.

Some examples of what may not qualify as inventive, as established by past court decisions in some countries, are: mere change of size; making a product portable; the

reversal of parts; the change of materials; aggregation; or the mere substitution by an equivalent part or function.

Industrial Applicability (or utility)

To be patentable, an invention must be capable of being made or used in industry. This means that the invention cannot be a mere theoretical phenomenon, but it must be useful and provide some practical benefit. If the invention is intended to be a product or part of a product, it should be possible to make that product. And if the invention is intended to be a process or part of a process, it should be possible to carry that process out or “use” it (the general term) in practice.

The term “industrial” should be considered in its broadest sense, including any kind of industry. In common language, an “industrial” activity means a technical activity on a certain scale, and the “industrial” applicability of an invention means the application (making use) of an invention by technical means on a certain scale. National and regional laws and practices concerning the industrial applicability requirement vary significantly. At one end of the spectrum, the requirement of industrial applicability is met as long as the claimed invention can be made in industry without taking into account the use of the invention. At the other end of the spectrum, the “usefulness” of the claimed invention is taken into account for the determination of the industrial applicability. On the other hand, some countries do not require industrial applicability, but utility.

Typical examples of inventions not being capable of industrial application are those which appear to contravene the laws of nature (for example, a perpetual motion machine) and those concerning methods which could be considered to fall entirely within the private or personal sphere.

Sufficient Disclosure/Enabling Disclosure

An additional requirement of patentability is whether or not the invention is sufficiently disclosed in the application. The application must disclose the invention in a manner sufficiently clear and complete for the invention to be carried out by a person skilled in the specific technical field “person skilled in the art.”

The description should set out at least one mode for carrying out the invention claimed. This should be done in terms of examples, where appropriate, and with reference to the drawings, if any. In some countries, the description is required to disclose the best mode for carrying out the invention known to the applicant. For patents involving microorganisms, many countries require that the microorganism be deposited at a recognized depositary institution, if it cannot be fully disclosed otherwise.

It is important that the claims be precisely defined and that they be fully supported by the description. This means that the scope of the claims may not be broader than what the description enables. See also claims interpretation, page 23, below.

Prior Art

The definition of “prior art” differs from country to country. In many countries, any invention made available to the public anywhere in the world in written form, by oral communication, by display or through use constitutes the prior art. Thus, in principle, the publication of the invention in a scientific journal, its presentation in a conference, its use in commerce or its display in a company’s catalogue would all constitute acts that could destroy the novelty of the invention and render it not patentable.

The question of what should constitute “prior art” at a given time is one which has been the subject of some debate.

One viewpoint is that the determination of prior art should be made against a background of what is known only in the protecting country. This would exclude knowledge from other countries, if it was not imported into the country before the making of the invention, even if that knowledge was available abroad before the date of the making of the invention.

Another viewpoint is based on the differentiation between printed publications and other disclosures such as oral disclosures and prior use, and where such publications or disclosures occurred.

The disclosure of an invention so that it becomes part of the prior art may take place in three ways, namely:

- ✓ by a description of the invention in a published writing or publication in other form;
- ✓ by a description of the invention in spoken words uttered in public, such a disclosure being called an oral disclosure;
- ✓ by the use of the invention in public, or by putting the public in a position that enables any member of the public to use it, such a disclosure being a “disclosure by use.”

Publication in tangible form requires that there be some physical carrier for the information, a document in the broad sense of the term, and that document must have been published, that is to say, made available to the public in any manner such as by offering for sale or deposit in a public collection. Publications include issued patents or published patent applications, writings (whether they be manuscript, typescript, or printed matter), pictures including photographs, drawings or films, and recording, whether they be discs or tapes in either spoken or coded language. Today, publication on the Internet must increasingly be taken into consideration.

Oral disclosure, as the expression suggests, implies that the words or form of the disclosure are not necessarily recorded as such and includes lectures and radio broadcasts.

Disclosure by use is essentially a public, visual disclosure such as by display, sale, demonstration, unrecorded television broadcasts and actual public use.

A document will only destroy the novelty of any invention claimed if the subject matter is explicitly contained in the document. The subject matter set forth in a claim of an application under examination is thus compared element by element with the contents of each individual publication. Lack of novelty can only be found if the publication by itself contains all the characteristics of that claim, that is, if it anticipates the subject matter of the claim.

Lack of novelty may however, be implicit in the publication in the sense that, in carrying out the “teaching” of the publication, a person having ordinary skill in the art would inevitably arrive at a result falling within the terms of the claim. Generally speaking, lack of novelty of this kind will only be raised by the Patent Office where there is no reasonable doubt as to the practical effect of the prior “teaching.”

It should be noted that in considering novelty, it is not permissible to combine separate items of prior art together.

Unity of Invention

Most patent laws provide for certain limitations in respect of the number of different inventions that may be included in one patent application. These limitations include, in particular, the so-called requirement of unity of invention. In those patent offices that carry out substantive examination, the patent examiner will check whether the application fulfills this requirement.

Whereas some patent laws provide for very strict requirements of unity of invention (for example, the patent law of the United States of America), others (e.g. the European Patent Convention and the Patent Cooperation Treaty) permit groups of inventions so linked as to form a single “inventive concept” to be included in a single application. In case of lack of unity of invention, the applicant may be required to either restrict the claims or divide the application into two or more applications (divisional applications). As a result of differences in the applicable law, one patent application may suffice in some countries, while in others, two or more applications may have to be filed to cover the same ground.

Claims Structure and Interpretation

The claims determine the patentability and the scope of protection of a patent. The claims are absolutely crucial to a patented invention since, if they are badly drafted, even a truly valuable invention could result in a worthless patent that is easy to circumvent or design around. In patent litigation, interpreting the claims is generally the first step in determining whether the patent is valid and in determining whether the patent has been infringed. It is strongly advisable to seek the advice of an expert to draft patent applications, particularly the claims.

Opposition Procedures

Whether or not there is an examination as to substance, some jurisdictions provide for an opposition procedure which may be instituted either before or after the grant of a patent. An opposition procedure is designed to allow third parties to present objections to the grant of a patent. So that oppositions may be filed, the public must be informed of the content of the application, and this is done by the Patent Office by publication of a notice in an official journal or gazette to the effect that the application is open to public inspection; and/or the Patent Office will, unless opposition is filed within a prescribed period, grant a patent; or a patent has been granted on the application.

The grounds upon which an opposition may be filed are prescribed by the relevant legislation. Generally speaking, it should be possible for an opposition to be based on non-compliance with any substantive requirement. However, the law in some countries restricts an opposition to certain substantive requirements only. Typically these grounds are lack of novelty, inventive step or industrial applicability, insufficient disclosure of the invention, or the fact that an amendment made to a patent application has gone beyond the original disclosure in the application as filed. Some jurisdictions make it possible to file an opposition on the ground that the applicant has no right to a patent.

Grace Period

In order to preserve rights, it is important to keep the invention confidential prior to filing the patent application. In many circumstances, public disclosure of the invention prior to filing the application would destroy the novelty of the invention, rendering it unpatentable, unless the applicable law provides for a so-called “grace period.”

The legislation of some countries provides a “grace period” of, in general, 6 or 12 months, from the moment an invention was disclosed until the application is filed, in which the invention does not lose its novelty. In such countries, a company may disclose its invention, for example by displaying it in a trade show or publishing it in a company catalogue or technical journal, and file the patent application within the grace period without the invention losing its novelty for the purpose of obtaining a patent.

However, as this is not the case in all countries, relying on the grace period in one country would preclude the invention from being patentable in other markets of interest where a grace period is not available.

Main Provisions in the Paris Convention

The Paris Convention for the Protection of Industrial Property (the Paris Convention) contains basic principles of territoriality, national treatment and minimum rights, with particular emphasis on the complex priority right rules, the rule on the independence of national patents and the rules on compulsory licenses.

The Paris Convention applies to industrial property in the widest sense, including patents, marks, industrial designs, utility models (a kind of “small patent” provided for by the laws of some countries), trade names (designations under which an industrial or commercial activity is carried on), geographical indications (indications of source and appellations of origin) and the repression of unfair competition.

The substantive provisions of the Convention fall into three main categories: national treatment, right of priority, common rules.

1. Under the provisions on national treatment, the Convention provides that, as regards the protection of industrial property, each contracting State must grant the same protection to nationals of the other contracting States as it grants to its own nationals. Nationals of non-contracting States are also entitled to national treatment under the Convention if they are domiciled or have a real and effective industrial or commercial establishment in a contracting State.
2. The Convention provides for the right of priority in the case of patents (and utility models, where they exist), marks and industrial designs (see below).
3. The Convention lays down a few common rules which all the contracting States must follow. Provisions regarding the protection of patents provide for the following basic rules:
 - ✓ Patents granted in different contracting States for the same invention are independent of each other;
 - ✓ The granting of a patent in one contracting State does not oblige the other contracting States to grant a patent;
 - ✓ a patent cannot be refused, annulled or terminated in any contracting State on the ground that it has been refused or annulled or has terminated in any other contracting State;
 - ✓ The inventor has the right to be named as such in the patent.

- ✓ The grant of a patent may not be refused, and a patent may not be invalidated, on the ground that the sale of the patented product, or of a product obtained by means of the patented process, is subject to restrictions or limitations resulting from the domestic law.
- ✓ Each contracting State that takes legislative measures providing for the grant of compulsory licenses to prevent the abuses which might result from the exclusive rights conferred by a patent may do so only with certain limitations.
- ✓ Thus, a compulsory license (license not granted by the owner of the patent but by a public authority of the State concerned) based on failure to work the patented invention may only be granted pursuant to a request filed after three or four years of failure to work or insufficient working of the patented invention and it must be refused if the patentee gives legitimate reasons to justify his inaction.
- ✓ Furthermore, forfeiture of a patent may not be provided for, except in cases where the grant of a compulsory license would not have been sufficient to prevent the abuse. In the latter case, proceedings for forfeiture of a patent may be instituted, but only after the expiration of two years from the grant of the first compulsory license.

The Paris Union, established by the Convention, has an Assembly and an Executive Committee. Every State member of the Union which has adhered to at least the administrative and final provisions of the Stockholm Act (1967) is a member of the Assembly.

The members of the Executive Committee are elected from among the members of the Union, except for Switzerland, which is a member *ex officio*.

The establishment of the biennial program and budget of the WIPO Secretariat—as far as the Paris Union is concerned—is the task of its Assembly.

The Paris Convention, concluded in 1883, was revised at Brussels in 1900, at Washington in 1911, at The Hague in 1925, at London in 1934, at Lisbon in 1958 and at Stockholm in 1967, and it was amended in 1979.

The Right of Priority

This is one of the most important facility agreed upon as a result of the conclusion of the Paris Convention more than a century ago. The right of priority means that, on the basis of a regular first application filed in one of the contracting States, the applicant may, within a certain period of time (12 months for patents and utility models; 6 months for industrial designs and marks), apply for protection in any of the other contracting States; these later applications will then be regarded as if they had been filed on the same day as the first application. In other words, these later applications will have priority (hence the expression “right of priority”) over applications which may have been filed during the

said period of time by other persons for the same invention, utility model, mark or industrial design.

Moreover, these later applications, being based on the first application, will not be affected by any event that may have taken place in the interval, such as any publication of the invention or sale of articles bearing the mark or incorporating the industrial design. One of the great practical advantages of this provision is that, when an applicant desires protection in several countries, he is not required to present all his applications at the same time but has six or 12 months at his disposal to decide in which countries he wishes protection and to organize with due care the steps he must take to secure protection.

Patent Law Harmonization

As the global economies need more coherent approaches to the protection of patent in different countries, the lack of substantive provisions on the patent protection in the Paris Convention prompted initial discussions at WIPO with regard to possible harmonization of the grace period in 1980's. Several provisions about which different national laws adopt different approaches were also taken up as agenda items. They were the subject matter eligible for patent protection, i.e., the definition of the patentable invention (non-patentable subject matter); notion of invention, specific patentability requirements, namely that of novelty, inventive step (non-obviousness), industrial application (utility) and enabling disclosure, and relevant prior art.

Certain aspects on patent protection were included in the TRIPS Agreement as the minimum standards. However, there remain a number of matters and policy issues which vary from country to country. In view of the fact that users seeking the patent protection in the world wish to see more harmonization of patent laws for more efficient and cost-effective protection, WIPO Member States have discussed international harmonization of patent laws for over 20 years since 1985. Recently some Member States proposed to focus initially on a number of issues of direct relevance to the grant of patents, in particular, the definition of prior art, novelty, inventive step/non-obviousness, industrial applicability/utility, the drafting and interpretation of claims and the requirement of sufficient disclosure of the invention. The Standing Committee on the Law of Patents (SCP) further agreed that other issues related to substantive patent law harmonization, such as first-to-file versus first-to-invent systems, 18-month publication of applications and a post-grant opposition system, would be considered at a later stage.

The Rights Conferred by a Patent

In general, a patent right confers on its owner the following exclusive rights:

Where the subject matter of a patent is a product, to prevent third parties not having the owner's consent from the acts of: making, using, offering for sale, selling, or importing for these purposes that product; and where the subject matter of a patent is a process, to prevent third parties not having the owner's consent from the act of using the process,

and from the acts of: using, offering for sale, selling, or importing for these purposes at least the product obtained directly by that process.

The patent owner also has the right to assign, or transfer by succession, the patent and to conclude licensing contracts.

Exceptions and Limitations to the Patent Right

In view of the policy objective of the patent system, the scope of the exclusive patent right is carefully designed under national patent laws, which aims to strike a balance between the legitimate interests of the right holders and the legitimate interests of third parties. Article 30 of the TRIPS Agreement allows members to provide exceptions to the exclusive rights conferred, provided that such exceptions do not conflict with the normal exploitation of the patent and do not prejudice the legitimate interests of the patent owner, taking into account the legitimate interests of third parties.

The Paris Convention, in Article 5, also contains provisions concerning compulsory licenses. Further, Article 5^{ter} provides certain limitations on the exclusive rights in cases where strict enforcement of such rights may be prejudicial to public interest in maintaining freedom of transport. In principle, if ships, aircraft or land vehicles temporarily enter the territory of foreign countries, it is not necessary to obtain licenses on patents in force in these countries in order to avoid infringing such patents.

Taking into consideration the above international rules, a number of countries provide in their national legislations certain exceptions and limitations to the exclusive rights. For example, the rights conferred by a patent do not extend to the following acts under some national laws:

- acts done for private and non-commercial use;
- uses for articles on aircraft, land vehicles or vessels of other countries which temporarily or accidentally enter the airspace, territory or waters of the respective country;
- acts done only for experimental purposes or research purposes;
- acts performed by any person who, in good faith, before the filing date (priority date) of the application on which the patent is granted, was using the invention or was making effective and serious preparation for such use in the respective country (prior user's exception);
- acts solely for uses reasonably related to the development and submission of information required for obtaining a regulatory approval;
- preparation of drugs in accordance with a medical prescription.

Further, in Article 31, the TRIPS Agreement provides that a Member may allow, under the stipulated conditions, other use than that allowed under Article 30 without authorization of the right holder. In connection with Article 31, the Doha Ministerial Declaration on the TRIPS Agreement and Public Health specifically states that each member has the right to grant compulsory licenses and the freedom to determine the grounds upon which such licenses are granted, and to determine what constitutes a national emergency or other circumstances of extreme urgency, it being understood that public health crises, including those relating to HIV/AIDS, tuberculosis, malaria and other epidemics, can represent a national emergency or other circumstances of extreme urgency. Furthermore, in order to solve the problem of Members with insufficient or no manufacturing capacities in the pharmaceutical sector facing difficulties in making effective use of compulsory licensing under the TRIPS Agreement, following the instruction under paragraph 6 of the Doha Ministerial Declaration on the TRIPS Agreement and Public Health, WTO Members decided on a “waiver” that removed limitations on exports under compulsory license to countries that cannot manufacture the pharmaceuticals themselves in 2003 and made that decision permanent by amending the TRIPS Agreement.

As regards the exhaustion of the patent right, Article 6 of the TRIPS Agreement states that, for purposes of dispute settlement under this Agreement, subject to the provisions of Articles 3 and 4 of the TRIPS Agreement, nothing in the TRIPS Agreement shall be used to address the issue of exhaustion of IP rights. The Doha Ministerial Declaration on the TRIPS Agreement and Public Health clarified that the effect of the provisions in the TRIPS Agreement that are relevant to the exhaustion of IP rights is to leave each member free to establish its own regime for such exhaustion without challenge, subject to the Most Favored Nation Clause (MFN) and national treatment provisions under the Agreement.

The above exceptions limit the enforcement of rights conferred by a patent. In the laws of some countries, there exist exceptions that extend the enforcement of rights, i.e., acts which may be deemed as patent infringement under certain circumstances. An example of such exceptions is an indirect infringement or a contributory infringement. In principle, making, using and selling only one or some elements of the claimed invention does not constitute infringement. However, a strict application of such principle may not always protect the right holder from a third party who unfairly took advantage of the patented invention. For example, a third party may supply parts which relate to material elements of the patented invention for a final assembly by individuals, or a third party supplies a machine which is exclusively used to make a patented invention. Taking into account the legitimate interests of the right holder and the legitimate interests of third parties, certain actions are considered as indirect infringement, under some national laws. The conditions of indirect infringement, however, are significantly different from one country to another.

Debate on Policy Issues

1. patentable and non-patentable subject matter; should biotechnological inventions, software and business methods be patentable subject matter, why or why not? What subject matter should be deemed patentable? What subject matter should be excluded and why?
2. patentable subject matter; to what extent should biotechnological material and inventions, genome, cell lines, surgical methods, computer software and business methods be included in the subject matter to be protected by patents
3. patents and compulsory licensing
should compulsory licensing continue to be permissible – under what circumstance?
4. patents and technical standards;

Should a patent holder disclose the best method of working a patent?
5. Patent and access to medicine and public health policy;
how should the law regulate access to patented medicines while at the same time safe guarding the rights of the patent holder? Can these two nexus co-exist? Has the international community attempted to deal with this issue e.g. through WTO, WHO, etc? See more in chapter 8.

Reference

WIPO's report on international patent system for the Standing Committee on Patents (SCP 12/3)

http://www.wipo.int/edocs/mdocs/scp/en/scp_12/scp_12_3.doc

Chapter 4 “Patents, R&D and New Technologies” of WIPO Publication No. 888, Intellectual Property – a Power Tool for Economic Growth - at

http://www.wipo.int/about-wipo/en/dgo/wipo_pub_888/index_wipo_pub_888.html

General Frequently Asked Questions are useful to pose some questions to start discussing the role of patents:

<http://www.wipo.int/patentscope/en/patents.html>

Use a few case studies involving companies in the country concerned; see some case studies available at

http://www.wipo.int/sme/en/index.jsp?sub_col=sme-cs&cat=patents

To read the executive summary of patent policies and strategy of some countries may be useful to understand the current issues and challenges in the area of innovation promotion and the role of patents; see some free web resources at <http://www.wipo.int/patent-law/en/developments/policies.html>

WIPO Intellectual Property Handbook; Policy, Law and Use, Chapters 2 and 5, available at <http://www.wipo.int/export/sites/www/about-ip/en/iprm/pdf/ch2.pdf>

Resources available at WIPO and WTO web sites:

<http://www.wipo.int/treaties/en/>

and

http://www.wto.org/english/thewto_e/whatis_e/tif_e/agrm7_e.htm

On a brief history of WIPO substantive patent law harmonization, see a backgrounder at <http://www.wipo.int/patent-law/en/harmonization.htm>

See more in papers presented at WIPO Open Forum on the Substantive Patent Law Harmonization Treaty (SPLT) available at http://www.wipo.int/meetings/en/2006/scp_of_ge_06/

1. Disclosure requirement and the deposit of microorganisms

Explain the purport of this requirement in the context of promoting scientific and technological innovation and explain the Budapest Treaty and recent discussions on the disclosure requirement of genetic resources at WTO, WIPO and CBD.

See a brief explanation of the rationale of this requirement at http://www.wipo.int/export/sites/www/meetings/en/2006/scp_of_ge_06/presentations/scp_of_ge_06_roberts.pdf

See the Budapest Treaty text and its summary at <http://www.wipo.int/treaties/en/registration/budapest/>

See the disclosure requirements on genetic resources used for carrying out an invention included in a patent application at <http://www.wipo.int/tk/en/genetic/>

See Chapter 4 “Patents, R&D and New Technologies” of WIPO Publication No. 888, Intellectual Property – a Power Tool for Economic Growth - at http://www.wipo.int/about-wipo/en/dgo/wipo_pub_888/index_wipo_pub_888.html

See also resources on patents, innovation and R&D at <http://www.wipo.int/patent-law/en/developments/research.html>

See a brief history of the Bayh-Dole Act which was intended to clarify the patent policy of the United States of America

www.wipo.int/academy/en/meetings/ipcd_sym_05/papers/pdf/reichman_paper.pdf

Chapter 3

Trademarks, Geographical Indications and Industrial Designs

Introduction

The outlook of a product and an indication identifying the producer or supplier of the product and services used in trade often influence consumers' decision to buy or not to buy them. Visible elements of products and services could be protected from acts of unfair competition by intellectual property rights such as trademarks and service marks, indications of source on goods and geographical indications, and industrial designs. It was at the end of the 19th century that such signs or designs were recognized as important elements of trade in an international treaty (the Paris Convention).

These branches of intellectual property are expected to make a contribution towards enhancing the competitiveness and brand of private companies in the market as well as brands and reputation of a country where those brands come from. According to recent statistics, good will and intangible assets account for more than two thirds of corporate assets. Notwithstanding, the value of intangible assets such as brand names often protected by trademarks, do not often or clearly appear on the balance sheets of private companies. Good management of intellectual property has become a crucial factor for the success of business. Corporate strategies increasingly focus on how to generate or extract the value of intangible assets from their undertakings. Strategic use of these branches of intellectual property rights is an essential and integral part of the successful corporate strategy.

“Branding” and “brand” are often narrowly defined to refer only to the expensive price of such luxury goods as cosmetics, watches, drugs and electronic devices. However, the business enterprises have increasingly realized that the perception of branding or brands need to be understood and discussed in the context of the globalized economy which requires that any company, whether it provides goods or services to end consumers or other business partners, should have something special or unique to make its goods or services different from and superior to those of other competitors in the market. That is the value of the company which is arguably the most crucial strategic factor to the business success in this century. Trademarks, geographical indications and industrial designs are powerful tools for branding. They have become important as elements of value in financial transactions. Brand names supported by trademarks, geographical indications and industrial designs have become the most valuable assets of a growing number of companies, often exceeding the value of their physical assets.

Trademark

Basics of Trademarks

A trademark is a sign capable of distinguishing the “goods” or “services” produced or provided by one enterprise from those of other enterprises. The concept of “goods” refers to products (for example shoes or computers) on which the trademark can be physically affixed, directly or by means of labels or packaging, while the notion of “services” refers to activities of an intangible nature (such as financial, banking, travel or advertising).

Any distinctive words, letters, numerals, drawings, pictures, shapes, colors, logotypes, labels or combinations used to distinguish goods or services may be considered a trademark. In some countries, advertising slogans are also considered trademarks and may be registered as such at national trademark offices.

Service Marks, Certification Marks, Collective Marks

Trademarks also include service marks, certification marks and collective marks. Service marks are names used to identify a service, as opposed to a good (e.g. TATA GROUP is a service mark, whereas TATA INDICA for a car is a trademark) and function like trademarks.

Certification marks are used to indicate that a good or service complies with a manufacturing standard or specification (e.g. WOOLMARK which certifies that the goods on which it is used are made of 100% wool), or that those who provide a service have certain level of skills or training.



A Collective mark is a mark that belongs to an association which authorizes its members to use the collective mark (e.g. UAW for United Auto Workers).



Protecting Trademarks and Registering Trademarks

Trademark protection can be obtained through registration or, in some countries, also through use. Even where trademarks can be protected through use, it is advisable to register the trademark by filing the appropriate application form at the national trademark office (some trademark offices have facilities for applying for registration on-line). Registering a trademark will provide stronger protection, particularly in case of conflict with an identical or confusingly similar trademark. Without trademark registration, investments in marketing a product may become wasteful as rival companies may use the same or a confusingly similar trademark for identical or similar products.

As a general rule, countries provide for an application on paper form, the use of which is mandatory. The application may be handed in person directly to the Industrial Property Office, or be forwarded by post or by fax. Some Offices (for example in Australia, Republic of Korea or United States of America) have facilities for applying for registration on-line, directly over the Internet.

Classes of Goods and Services

While filling a trademark application form, it is necessary to indicate the goods and/or services for which the protection is granted. In order to rationalize the examination of trademark applications by Offices, and also with a view to facilitating the search of prior conflicting trademarks, applicants are required to group these goods and/or services according to “classes”. The most widely used classification system is the International Trademark Classification system (the so-called Nice system for classification of word marks), which has 34 classes for goods and a further 11 for services.

In the field of trademarks, the list of goods and/or services is of critical importance since it determines the scope of protection. This means that the protection acquired by the owner in relation to the mark applies only with respect to those goods and/or services (or similar goods and/or services). The consequences of this principle, known as the principle of specialty, are extremely important. The principle of specialty means in particular that if a person obtains the protection of the mark “XX” in relation, for example, to shoes, nothing prevents a third party to use the very same name (“XX”) for other types of goods and services (for which there can not be a likelihood of confusion), for example for computers.

However, where given goods belong to the same class of the Nice Classification, this does not necessarily mean that those goods must be considered as similar. The Nice classification provides in this respect (Article 2(1)) that the classification does not bind the Nice Union countries as regards evaluation of the extent of protection of a mark. For example, even though both “protection devices for personal use against accidents” and “optical devices” fall within class 9 of the Nice Classification, these two different types of goods should certainly not be considered as similar.

Geographical Coverage

Is trademark registration in your home country valid internationally? The legal rights arising out of a trademark registration are normally limited to the territory to which they pertain; so, ordinarily, a valid registration of a trademark in your home country gives you rights only in your own country unless your mark is considered to be a well-known mark. Given the value of trademarks and the importance that a trademark may have in determining the success of a product in the marketplace, it is important to ensure its registration in the relevant market(s). It is advisable to register your trademark abroad if you are engaged in export operations or intend to do so in the near future. In addition, a registered trademark may be licensed to other companies, thus providing an additional source of revenue for your company, or may be the basis for a franchising agreement.

Trademark Protection under the Paris Convention

The Paris Convention does not regulate the conditions for the filing and registration of trademarks. Such regulation and conditions are determined in each contracting State by the domestic law. Consequently, no application for the registration of a mark filed by a national of a contracting State may be refused, nor may a registration be invalidated, on the ground that filing, registration or renewal has not been effected in the country of origin.

Once the registration of a mark is obtained in a contracting State, it is independent of its possible registration in any other country, including the country of origin. Consequently, the lapse or annulment of the registration of a mark in one contracting State will not affect the validity of registration in other contracting States.

Where a trademark has been duly registered in the country of origin, it must, on request, be accepted for filing and protected in its original form in the other contracting States. Nevertheless, registration may be refused in well-defined cases, such as when the trademark would infringe acquired rights of third parties, when it is devoid of distinctive character, when it is contrary to morality or public order, or when it is of such a nature as to be liable to deceive the public. If, in any contracting State, the use of a registered trademark is compulsory, the registration cannot be canceled until after a reasonable period, and only if the owner cannot justify his inaction.

Each contracting State must refuse registration and prohibit the use of trademarks which constitute a reproduction, imitation or translation, liable to create confusion, of a trademark considered by the competent authority of that State to be well known in that State as being already the mark of a person entitled to the benefits of the Convention and used for identical or similar goods.

Each contracting State must likewise refuse registration and prohibit the use of trademarks which consist of or contain without authorization, armorial bearings, State

emblems and official signs and hallmarks of contracting states, provided such refusal and provision of use have been communicated to other members through the International Bureau of WIPO. The same provisions apply to abbreviations and names of certain intergovernmental organizations.

Well-known Marks

In most countries, well-known trade and service marks enjoy protection against signs which are considered a reproduction, imitation or translation of that mark. Such a mark is likely to cause confusion in the relevant sector of the public. Well-known marks are usually protected irrespective of whether they are registered or not, in respect of goods and services which are identical with or similar to those for which they have gained their reputation. In many countries, under certain conditions, they are also protected for dissimilar goods and services. It should be noted that there is no commonly agreed definition of what constitutes a “well-known mark.” However, WIPO adopted joint recommendations on the protection of well-known marks in 1999. For text, see:

http://www.wipo.int/about-ip/en/development_iplaw/pub833.htm

Many countries protect unregistered well-known marks in accordance with their international obligations under the Paris Convention and the TRIPS Agreement. Consequently, any business enterprise can aspire to establish sufficient goodwill with customers so that its marks may be recognized as well-known marks and acquire protection without registration. It is, nevertheless, advisable to seek registration, taking into account that many countries provide for an extended protection of registered well-known marks against dilution (Art. 16.3 TRIPS), i.e., against the reputation of the mark being weakened by the unauthorized use of that mark by others.

Trademark Law Harmonization (Formality Requirements)

The Trademark Law Treaty (TLT) adopted in 1994 contains, in Article 3, an exhaustive list of information which Trademark Offices of Contracting Parties may require for trademark registration. It expressly prohibits requirement of certain formalities such as authentication or legalization, which are considered unnecessary and particularly burdensome. The TLT also provides Model International Forms which contain relevant information required for registration of a Trademark.

The Singapore Treaty on the Law of Trademarks was adopted in March 2006. The objective of the Singapore Treaty is to create a modern and dynamic international framework for the harmonization and administrative procedures for trademark registration. Building on the TLT, the Singapore Treaty has a wider scope of application and addresses registration of Trademark in the light of new developments in the field of communication technology. As compared with the TLT 1994, the Singapore Treaty is applicable to all types of marks registrable under the law of a given Contracting Party.

Contracting Parties are free to choose the means of communication for registration of Trademarks (including communications in electronic form or by electronic means of transmittal). Relief measures in respect of time limits as well as provisions on the recording of trademark licenses were introduced. An Assembly of the Contracting Parties was also established. Other provisions of the Singapore Treaty (such as the requirements to provide for multi-class applications and registrations, and the use of the Nice International Classification), closely follow the 1994 TLT. The two treaties are separate, and may be ratified or adhered to independently.

Conditions of Protection: What Trademarks can be registered?

The requirements which a sign must fulfill in order to serve as a trademark are reasonably standard throughout the world. Generally speaking, two different kinds of requirement are stated in most national laws: the first kind relates to the function to distinguish the products or services of one enterprise from the products or services of other enterprises, and the second one is that it should not mislead or violate public order or morality.

These two kinds of requirement exist in practically all national trademark laws. They also appear in Article 6*quinquies* B of the Paris Convention where it is stated that trademarks enjoying protection under Article 6*quinquies* A may be denied registration only if “they are devoid of any distinctive character” or if “they are contrary to morality or public order and, in particular, of such a nature as to deceive the public.”

A trademark must be distinctive. The word “apple” or an apple device cannot be registered for apples, but it is highly distinctive for computers. This means that a trademark’s distinctive character must be evaluated in relation to the goods to which it is applied. The test of whether a trademark is distinctive depends on the understanding of the consumers, or at least the persons to whom the sign is addressed. A sign is distinctive for the goods to which it is to be applied when it is recognized by those to whom it is addressed as identifying goods from a particular trade source, or is capable of being so recognized.

The distinctiveness of a sign is not an absolute or unchangeable factor. Depending on the steps taken by the user of the sign or third parties, it can be acquired or even lost. Circumstances such as (possibly long and intensive) use of the sign have to be taken into account when the registrar is of the opinion that the sign lacks the necessary distinctiveness, that is, if it is regarded as not being in itself distinct enough for the purpose of distinguishing between goods and services.

Common words from everyday language can also be highly distinctive as a trademark if they communicate a meaning that is arbitrary in relation to the products on which they are used. Examples are the famous CAMEL trademark for cigarettes and APPLE for computers.

The applicant need not normally prove the distinctiveness of a mark. It is up to the registrar to prove lack of distinctiveness, and in the case of doubt the trademark should be

registered. The trend is to treat lack of distinctiveness as a ground for refusing an application for registration of a trademark. The criteria governing the refusal of registration for lack of distinctiveness include, among others, the following:

(1) Generic Terms

A sign is generic when it defines a category or type to which the goods belong. It is essential so as not to impede trade and also for consumers that nobody should be allowed to monopolize a generic term which should be available for all to use. Examples of generic terms are “furniture”, “chair”, “drinks”, “coffee”, etc. These signs are totally lacking in distinctiveness. Some jurisdictions hold that, even if such words are used extensively and may have acquired a secondary meaning, they cannot be registered since, in view of the absolute need of trade, they must not be monopolized by one entity.

(2) Descriptive Signs

Descriptive signs are those that serve in trade to designate the kind, quality, intended purpose, value, place of origin, time of production or any other characteristic of the goods for which the sign is intended to be used or is being used. The test to be applied is whether consumers are likely to regard such a sign as referring to the origin of the product (distinctive sign) or whether it is regarded as a reference to the characteristics of the goods or their geographical origin (descriptive sign). The term “consumer” is used to refer to the relevant circles to whom the sign is addressed.

Letters, numerals and geometrical shapes are often regarded as not distinctive and therefore unregistrable. Normally consumers will not regard letters, numerals or simple geometrical shapes as indications of the origin of the goods. Nevertheless, letters, numerals and their combinations can become distinctive through use. The recent international trend has been to accept the registration of such signs. Furthermore, even without use, letters and numerals can be registrable if they are registered as a fanciful trademark.

(4) Names

Company names and trade names are registrable, except where they are deceptive or considered to be not distinctive. In some countries, common surnames are not registrable in some countries, since they are not distinctive. For less common surnames, it is important to establish whether another meaning in everyday language will be overwhelmingly recognized by consumers. If there is such a dominant meaning, the sign is registrable on the condition that the meaning in question is not descriptive of the goods for which the mark is to be used.

Exclusions from Registration on Grounds of Public Interest

Trademarks that are likely to deceive the public as to the nature, quality or any other characteristics of the goods or their geographical origin do not, in the interest of the public, qualify for registration. The test here is for intrinsic deception, inherent in the trademark itself when associated with the goods for which it is proposed. This test should be clearly distinguished from the test for the risk of confusing customers by the use of identical or similar trademarks for identical or similar goods.

Signs that are descriptive or indicative of the geographical origin of products are intended to deceive consumers as to the origin of the goods when such goods are clearly not. As discussed below in this Chapter, in some countries, the protection of geographical indications is provided under a separate law from the trademark law with a view to ensuring that products come from the region described or indicated for consumer protection and promotion of such products of the original quality.

Use Requirements

To register a trademark, some trademark offices (e.g. the United States of America and Canada), require proof of use or a declaration that the owner intends to use the trademark. In many countries, however, trademark laws generally do not require use as condition for the application for trademark registration. In some countries, the registration may be cancelled without valid reasons (see for example Article 19 of the TRIPS Agreement). A trademark that is not put in use is an artificial barrier to the registration of new marks.

Trademark owners need a period of time after registration before the obligation to use a trademark comes into effect. The moratorium period granted in trademark laws that provide for a use obligation is sometimes three years, but more often five years in many countries.

In trademark laws of certain countries, the period granted for a use obligation ranges from three years to five years.

Duration and Renewal

For administrative reasons, a time limit is generally provided for the validity of a trademark, with possibility for renewal of the registration upon expiration. Furthermore, the registration of trademarks without a time limit would lead to an undesirable amount of trademark registrations that are no longer of interest to their owners. Even if unused marks may be removed from the register, such a procedure would be costly and time-consuming for the interested party, and would not always be successful.

Consequently, the requirement of renewal and the payment of renewal fees is an opportunity for a trademark owner to consider whether it is still worth having his

registration renewed, as the trademark may have been superseded in its graphic form, or may even no longer be in use.

Rights Arising from Trademark Registration

The owner of a registered trademark has the exclusive right to prevent all third parties from using identical or similar trademarks without his consent. The owner of a registered trademark also has the right to assign the trademark to a third party with or without the transfer of the business to which the trademark belongs.

Together with the question whether a trademark is distinctive, the question whether a trademark is confusingly similar to an earlier right is one of the cornerstones of trademark protection.

Trademarks are registered for goods in certain classes which have been established for purely administrative purposes. The classification of goods cannot therefore be decisive for the question of similarity. Trademarks can be more or less similar to each other. A trademark is confusingly similar to a prior mark if it is used for similar goods and so closely resembles the prior mark that there is a likelihood of consumers being misled as to the origin of the goods. If the consumer is confused, the distinguishing role of the trademark is not functioning, and the consumer may fail to buy the product that he wants. This is bad for the consumer, but also for the trademark owner who loses the sale.

The Internet and Trademarks

What should be kept in mind when using trademarks on the Internet? One important problem stems from the fact that trademark rights are territorial (they are only protected in the country or region where the mark has been registered or used), whereas the reach of the Internet is global. This creates problems when it comes to settling disputes between persons or companies legitimately owning identical or confusingly similar trademarks for identical or similar goods or services in different countries. Legislation in this area is still developing and treatment may differ from one country to another.

Trademarks are essential in electronic-commerce. Enterprises need to build recognition and goodwill and inspire confidence in them and in their brands. Particularly when operating in virtual markets in which face-to-face interactions are infrequent and there is little or no opportunity to inspect goods or services before purchasing them, consumers rely heavily on marks as a means of identifying suppliers of products and services. In some respects, a mark used on the Internet may have broader impact and possibly greater value than in the physical world, as it is visible to a potentially global public and might be considered to have a global effect.

Owners of trademarks used in e-commerce are placed under considerable strain when confronted with the challenges of the Internet. One area of conflict stems from the

relationship between marks and domain names. Domain names are a simple form of Internet address, designed to enable users to access locations on the net easily. Domain names have become valuable in their own right as unique identifiers, akin to marks, showing the Internet address, but also often capitalizing on the brand strategy of the owner of the website. Their value is heightened because there is only one spot for each word as a domain name in a particular address.

At its Assemblies meeting in September 2001, WIPO adopted the Joint recommendation concerning provisions on the protection of marks, and other industrial property rights in signs, on the internet with a view to providing a clear legal framework for trademark owners who wish to use their marks on the Internet and to participate in the development of electronic commerce.

See http://www.wipo.int/about-ip/en/development_iplaw/pub845.htm

New Types of Marks

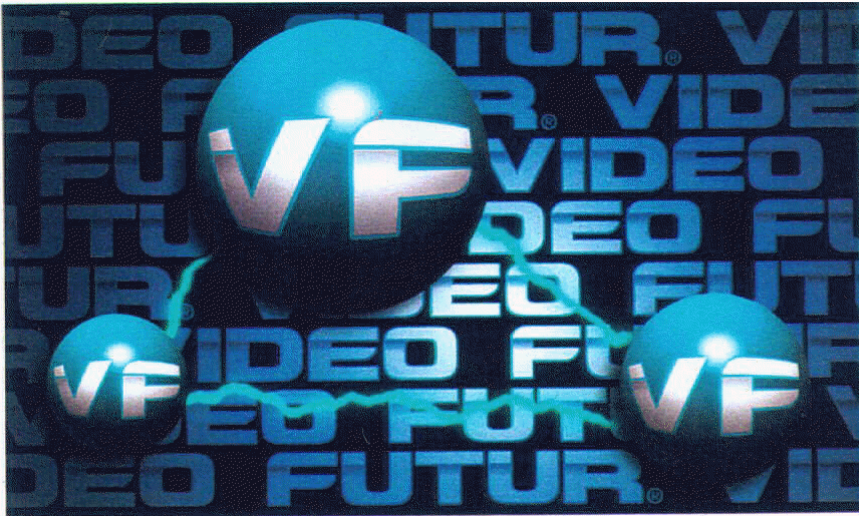
At the Standing Committee on the Law of Trademarks, Industrial Designs and Geographical Indications, WIPO Member States have started to work on a number of topical issues relating to trademarks and industrial designs. One of the issues concerns the national legislation and trademark office practice in relation to the registration of new types of trademarks. It is because in some countries such trademarks have been registered in response to the growing demands for effectively attracting the attention of consumers. Though there are still different opinions on a question of whether and to what extent new types of marks should be registered, the exchange of information on substantive and procedural requirements on the registration of such marks have started at WIPO. Under the Madrid system where approximately 500,000 trademark registrations are valid, only 35 are sound marks, 526 are three dimensional marks and over 3,000 are marks that claim one or several colors as distinctive feature.

Examples of such marks are given below.

(1) Three-dimensional marks; These include product shape, product packaging and containers. A famous example is a bottle of Coca Cola.

(2) Color marks; Color *per se* and combinations of color without delineated contours have been included accepted for registration in several jurisdictions. A famous example is Kodak's yellow.

(3) Hologram marks; Holograms may optically store and retrieve an image in three dimensions. The image might change depending on the angle chosen by the viewer. A number of Trademark Offices have accepted for registration hologram marks.



Community Trademark registration (CTM 2117034) for Video Future Ltd.

(4) Motion or multimedia signs and gesture marks; these signs may consist of or contain elements of motion. The moving image may be a film-clip, video, moving logo for TV-shows, etc.

Example 1 (motion mark): Microsoft registered an animation called a “flare logo” in Windows Vista computer operating system.

Example 2 (gesture mark): Mars BV registered a mark for a gesture of two cutting fingers (used for a commercial film of TWIX chocolate bar).

(5) Position marks; the particular and distinctive location of a sign in relation to a product may constitute a trademark in certain systems. Position marks are usually treated as figurative marks and only one representation with one single view of the sign is generally required. An example is a graphical representation of a red stripe with the indication that it is positioned in the heel of shoes.

(6) Sound marks; Sound marks may consist of musical sounds, either pre-existing or specially commissioned for the purposes of trademark registration. They may also consist of non-musical sounds, either existing in nature (e.g., animal sounds or sounds produced by meteorological or geographical features) or produced by machines and other man-made devices.

Example 1: Nokia - default ring tone (US No 3,288,274)

Example 2: New York Stock Exchange Closing Bell (application). Description: The mark consists of the sound of a brass bell tuned to the pitch D, but with an overtone of D-sharp, struck nine times at a brisk tempo, with the final tone allowed to ring until the sound decays naturally. The rhythmic pattern is eight 16th notes and a quarter note; the total duration, from the striking of the first tone to the end of the decay on the final one, is just over 3 seconds.

(7) Olfactory (smell) marks; Olfactory or scent or smell marks have been registered in some countries. Even though the registration of this type of sign remains exceptional, it would seem that the representation may consist of a written description of the scent. This representation should be in a form that conveys information to the ordinary person allowing proper identification of the mark.

Example 1: A smell mark applied by Sieckmann in Germany once refused and later reviewed by the European Court of Justice (ECJ). The smell mark consists of a chemical compound of cinnamic acid methyl ester and it is described as “balsamically fruity smell with a slight hint of cinnamon.”

The ECJ’s decision is regarded as a landmark decision in EU on the issue of the registration of new types of marks. The decision ruled that (a) a chemical formula depicting this scent did not represent the odor of a substance, was not sufficiently intelligible, nor sufficiently clear and precise; (b) a written description was not sufficiently clear, precise and objective; and (c) a physical deposit of a sample of the scent did not constitute a graphic representation, and was not sufficiently stable or durable.

See <http://www.copat.de/markenformen/C-273-00EN.pdf>

Example 2: The UK’s first smell mark was granted to a rubber company in 1996 for a floral fragrance of roses as applied to tires.

(8) Taste marks; this type of sensory mark has been accepted for registration in some countries. In such cases, the applicant supplied a representation of the mark consisting of two elements, namely an indication of the type of mark in the application and a written description depicting the characteristics of the taste. It seems, however, that at present the registration of taste marks remains exceptional. The Benelux IP Office registered a few taste marks.

(9) Texture or feel marks; In the case of texture marks, it is the surface of the product that might lead to recognition, for instance because the surface touched has a specific recognizable structure or texture. Although the registration of texture or feel marks remains exceptional, some ways of representing such signs have been identified.

See http://www.wipo.int/edocs/mdocs/sct/en/sct_19/sct_19_2.doc

Geographical Indications

Basics of Geographical Indications

Article 1 paragraph (2) of the Paris Convention defines as subjects of industrial property, inter alia, indications of source and appellations of origin. This is the terminology traditionally applied and still officially used in the conventions and agreements administered by WIPO. Yet another “geographical indication” are defined, for the purposes of the TRIPS Agreement, as indications which identify a good as originating in the territory of a Member, or a region or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographical origin (Article 22.1).

A geographical indication points to a specific place or region of production that determines the characteristic qualities of the product that originates therein. It is important that the product derives its qualities and reputation from that place. Since those qualities depend on the place of production, a specific “link” exists between the products and their original place of production.

Geographical indications may be used for a wide variety of agricultural products, such as, “Tuscany” for olive oil produced in a specific area of Italy (protected, for example, in Italy by Law No. 169 of February 5, 1992), or “Roquefort” for cheese produced in France (protected, in the European Union under Regulation (EC) No. 2081/92 and in the United States under US Certification Registration Mark No. 571.798).

However, the use of geographical indications is not limited to agricultural products. They may also highlight specific qualities of a product which are due to human factors that can be found in the place of origin of the product, such as specific manufacturing skills and traditions. The place of origin may be a village or town, a region or a country. An example of the latter is “Switzerland” or “Swiss,” which is perceived as a geographical indication in many countries for products that are made in Switzerland and, in particular, watches and chocolate.

Lisbon Agreement

The Lisbon Agreement for the Protection of Appellations of Origin and their International Registration adopted in 1958 has the objective of facilitating the international protection of appellations of origin. Its latest amended regulations entered into force on April 1, 2002. The system offers the possibility of obtaining the protection of appellation of origin in 25 member States of the Lisbon Union (i.e., excluding the country of origin) by using one single registration procedure.

The limited membership of the Lisbon Agreement is due to the particular characteristics of the substantive provisions of the Agreement. For instance, Article 2(1) contains a

definition according to which appellation of origin means “the geographical name of a country, region or locality which serves to designate a product originating therein, the quality and characteristics of which are due exclusively or essentially due to the geographical environment, including natural and human factors.”

Thus, some countries have requested for a new international system which is more flexible and broader than the Lisbon system. This request has also been discussed at WTO TRIPS Council for a possible revision of the TRIPS Agreement as discussed below.

TRIPS Agreement on Geographical Indications

Part II, Section 3 of the TRIPS Agreement is dedicated to geographical indications. The general norm of protection is provided by Article 22.2, which reads as follows:

“2. In respect of geographical indications, Members shall provide the legal means for interested parties to prevent:

- the use of any means in the designation or presentation of a good that indicates or suggests that the good in question originates in a geographical area other than the true place of the origin in a manner which misleads the public as to the geographical origin of the good;
- any use which constitutes an act of unfair competition within the meaning of Article 10*bis* of the Paris Convention (1967).”

The registration of a trademark which uses a geographical indication in a way that misleads the public as to the true place of origin must be refused or invalidated *ex officio* if the legislation so permits or at the request of an interested party (Article 22.3).

Article 23 provides that interested parties must have the legal means to prevent the use of a geographical indication identifying wines for wines not originating in the place indicated by the geographical indication. This applies even where the public is not being misled, there is no unfair competition and the true origin of the good is indicated or the geographical indication is accompanied by expressions such as “kind”, “type”, “style”, “imitation” or the like. Similar protection must be given to geographical indications identifying spirits when used on spirits. Protection against registration of a trademark must be provided accordingly. Article 23 is commonly referred to as “enhanced protection”.

Article 24 contains a number of exceptions to the protection of geographical indications. These exceptions are of particular relevance in respect of the additional protection for geographical indications for wines and spirits. For example, Members are not obliged to bring a geographical indication under protection, where it has become a generic term for describing the product in question (paragraph 6). Measures to implement these provisions shall not prejudice prior trademark rights that have been acquired in good faith

(paragraph 5). Under certain circumstances, continued use of a geographical indication for wines or spirits may be allowed on a scale and nature as before (paragraph 4). Members availing themselves of the use of these exceptions must be willing to enter into negotiations about their continued application to individual geographical indications (paragraph 1). The exceptions cannot be used to diminish the protection of geographical indications that existed prior to the entry into force of the TRIPS Agreement (paragraph 3). The TRIPS Council shall keep under review the application of the provisions on the protection of geographical indications (paragraph 2).

The WTO Doha Ministerial Conference decided to mandate the TRIPS Council to discuss two issues on geographical indications aiming at the higher level of protection: (a) creating a multilateral register for wines and spirits; and (b) extending the higher (Article 23) level of protection beyond wines and spirits (extension). Both are as contentious as any other subject on the Doha agenda.

Three sets of proposals have been submitted over the years: the EU's proposal; "the joint proposal" put forward by Argentina, Australia, Canada, Chile, Costa Rica, Dominican Republic, Ecuador, El Salvador, Honduras, Japan, Mexico, New Zealand, Chinese Taipei and the United States of America; and a proposal from Hong Kong (Special Administrative Region of China)

Bilateral Agreements

A further possibility of international protection of geographical indications is the conclusion of bilateral agreements between two states. A number of countries have entered into such agreements. In general, such bilateral agreements consist of lists of geographical indications which were drawn up by the contracting parties and an undertaking to protect the geographical indications of the respective contracting parties. The agreement also usually specifies the kind of protection that is to be granted. Although in general, bilateral agreements are useful, they cannot constitute an entirely adequate solution to the problem of the lack of international protection because of the multiplicity of negotiations required and, resulting therefrom, an inevitable diversity of standards.

Industrial Designs

Basics of Industrial Design Protection

An Industrial design, in a general sense, refers to the creative activity of achieving a formal or ornamental appearance for mass-produced items that, within the available cost constraints, satisfies both the need for the item to appeal visually to potential consumers, and the need for the item to perform its intended function efficiently. In a legal sense, an industrial design refers to the right granted in many countries, pursuant to a registration system, to protect the original ornamental and non-functional features of an industrial article or product that result from design activity.

Visual appeal is one of the considerations that influence the decision of consumers to prefer one product over another, particularly in areas where a range of products performing the same function is available in the market. In these latter situations, if the technical performance of the various products offered by different manufacturers is relatively equal, aesthetic appeal, along with, of course, cost, will determine the consumer's choice. The legal protection of industrial designs thus serves the important function of protecting one of the distinctive elements by which manufacturers achieve market success. In so doing, by rewarding the creator for the effort which has produced the industrial design, legal protection serves as an incentive to the investment of resources in fostering the design element of production.

Depending on the particular national law and the kind of design, an industrial design may also be protected as a work of art under copyright law. In some countries, industrial design and copyright protection can exist concurrently. In other countries, they are mutually exclusive: once the owner chooses one kind of protection, he can no longer invoke the other. Under certain circumstances an industrial design may also be protectable under unfair competition law, although the conditions of protection and the rights and remedies ensured can be significantly different.

Industrial design registration systems can be grouped under two broad categories, namely "deposit" systems and "examination" systems. Deposit systems are characterized by a relatively simple administrative deposit procedure, under which an industrial design is deposited or registered without being examined as to compliance with substantive requirements for protection, such as novelty or originality.

Conditions for Registration

In most countries, an industrial design must be registered in order to be protected under industrial design law. As a general rule, to be registrable, the design must be "*new*" or "*original*". Different countries have varying definitions of such terms, as well as variations in the registration process itself. Generally, "new" means that no identical or very similar design is known to have existed before. Once a design is registered, a

registration certificate is issued. Following that, the term of protection is generally five years, with the possibility of further periods of renewal up to, in most cases, 15 years.

The subject matter of the legal protection of industrial designs is not articles or products, but rather the design which is applied to or embodied in such articles or products. While the subject matter of design protection is an essentially abstract conception, one of the basic purposes of industrial design protection is the stimulation of the design element of the production. Accordingly, it is a usual feature of industrial design laws that a design can be protected only if it is capable of being used in industry, or in respect of articles produced on a large scale.

The requirement that a design must be applied to utilitarian articles in order to be protected is one of the principal matters which distinguishes the objectives of industrial design protection from copyright protection, since the latter is purely concerned with aesthetic creations.

Novelty or Originality

It is a requirement of all industrial design laws that protection through registration shall be granted only to designs which are novel or, as it is sometimes expressed, original. The novelty of the design constitutes the fundamental reason for the grant of a reward to the originator through protection by registration of the industrial design.

While the requirement of novelty is to be found in all laws, the nature of the novelty that is required as a condition of protection differs amongst the laws of various countries. The novelty required is sometimes absolute or universal, meaning that the design for which registration is sought must be new as against all other designs produced in all other parts of the world at any previous time and disclosed by any tangible or oral means.

On the other hand, a qualified standard of novelty is sometimes required. In this latter situation, the qualification may relate to time, meaning that novelty is judged by reference to designs published within a limited preceding period of time; or may relate to territory, meaning that novelty is judged by reference to all designs published within the relevant jurisdiction, as opposed to anywhere in the world; or may relate to means of expression, meaning that novelty is assessed by reference to written or tangible disclosures anywhere in the world and to oral disclosures only within the relevant jurisdiction.

Exclusion of Designs Dictated by Function

The concern of industrial design protection with appearance only is also apparent from the requirement, commonly found in industrial design laws, that designs which are dictated solely by the function which the article is to perform shall be excluded from protection. In this respect, Article 25.1 of the TRIPS Agreement provides that Members

of the WTO may provide that industrial design protection shall not extend to designs dictated essentially by technical or functional considerations.

A fundamental purpose is served by the exclusion from protection of designs dictated solely by the function which the article is to perform. Many articles to which designs are applied are not themselves novel, and are produced by a large number of different manufacturers.

Examination for Registration

Industrial design protection is usually granted pursuant to a procedure for the registration of such designs. The most commonly adopted examination system provides for a formal examination only of an application for a registered design. According to this system, an application is examined to ensure that it meets with each of the formal requirements for an application which are imposed by the relevant law (for example, whether the requisite number of representations or specimens of the design are filed with the application). No search is made of the prior art to determine whether the substantive criterion of novelty or originality is satisfied by the design for which registration is sought.

A system requiring only formal examination has the effect of shifting the burden of assessing novelty to those interested persons in the market who may wish to use, or who may have used, the design or a substantially similar design. Any person interested in using such a design will have the opportunity either to oppose the registration of the design for which application has been made (if the relevant law provides for an opposition procedure) or of bringing proceedings for the cancellation of a registration which it is alleged is invalid. The alternative system of examination provides for a search of past designs and an examination of the design for which registration is sought to ascertain whether it satisfies the required condition of novelty. It necessitates the maintenance of a search file and sufficient skilled manpower to undertake the substantive examination.

Rights Conferred by the Registration of Industrial Design

The right to prevent others from exploiting an industrial design usually encompasses the exclusive right to do any of the following things for industrial or commercial purposes: make articles to which the design is applied or in which the design is embodied; import articles to which the design is applied or in which it is embodied; sell, hire or offer for sale any such articles.

In some laws, the exclusive rights of the proprietor also extend to preventing others from stocking any articles to which the design has been applied or in which it is embodied. While this right is sometimes considered as excessive in that it deals only with preparatory acts, it is on the other hand often included in order to facilitate the enforcement of a proprietor's rights, since it may often be easier to locate a stock of

infringing articles than to apprehend a person in the act of selling or offering for sale such articles.

Duration of Rights

The term of protection for an industrial design varies from country to country. The usual term ranges from 10 to 25 years, often divided into terms requiring the proprietor to renew the registration in order to obtain an extension of the term of protection. The relatively short period of protection may be related to the association of designs with more general styles of fashions, which tend to enjoy somewhat transient acceptance or success, particularly in highly fashion-conscious areas, such as clothing or footwear.

Debate on Policy Issues

- ✓ Identify some cases in your country which show how a trademark, a geographical indication or an industrial design could enhance the competitiveness in the market and could make a solid and international brand.
- ✓ Discuss what government policies could promote the use of the protection system for trademarks, geographical indications and industrial designs to facilitate development in developing countries.
- ✓ Some countries are in favor of possible expansion of an enhanced protection of geographical indications from wine and spirits to other products, while some others are not. Discuss the pros and cons of the two sides.

Reference

Chapter 5 of WIPO Publication No. 888, Intellectual Property – a Power Tool for Economic Growth - at

www.wipo.int/about-wipo/en/dgo/wipo_pub_888/index_wipo_pub_888.html

“Making a mark,” WIPO publication; Intellectual Property for Business Series

www.wipo.int/export/sites/www/freepublications/en/marks/900/wipo_pub_900.pdf

See sources at “International Treaties – Trademark” at the following web site;

<http://www.wipo.int/trademarks/en/treaties.html>

For a brief overview of such Treaties, use WIPO Intellectual Property Handbook; Policy, Law and Use, Chapters 5 at <http://www.wipo.int/about-ip/en/iprm/index.html>

See a detailed explanation of TRIPS trademark provisions at

http://www.wto.int/english/tratop_e/trips_e/intel2_e.htm#trademark

For a brief overview of these elements with regard to trademark protection, use WIPO Intellectual Property Handbook; Policy, Law and Use, Section “Trademark” in Chapter 2 at <http://www.wipo.int/export/sites/www/about-ip/en/iprm/pdf/ch2.pdf>

For a brief overview of three different routes, see “Making a Mark” (pp. 13 and 14) at http://www.wipo.int/freepublications/en/sme/900/wipo_pub_900.pdf

For the Madrid system, see <http://www.wipo.int/madrid/en/general/>

For the Community Trademark system, see <http://oami.europa.eu/en/mark/role/brochure/br1en.htm>

For a brief explanation of the concept and WIPO joint recommendation on the protection of well-known marks, see http://www.wipo.int/sme/en/ip_business/marks/well_known_marks.htm

Chapter 4

PCT, Madrid and the Hague Systems

PCT System

The Patent Cooperation Treaty (PCT) makes it possible to seek patent protection for an invention simultaneously in each of a large number of countries by filing an “international” patent application. Such an application may be filed by anyone who is a national or resident of a PCT contracting State. It may generally be filed with the national patent office of the contracting State of which the applicant is a national or resident or, at the applicant’s option, with the International Bureau of WIPO in Geneva.

If the applicant is a national or resident of a contracting State which is party to the European Patent Convention, the Harare Protocol on Patents and Industrial Designs (Harare Protocol), the Bangui Agreement, or the Eurasian Patent Convention, the international application may also be filed with the European Patent Office (EPO), the African Regional Industrial Property Organization (ARIPO), the African Intellectual Property Organization (OAPI) or the Eurasian Patent Office (EAPO), respectively. The Treaty regulates in detail the formal requirements with which any international application must comply.

The filing of a PCT application automatically has the effect of the designation of all PCT contracting States. The effect of the international application in each designated State is the same as if a national patent application had been filed with the national patent office of that State.

The international application is subjected to what is called an “international search.” That search is carried out by one of the major patent offices and results in an “international search report,” that is, a listing of the citations of published documents that might affect the patentability of the invention claimed in the international application. In addition, a preliminary and non-binding, written opinion on whether the invention appears to meet the patentability criteria in light of the search report results is also issued.

The international search report and the written opinion are communicated to the applicant who, after evaluating their content, may decide to withdraw his application, in particular where the content of the report and opinion suggest that the granting of patents is unlikely, or he may decide to amend the claims in the application.

If the international application is not withdrawn, it is, together with the international search report, published by the International Bureau. The written opinion is not published at this time.

If the applicant decides to continue with the international application with a view to obtaining national (or regional) patents, he can, in relation to most contracting States, wait until the end of the thirtieth month from the priority date to commence the national procedure before each designated Office by furnishing a translation (where necessary) of the application into the official language of that Office, paying to it the necessary fees and acquiring the services of local patent agents.

If the applicant wishes to make amendments to the application, for example, in order to overcome documents identified in the search report and conclusions made in the written opinion, and to have the potential patentability of the “as-amended” application reviewed, the optional international preliminary examination may be used. The result of the preliminary examination is an international preliminary report on patentability (IPRP Chapter II) which is prepared by one of the major patent offices and which contains, once again, a preliminary and non-binding opinion on the patentability of the claimed invention. It provides the applicant with an even stronger basis on which to evaluate his chances of obtaining patents, and, if the report is favorable, a stronger basis on which to continue with his application before the national and regional patent Offices.

The procedure under the PCT has great advantages for the applicant, the patent offices and the general public:

(i) applicants have up to 18 months more than if they had not used the PCT to reflect on the desirability of seeking protection in foreign countries, to appoint local patent agents in each foreign country, to prepare the necessary translations and to pay the national fees;

(ii) applicants can rest assured that, if their international application is in the form prescribed by the PCT, it cannot be rejected on formal grounds by any PCT contracting State patent Office during the national phase of the processing of the application;

(iii) on the basis of the international search report and the written opinion, applicants can evaluate with reasonable probability the chances of their invention being patented;

(iv) applicants have the possibility during the optional international preliminary examination to amend the international application and thus put it in order before processing by the various patent Offices;

(v) the search and examination work of patent Offices can be considerably reduced or eliminated thanks to the international search report, the written opinion and, where applicable, the international preliminary report on patentability which are communicated to the national and regional Offices together with the international application;

(vi) since each international application is published together with an international search report, third parties are in a better position to formulate a well-founded opinion about the potential patentability of the claimed invention; and

(vii) for applicants, international publication puts the world on notice of their applications, which can be an effective means of advertising and looking for potential licensees.

Ultimately, the PCT:

- brings the world within reach;
- postpones the major costs associated with international patent protection;
- provides a strong basis for patenting decisions; and
- is used by the world's major corporations, research institutions and universities when they seek international patent protection.

The PCT created a Union, which has an Assembly. Every State party to the PCT is a member of the Assembly.

The Assembly of the PCT Union has established a special measure to the benefit of (1) natural persons who are nationals of and reside in States whose per capita national income is below US\$ 3,000, and (2) applicants, whether a natural person or not, who are nationals of and reside in States which are classed as least developed countries by the United Nations. That benefit consists of a reduction of 75 percent of certain fees under the Treaty.

The PCT was concluded in 1970, amended in 1979 and modified in 1984 and in 2001.

Recent Use of PCT Services

In total, a record 156,100 international applications were filed under PCT in 2007, representing a 4.7% rate of growth over the previous year. For the fourth year running, the most notable growth rates came from countries in north east Asia which accounted for over a quarter (25.8%) of all international applications under the PCT.

The PCT remains an attractive option for businesses as it makes it easier for companies and inventors to obtain patent rights in multiple countries. Strategic use of the patent system is a business imperative in today's knowledge-driven economy.

The Republic of Korea, which experienced 18.8% growth in 2007 as compared to 2006, overtook France to become the 4th biggest country of origin of PCT filings, and applicants from China, whose use grew by 38.1%, dislodged the Netherlands to take the position of 7th largest country of origin.

With more than 52,000 PCT applications, inventors and industry from the United States of America represented 33.5% (a 2.6% increase over 2006) of all applications in 2007. Applicants from Japan, who unseated their German counterparts in 2003 for the number two spot, maintained their second place position with 17.8% of the total number of applications, representing a 2.6% increase over 2006.

Inventors and industry from Germany held third position with 11.6% of all applications in 2007, representing an 8.4% increase, followed by users in the Republic of Korea (4.5% of all applications and an 18.8% increase) and France (4.1% of all applications and a 2.1% increase). Of the fifteen top filing countries, China achieved double-digit growth (7th highest filer, with a growth rate of 38.1% in 2007). Among other countries to register double-digit growth in 2007 were Brazil (15.3%), Malaysia (71.7%), Singapore (13.9%) and Turkey (10%).

The year 2007 saw some changes in the list of top users of the PCT system. Matsushita of Japan moved into 1st place (2,100 applications published in 2007), overtaking the Dutch multinational Philips Electronics N.V. (2,041 applications published in 2007). Siemens (Germany) (1,644) retained 3rd place. Huawei Technologies of China moved up 9 places to become the 4th largest applicant with 1,365 applications published in 2007. These were followed by Bosch (Germany) (1,146), Toyota (Japan) (997), Qualcomm (USA) (974), Microsoft, which jumped 38 places to 8th place (USA) (845), Motorola (USA) (824) and Nokia (Finland) (822). Among the 20 top filing companies, six were from the USA, six from Japan and three from Germany.

The largest proportion of PCT applications published in 2007 related to the telecommunications (10.5%), information technology (10.1%) and pharmaceuticals (9.3%) sectors. The fastest growing technology areas are nuclear engineering (24.5% increase) and telecommunications (15.5%).

WIPO continued to receive international patent applications from developing countries in 2007. The largest number of applications received came from the Republic of Korea (7,061) and China (5,456) followed by India (686), South Africa (390), Brazil (384), Mexico (173), Malaysia (103), Egypt (41), Saudi Arabia (35) and Colombia (31). Developing countries make up 78% of the membership of the PCT, representing 108 of the 138 countries that have signed up to the treaty to date.

Madrid System

The system of international registration of marks is governed by two treaties: the Madrid Agreement concluded in 1891 and revised at Brussels (1900), Washington (1911), The Hague (1925), London (1934), Nice (1957), and Stockholm (1967), and amended in 1979, and the Protocol to that Agreement (the Madrid Protocol), which was concluded in 1989, with the aim of rendering the Madrid system more flexible and more compatible with the domestic legislation of certain countries which had not been able to accede to the Agreement.

The Madrid Agreement and Protocol are open to any State which is party to the Paris Convention for the Protection of Industrial Property. The two treaties are parallel and independent and States may adhere to either of them or to both. In addition, an intergovernmental organization which maintains its own Office for the registration of marks may become party to the Protocol. Instruments of ratification or accession must be deposited with the Director General of WIPO. States and organizations which are party to the Madrid system are collectively referred to as Contracting Parties.

The system makes it possible to protect a mark in a large number of countries by obtaining an international registration which has effect in each of the Contracting Parties that has been designated.

An application for international registration (international application) may be filed only by a natural person or legal entity having a connection, through establishment, domicile or nationality, with a Contracting Party to the Agreement or the Protocol.

A (trade)mark may be the subject of an international application only if it has already been registered with the Trademark Office (referred to as the Office of origin) of the Contracting Party with which the applicant has the necessary connections. However, where all the designations are effected under the Protocol (see below) the international application may be based on a mere application for registration filed with the Office of origin. An international application must be presented to the International Bureau of WIPO through the intermediary of the Office of origin.

An application for international registration must designate one or more Contracting Parties where protection is sought. Further designations can be effected subsequently. A Contracting Party may be designated only if it is party to the same treaty as the Contracting Party whose Office is the Office of origin. The latter cannot itself be designated in the international application.

The designation of a given Contracting Party is made either under the Agreement or under the Protocol, depending on which treaty is common to the Contracting Parties concerned. If both Contracting Parties are party to both the Agreement and the Protocol, the designation will be governed by the Agreement, in accordance with the so-called "safeguard clause" (Article 9sexies of the Protocol).

Where all the designations are effected under the Agreement the international application, and any other subsequent communication, must be in French. Where at least one designation is effected under the Protocol, the applicant has the option of English or French, unless the Office of origin restricts this choice to one of these.

The filing of an international application is subject to the payment of a basic fee (which is reduced to 10% of the prescribed amount for international applications filed by applicants whose country of origin is a Least Developed Country (LDC), in accordance with the list established by the United Nations), a supplementary fee for each class of goods and/or

services beyond the first three classes, and a complementary fee for each Contracting Party designated. However, a Contracting Party to the Protocol may declare that when it is designated under the Protocol, the complementary fee is to be replaced by an individual fee, whose amount is determined by the Contracting Party concerned but may not be higher than the amount which would be payable for the registration of a mark with its Office.

Once the International Bureau receives the international application, it carries out an examination for compliance with the requirements of the Agreement, the Protocol, and their Common Regulations. This examination is restricted to formalities, including the classification and comprehensibility of the list of goods and/or services; any matter of substance, such as whether the mark qualifies for protection or whether it is in conflict with an earlier mark, is left to each designated Contracting Party to determine. If there are no irregularities, the International Bureau records the mark in the International Register, publishes the international registration in the WIPO Gazette of International Marks, and notifies it to each designated Contracting Party.

These Contracting Parties may examine the international registration for compliance with their domestic legislation and, if some substantive provisions are not complied with, they have the right to refuse protection in their territory. Any such refusal, including the indication of the grounds on which it is based, must be communicated to the International Bureau, normally within 12 months from the date of the notification. However, a Contracting Party to the Protocol may declare that, when it is designated under the Protocol, this time limit is extended to 18 months. Such a Contracting Party may also declare that a refusal based on an opposition may be communicated to the International Bureau even after this time limit of 18 months.

The refusal is communicated to the holder, recorded in the International Register and published in the Gazette. The procedure subsequent to a refusal (such as an appeal or a review) is carried out directly between the administration or court of the Contracting Party concerned and the holder, without any involvement of the International Bureau. The final decision concerning the refusal must, however, be communicated to the International Bureau, which records and publishes it.

The effects of an international registration in each designated Contracting Party are, as from the date of the international registration, the same as if the mark had been deposited directly with the Office of that Contracting Party. If no refusal is issued within the applicable time limit, or if a refusal originally notified by a Contracting Party is subsequently withdrawn, the protection of the mark in question is, from the date of the international registration, the same as if it had been registered by the Office of that Contracting Party.

Protection may be limited with regard to some or all of the goods or services or may be renounced with regard to only some of the designated Contracting Parties. An international registration may be transferred in relation to all or some of the designated Contracting Parties and all or some goods or services.

The system of international registration of marks has several advantages for trademark owners. Instead of filing many national applications in all countries of interest, in several different languages, in accordance with different national procedural rules and regulations and paying several different (and often higher) fees, an international registration may be obtained by simply filing one application with the International Bureau (through the Office of the home country), in one language (either English or French) and paying only one set of fees.

Similar advantages exist when the registration has to be renewed; this involves the simple payment of the necessary fees, every 10 years, to the International Bureau. Likewise, if the international registration is assigned to a third party or any other change, such as a change in name and/or address, has occurred, this may be recorded with effect for all the designated Contracting Parties by means of a single procedural step.

Recent Use of the Madrid Services

A record 39,945 international trademark applications were received in 2007 by WIPO under the Madrid system for the international registration of trademarks, representing a 9.5% increase on figures for 2006.

The Madrid system has earned the trust and confidence of the business community as a reliable option for brands seeking export markets. Brand value is one of the most important assets that a business holds. From a legal perspective, brand creation and management translates into trademark protection. Trademarks are a key means by which businesses are able to add value to their day-to-day commercial operations and thereby secure their long-term financial viability.

The largest share of the 39,945 international trademark applications received by WIPO in 2007 was filed by companies in Germany (6,090 applications or 15.2% of the total). These were followed by companies in France, which accounted for 3,930 applications or 9.8% of the total. Users in the USA ranked third with 3,741 or 9.4% of the total, only 4 years after the USA joined the Madrid system. Those filing their international applications through the EC's regional Trademark Office (OHIM) were fourth, only 3 years after the EC acceded (with 3,371 applications or 8.4% of the total). They were followed by Italy (2,664 or 6.7%), Switzerland (2,657 or 6.7%), Benelux (2,510 or 6.3%), China (1,444 or 3.6%), the United Kingdom (1,178 or 2.9%) and Australia (1,169 or 2.9%).

Since October 2004, applicants from the EC have the option to file their international applications either through their national trademark office or through the EC's regional trademark office (OHIM) in Alicante. In 2007, the third full year of the EC as a member of the Madrid system, the number of international applications filed by applicants from the EC through OHIM rose by 37.9%. The 27 countries of the European Union (EU) together accounted for 26,026 applications in 2007. These figures include both the

international applications filed through the national trademark offices of the countries concerned and those filed through OHIM (3,371).

A number of countries experienced significant growth in the number of international trademark filings in 2007. The USA, for instance, enjoyed an 18.8% increase enabling it to strengthen its 3rd position in the ranking of top filer countries. Other countries included, inter alia, the United Kingdom (+11.8%) now ranking 9th (previously 11th), Japan (+16.2%) now ranking 12th (formerly 13th), Russian Federation (+42.9%) now 13th (formerly 15th), Denmark (+19.6%) now 16th (formerly 17th), Sweden (+19.5%) now 18th (formerly 19th) and Hungary (+101.8%) now 19th (formerly 25th). Developing countries accounted for 2,108 filings in 2007, representing 5.3% of total filings and a 10.5% growth over 2006. The developing country that witnessed the most significant growth in international trademark filings in 2007 is the Republic of Korea with 330 applications (+73.7%).

Henkel from Germany is holder of the largest number of international trademark registrations under the Madrid system: 2,567. The top twenty holders, by the end of 2007, were: Henkel (Germany), Janssen Pharmaceutica (Belgium), Novartis (Switzerland), L'Oréal (France), Unilever (Netherlands), Nestlé (Switzerland), Sanofi-Aventis (France), Siemens (Germany), BASF (Germany), ITM Entreprises (France), Bayer (Germany), Biofarma (France), Richter Gedeon (Hungary), Lidl (Germany), Kraft Foods (Switzerland), Philips (Netherlands), Boehringer Ingelheim (Germany), Syngenta (Switzerland), Ecolab (Germany), Merck (Germany).

With 278 international trademark applications, Richter Gedeon from Hungary was the largest filer in 2007. The top twenty filers in 2007 were: Richter Gedeon (Hungary), Novartis (Switzerland), Henkel (Germany), Lidl (Germany), Toyo Boseki (Japan), Glaxo (UK), Biofarma (France), Janssen Pharmaceutica (Belgium), Nestlé (Switzerland), Brillux (Germany), L'Oréal (France), Zhejiang Elegant Prosper Garment (China), Boehringer Ingelheim (Germany), BMW (Germany), Plus (Germany), Siemens (Germany), Beiersdorf (Germany), Krka (Slovenia), Sanofi-Aventis (France), Hofer (Austria).

The top filers from developing countries include, apart from Zhejiang Elegant Prosper Garment (China) mentioned above, also the following companies from China: Shanghai Vanwa Industrial, Ningbo South Electronical Appliance Co., Beijing Posh Furniture Co., Jiangsu Sunshine Garment Co., Guangzhou Panyu South Star Co., China Tea Co. and Shandong Jinyu Tyre Co. The list further includes E. Land Ltd (Republic of Korea).

A record 370,234 new designations of Madrid Union member countries were notified in 2007, representing a 1.5% increase over 2006 and reflecting commercial activity by foreign companies in the designated country. When submitting an international trademark application, applicants must designate those member countries in which they want their mark to be protected. Applicants can also extend the effects of an international registration to other members at a later date by filing a subsequent designation. In this

way, the holder of an international registration can expand the geographical scope of the protection of a mark in line with evolving business needs.

For the third consecutive year, China was the most designated country. With 16,676 designations, it accounted for 4.5% of the total number of new designations and enjoyed a 5.5% increase in such designations over 2006. The second most designated country in 2007 was the Russian Federation with 15,455 designations (+7.1%), followed by the United States of America with 14,618 designations (+4.5%), Switzerland with 14,528 designations (+1.9%), EC with 12,744 designations (+19.8%) and Japan with 12,296 designations (+3.8%).

The EC continues to be a favorite target market for designations. Having received 12,744 designations in 2007 (+19.8%), the EC has moved from the 6th to the 5th position in the ranking of most designated members of the Madrid Union; the majority of these designations, i.e., 7,529 (59%), were made in applications or subsequent designations originating in an EC member state. Other countries which moved up in the ranking of most designated countries compared to 2006 are USA (from 4th to 3rd position), the Ukraine (from 9th to 8th place), Turkey (from 10th to 9th place), Croatia (from 18th to 13th place) and Singapore (from 21st to 14th place).

In 2007, on average, 8.4 member countries were designated per registration by applicants seeking international trademark protection under the Madrid system and 58% of the registrations recorded in 2007 contained one to five designations.

In submitting a trademark application, an applicant has to specify the goods or services to which the trademark will be applied in accordance with an international classification system known as the "Nice Classification". The most popular classes of goods and services in international trademark registrations recorded in 2007 were Class 9 (which covers, e.g., computer hardware and software and other electrical or electronic apparatus of a scientific nature) representing 8.5% of the total, Class 35 (which covers services such as office functions, advertising and business management) which represented 6.4% of the total, Class 25 (covering clothing, footwear and headgear), or 5.3% of the total, Class 42 (covering services provided by, e.g. scientific, industrial or technological engineers and computer specialists) or 5.2% of the total and Class 5 (which covers, e.g., pharmaceuticals and other preparations for medical purposes), or 4.7% of the total.

In 2007, applicants paid on average a fee of 3,549 Swiss Francs (CHF) for an international registration. For 81% of the registrations recorded in 2007, the fees paid were less than 5,000 CHF and for 54% less than 3,000 CHF.

By the end of 2007, there were 483,210 international trademark registrations in force in the international register. They contained some 5.4 million active designations and belonged to 159,420 different trademark holders (of which many are small and medium-sized enterprises (SMEs)). In the course of 2007, 17,478 of these were renewed for an additional ten-year period of protection (i.e. some 46% of the total number of international registrations with a term of protection that was coming to an end in 2007).

The Madrid system also allows for the central administration of an international trademark portfolio, as it provides for procedures which enable trademark holders to record modifications to international registrations (for example, changes of ownership, changes in name or address of the holder or changes in the appointment of the representative of the holder) through the submission of a single request at WIPO. Modifications recorded in 2007 totaled 85,244, representing a 20.6% increase over 2006. The number of decisions by designated contracting parties (including grants of protection, provisional refusals, extensions of the limit for refusal based on an opposition, final decisions following a refusal and invalidations) recorded in the international register was 267,733, representing a 25.7% increase over 2006.

The Hague System

Three Acts of the Hague Agreement are currently in force, the 1999 Act, the 1960 Act and the 1934 Act. An international registration may be obtained only by a natural person or legal entity having a connection, through establishment, domicile, nationality or, under the 1999 Act residence, with a Contracting Party to any of the three Acts.

An international deposit may be governed by the 1999 Act, 1960 Act, the 1934 Act or any combination of these depending on the Contracting Party with which the applicant has the connection described above (hereafter referred to as “Contracting Party of origin”). Over 99 percent of international registrations currently obtained are governed (exclusively or in part) by either the 1999 or the 1960 Act.

The system applicable under the 1960 Act or the 1999 Act may be summed up as follows. The international registration of an industrial design may be sought with the International Bureau of WIPO, either directly or through the industrial property office of the Contracting Party of origin if the law of that Contracting Party so permits or requires.

An international registration is based on an application and one or more photographs or other graphic representations of the design. The application must contain a list of the Contracting Parties in which the international registration is to have effect and the designation of the article or articles in which it is intended to incorporate the design or which constitute the design. The international registration may extend its effects to the Contracting Party of origin unless the legislation of that Contracting Party provides otherwise. The application may be in English or French.

The photographs or other graphic representations of the designs submitted by the applicant are published in the International Designs Bulletin, which issues monthly on CD-ROM and on the Internet. Depending on his selection of designated Contracting Parties, the applicant may request that the publication be deferred by a period not exceeding 30 months from the date of the international registration or, if priority is claimed, from the priority date.

The international registration has, in each of the Contracting Parties designated by the applicant, the same effect as if all the formalities required by the domestic law for the

grant of protection had been complied with by the applicant and as if all administrative acts required to that end had been accomplished by the office of that State.

Each Contracting Party designated by the applicant may refuse protection within six months, or possibly 12 months under the 1999 Act, from the date of the publication of the international registration. Refusal of protection can only be based on requirements of the domestic law other than the formalities and administrative acts to be accomplished under the domestic law by the office of the Contracting Party which refuses the protection.

The term of protection is five years, renewable for at least one five-year period under the 1960 Act, or two such periods under the 1999 Act. If the legislation of a Contracting Party provides for a longer term of protection, protection of the same duration shall, on the basis of the international registration and its renewals, be granted in that Contracting Party to designs which have been the subject of an international registration.

The main differences between an international registration governed exclusively by the 1934 Act and an international registration governed exclusively or partially by the 1960 or the 1999 Act can be summarized as follows:

- ✓ the registration extends automatically to all States party to the 1934 Act, unless protection in any of those States is expressly renounced;
- ✓ the registration may be opened or sealed;
- ✓ the publication does not comprise a reproduction of the designs; it merely states the article or articles in which the designs are to be incorporated;
- ✓ the term of protection is 15 years, divided into an initial period of five years and, subject to renewal, a second period of 10 years;
- ✓ there is no provision for the notification of a refusal of protection;
- ✓ the registration must be made in French.

In order to facilitate the work of the users of the Hague Agreement, the WIPO Secretariat publishes a Guide to the International Registration of Industrial Designs.

The Hague Agreement, concluded in 1925, was revised at London in 1934 and at The Hague in 1960. It was completed by an Additional Act signed at Monaco in 1961 and by a Complementary Act signed at Stockholm in 1967, which was amended in 1979. As noted above, a further Act was adopted at Geneva in 1999.

The Hague Agreement created a Union. Since 1970, the Union has an Assembly. Every country member of the Union which has adhered to the Complementary Act of Stockholm is a member of the Assembly. Among the most important tasks of the Assembly are the adoption of the biennial program and budget of the Union and the adoption and modification of the implementing regulations, including the fixing of the fees connected with the use of the Hague system.

The 1960 and 1934 Acts of the Agreement are open to States party to the Paris Convention for the Protection of Industrial Property (1883). The 1999 Act is open to any

State member of WIPO and to certain intergovernmental organizations. Instruments of accession must be deposited with the Director General of WIPO.

Recent Use of the Hague Services

The number of international registrations under the Hague System in 2006 remained stable compared to the previous year. As regards renewals of international registrations, they totaled 3,889 (i.e., a 0.1 per cent increase over the previous year). The number of designs contained in these registrations was 13.7 per cent lower than the previous year.

Debate on Policy Issues

- ✓ Many developing countries have not used the global protection services. Why? How could we make the services more accessible to users in developing countries?
- ✓ Propose the ideal global services that WIPO should provide.

Reference

Details concerning the PCT can be obtained by consulting the PCT resources at

<http://www.wipo.int/treaties/en/registration/pct/>

Details concerning the Madrid system can be obtained by consulting Madrid resources at

http://www.wipo.int/treaties/en/registration/madrid_protocol/

Details concerning the Hague system can be obtained by consulting Madrid resources at

<http://www.wipo.int/treaties/en/registration/hague/>

Chapter 5

Copyright and Related Rights

Introduction

Copyright and related rights are probably most familiar IP to the public but their functions are less known or often misunderstood. The legal concepts and instruments, while respecting and protecting the rights of creators in their works, also contribute to the cultural and economic development of nations. Copyright law fulfills a decisive role in articulating the contributions and rights of the different stakeholders taking part in the cultural industries and the relation between them and the public.

To provide an overview of copyrights and related rights, several frequently-asked questions will be answered.

What rights does copyright provide? The original creators of works protected by copyright, and their heirs, have certain basic rights. They hold the exclusive right to use or authorize others to use the work on agreed terms. The creator of a work can prohibit or authorize:

- ✓ its reproduction in various forms, such as printed publication or sound recording;
- ✓ its public performance, as in a play or musical work;
- ✓ recordings of it, for example, in the form of compact discs, cassettes or videotapes;
- ✓ its broadcasting, by radio, cable or satellite;
- ✓ its translation into other languages, or its adaptation, such as a novel into a screenplay.

Many creative works protected by copyright require mass distribution, communication and financial investment for their dissemination (for example, publications, sound recordings and films); hence, creators often sell the rights to their works to individuals or companies best able to market the works in return for payment. These payments are often made dependent on the actual use of the work, and are then referred to as royalties.

How long will copyright and related rights provide for the protection? The rights have a time limit, according to the relevant WIPO treaties, of 50 years after the creator's death. National law may establish longer time-limits. This limit enables both creators and their heirs to benefit financially for a reasonable period of time.

Copyright protection also includes moral rights (as distinguished from the economic rights), which involve the right to claim authorship of a work, and the right to oppose changes to it that could harm the creator's reputation.

The creator - or the owner of the copyright in a work - can enforce rights administratively and in the courts, by inspection of premises for evidence of production or possession of illegally made - "pirated" - goods related to protected works. The owner may obtain court orders to stop such activities, as well as seek damages for loss of financial rewards and recognition.

Are ideas, methods or concepts protected by copyright? Copyright protection extends only to expressions, and not to ideas, procedures, methods of operation or mathematical concepts as such. This principle has been confirmed by the TRIPS Agreement as well as the WIPO Copyright Treaty.

History

It was the spread of the printing press that provoked the need for a copyright law. Book production in the first millennium was a tedious, slow affair. Scribes wrote and copied books by hand, some with more artistic skill than others. Written works were for the elite only. Organized religion was a prime moving force in the preservation of knowledge in books, as well as the proliferation of multiple copies of books. The invention of movable type and the printing press by Johannes Gutenberg around 1450, was one of the historical events that contributed to the birth of the first copyright system in the world. As in the protection of inventions, it was also Venice that granted John of Speyer, the first printer, the exclusive right to print the letters in 1469.

With Gutenberg's invention available everywhere in western Europe by the second half of the 15th century, the Roman Catholic Church began to ban books written by reformers, and monopolies of the press emerged in England and France. In the 16th century, monopolies by printers continued in order to protect the publishers' profits and to permit control over printing. In 1710, the Statute of Anne was enacted by the British Parliament, to diminish some of the control of publishers over printing and recognizing authors' rights, giving them or their heirs exclusive powers to reprint a book for 14 years after it was first published. Called an "act for the encouragement of learning", the Statute of Anne was one of the inspirations for the IP protection in the United States Constitution.

In the mid-1800s, renowned authors were finding their works illegally reproduced and for sale in countries other than their own, and from which they received no royalties. In order to eliminate this practice, the famed French author of *Les Miserables* and *The Hunchback of Notre Dame*, Victor Hugo, organized a group of prominent authors into the International Literary Association, which later became known as the International Literary and Artistic Association, with the intention of establishing some basic form of international protection for their works. In 1886, to provide the basis for mutual

recognition of copyright between different states, another major international IP treaty was enacted, the Berne Convention for the Protection of Literary and Artistic Works.

What are rights related to copyright?

A field of rights related to copyright has rapidly developed over the last 50 years. These related rights grew up around copyrighted works, and provide similar, although often more limited and of shorter duration, rights to:

- ✓ performing artists (such as actors and musicians) in their performances;
- ✓ producers of sound recordings (for example, cassette recordings and compact discs) in their recordings;
- ✓ broadcasting organizations in their radio and television programs.

Why protect copyright?

Copyright and its related rights are essential to human creativity, by giving creators incentives in the form of recognition and fair economic rewards. Under this system of rights, creators are assured that their works can be disseminated without fear of unauthorized copying or piracy. This in turn helps increase access to and enhances the enjoyment of culture, knowledge, and entertainment all over the world.

In this century's knowledge-based economy and information-rich society, so-called creative enterprises, those engaged in the commercial exploitation of copyright-based goods and services (i.e., books, film, music), contribute significantly to the economic, social and cultural development of nations. These enterprises form complex networks in content-driven sectors, which in turn make up the creative industries. Their unique characteristics (i.e., original symbolic products) drive and sustain diverse cultural and customary traditions, and enhance social values. At the same time, they generate wealth, increase employment opportunities, and promote trade. Yet, their true value and potential are often underestimated and insufficiently analyzed.

In 2003 WIPO published a "Guide on Surveying the Economic Contribution of the Copyright-Based Industries". The Guide summarizes existing experiences in assessing the economic contribution of the copyright-based industries to national economies and offers guidelines to those studying the creative outputs in economic terms. While the main objective of the Guide is to produce a harmonized approach to economic surveys in this field, it goes further in providing governments, research institutions and civil society in general with a practical tool to evaluate the contribution of their copyright sector. Based on the Guidelines, WIPO also published "National Studies on Assessing the Economic Contribution of the Copyright-Based Industries" is now available as WIPO Publication No. 624. A sample excerpt from the book (US study) is also available at the following site:

http://www.wipo.int/ip-development/en/creative_industry/pdf/ecostudy-usa.pdf

For instance, the “value-added” to the economy of the United States of America by the core copyright industries reached \$626.2 billion or 6% of the economy of the United States of America in 2002. In the same year, the value added by the total copyright industries was \$1.254 trillion or 12% of the economy of the United States of America. Another example is a study on Latvia where the core and interdependent copyright industries contributed 4.0% of GDP and 4.4% employment to the economy in the year 2000.

Conditions for protection

Copyright itself does not depend on official procedures. A created work is considered protected by copyright as soon as it exists. According to the Berne Convention for the Protection of Literary and Artistic Works (the Berne Convention), literary and artistic works are protected without any formalities in the countries party to that Convention. Thus, WIPO does not offer any kind of copyright registration system.

However, many countries have a national copyright office and some national laws allow for registration of works for the purposes of, for example, identifying and distinguishing titles of works. In certain countries, registration can also serve as prima facie evidence in a court of law with reference to disputes relating to copyright.

“All Rights Reserved”?

How can you get permission to use somebody else’s work and other subject matters? You can contact the right owner. For certain types of works and other subject matter, you can get permission from a collective management organization. Collective management organizations license use of works and other subject matter that are protected by copyright and related rights whenever it is impractical for right owners to act individually. There are several international non-governmental organizations that link together national collective management organizations. How much of someone else’s work can you use without getting permission? Under most national copyright laws, it is permissible to use limited portions of a work, including quotes, for purposes such as news reporting and private personal use. The exceptions will be discussed in detail below in this Chapter.

Copyright and Human Rights, the Universal Declaration of Human Rights

IP rights including copyright and related rights are recognized as human rights in the Universal Declaration of Human Rights, 1948 (in particular Articles 17, 19 and 27), and in other international and regional human rights treaties and instruments.

Article 17

- (1) Everyone has the right to own property alone as well as in association with others.
- (2) No one shall be arbitrarily deprived of his property.

Article 19

Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.

Article 27

- (1) Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits.
- (2) Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.

However, the relationship between IP systems and human rights is complex and calls for a full understanding of the nature and purposes of the IP system. It is suggested by some that conflicts may exist between the respect for and implementation of current IP systems and other human rights, such as the rights to adequate health care, to education, to share in the benefits of scientific progress, and to participation in cultural life.

The Berne Convention

The Berne Convention for the Protection of Literary and Artistic Works (1886) (the Berne Convention) rests on three basic principles and contains a series of provisions determining the minimum protection to be granted, as well as special provisions available to developing countries which want to make use of them.

The three basic principles are the following:

- (a) Works originating in one of the contracting States (that is, works the author of which is a national of such a State or works which were first published in such a State) must be given the same protection in each of the other contracting States as the latter grants to the works of its own nationals (principle of “national treatment”);
- (b) Such protection must not be conditional upon compliance with any formality (principle of “automatic” protection); and
- (c) Such protection is independent of the existence of protection in the country of origin of the work (principle of the “independence” of protection). If, however, a

contracting State provides for a longer term than the minimum prescribed by the Convention and the work ceases to be protected in the country of origin, protection may be denied once protection in the country of origin ceases.

The minimum standards of protection relate to the works and rights to be protected, and the duration of the protection:

(a) As to works, the protection must include “every production in the literary, scientific and artistic domain, whatever may be the mode or form of its expression” (Article 2(1) of the Convention).

(b) Subject to certain permitted reservations, limitations or exceptions, the following are among the rights which must be recognized as exclusive rights of authorization:

- ✓ the right to translate,
- ✓ the right to make adaptations and arrangements of the work,
- ✓ the right to perform in public dramatic, dramatico-musical and musical works,
- ✓ the right to recite in public literary works,
- ✓ the right to communicate to the public the performance of such works,
- ✓ the right to broadcast (with the possibility of a contracting State to provide for a mere right to equitable remuneration instead of a right of authorization),
- ✓ the right to make reproductions in any manner or form (with the possibility of a contracting State to permit, in certain special cases, reproduction without authorization provided that the reproduction does not conflict with the normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author, and with the possibility of a contracting State to provide, in the case of sound recordings of musical works, for a right to equitable remuneration),
- ✓ the right to use the work as a basis for an audiovisual work, and the right to reproduce, distribute, perform in public or communicate to the public that audiovisual work

The Convention also provides for moral rights, that is, the right to claim authorship of the work and the right to object to any mutilation or deformation or other modification of, or other derogatory action in relation to, the work which would be prejudicial to the author’s honor or reputation.

(c) As to the duration of protection, the general rule is that protection must be granted until the expiration of the 50th year after the author’s death.

There are, however, exceptions to this general rule. In the case of anonymous or pseudonymous works, the term of protection expires 50 years after the work has been lawfully made available to the public, except if the pseudonym leaves no doubt as to the author’s identity or if the author discloses his identity during that period; in the latter case, the general rule applies. In the case of audiovisual (cinematographic) works, the

minimum term of protection is 50 years after the making available of the work to the public (“release”) or—failing such an event—from the creation of the work. In the case of works of applied art and photographic works, the minimum term is 25 years from the creation of such a work.

(3) Countries regarded as developing countries in conformity with the established practice of the General Assembly of the United Nations may, for certain works and under certain conditions, depart from these minimum standards of protection with regard to the right of translation and the right of reproduction.

The Rome Convention

The Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organisations (1961) (the Rome Convention) secures protection in performances of performers, phonograms of producers of phonograms and broadcasts of broadcasting organizations.

4. Performers (actors, singers, musicians, dancers and other persons who perform literary or artistic works) are protected against certain acts they have not consented to. Such acts are: the broadcasting and the communication to the public of their live performance; the fixation of their live performance; the reproduction of such a fixation if the original fixation was made without their consent or if the reproduction is made for purposes different from those for which they gave their consent.

5. Producers of phonograms enjoy the right to authorize or prohibit the direct or indirect reproduction of their phonograms. Phonograms are defined in the Rome Convention as meaning any exclusively aural fixation of sounds of a performance or of other sounds. When a phonogram published for commercial purposes gives rise to secondary uses (such as broadcasting or communication to the public in any form), a single equitable remuneration must be paid by the user to the performers, or to the producers of phonograms, or to both; contracting States are free, however, not to apply this rule or to limit its application.

6. Broadcasting organizations enjoy the right to authorize or prohibit certain acts, namely: the re-broadcasting of their broadcasts; the fixation of their broadcasts; the reproduction of such fixations; the communication to the public of their television broadcasts if such communication is made in places accessible to the public against payment of an entrance fee.

The Rome Convention allows exceptions in national laws to the above-mentioned rights as regards private use, use of short excerpts in connection with the reporting of current events, ephemeral fixation by a broadcasting organization by means of its own facilities and for its own broadcasts, use solely for the purpose of teaching or scientific research and in any other cases—except for compulsory licenses that would be incompatible with the Berne Convention where the national law provides exceptions to copyright in literary

and artistic works. Furthermore, once a performer has consented to the incorporation of his performance in a visual or audiovisual fixation, the provisions on performers' rights have no further application.

Protection must last at least until the end of a period of 20 years computed from the end of the year in which:

- (a) the fixation was made, for phonograms and for performances incorporated therein;
- (b) the performance took place, for performances not incorporated in phonograms;
- (c) the broadcast took place, for broadcasts. (However, national laws ever more frequently provide for a 50-year term of protection, at least for phonograms and for performances.)

The TRIPS Agreement

As it was recognized that the Berne Convention, for the most part, provided adequate basic standards of copyright protection, it was agreed that the point of departure should be the existing level of protection under the latest Act, the Paris Act of 1971, of that Convention (TRIPS Agreement Article 9.1)

In addition to requiring compliance with the basic standards of the Berne Convention, the TRIPS Agreement clarifies and adds certain specific points.

Article 9.2 confirms that copyright protection shall extend to expressions and not to ideas, procedures, methods of operation or mathematical concepts as such;

Article 10.1 provides that computer programs, whether in source or object code, shall be protected as literary works under the Berne Convention (1971). Article 10.1 confirms that computer programs must be protected under copyright and that those provisions of the Berne Convention that apply to literary works shall be applied also to them. It confirms further, that the form in which a program is, whether in source or object code, does not affect the protection. The obligation to protect computer programs as literary works means e.g. that only those limitations that are applicable to literary works may be applied to computer programs. It also confirms that the general term of protection of 50 years applies to computer programs. Possible shorter terms applicable to photographic works and works of applied art may not be applied.

Article 10.2 clarifies that databases and other compilations of data or other material shall be protected as such under copyright even where the databases include data that as such are not protected under copyright.

Article 11 provides that authors shall have in respect of at least computer programs and, in certain circumstances, of cinematographic works the right to authorize or to prohibit the commercial rental to the public of originals or copies of their copyright works.

According to the general rule contained in Article 7(1) of the Berne Convention as incorporated into the TRIPS Agreement, the term of protection shall be the life of the author and 50 years after his death. Paragraphs 2 through 4 of that Article specifically allow shorter terms in certain cases. These provisions are supplemented by Article 12 of the TRIPS Agreement, which provides that whenever the term of protection of a work, other than a photographic work or a work of applied art, is calculated on a basis other than the life of a natural person, such term shall be no less than 50 years from the end of the calendar year of authorized publication, or, failing such authorized publication within 50 years from the making of the work, 50 years from the end of the calendar year of making.

Article 13 requires Members to confine limitations or exceptions to exclusive rights to certain special cases which do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the right holder. This is called a “three-step test” and it is a horizontal provision that applies to all limitations and exceptions permitted under the provisions of the Berne Convention and the Appendix thereto as incorporated into the TRIPS Agreement. The application of these limitations is permitted also under the TRIPS Agreement, but the provision makes it clear that they must be applied in a manner that does not prejudice the legitimate interests of the right holder.

The provisions on protection of performers, producers of phonograms and broadcasting organizations are included in Article 14. According to Article 14.1, performers shall have the possibility of preventing the unauthorized fixation of their performance on a phonogram (e.g. the recording of a live musical performance). The fixation right covers only aural, not audiovisual fixations. Performers must also be in position to prevent the reproduction of such fixations. They shall also have the possibility of preventing the unauthorized broadcasting by wireless means and the communication to the public of their live performance.

In accordance with Article 14.2, Members have to grant producers of phonograms an exclusive reproduction right. In addition to this, they have to grant, in accordance with Article 14.4, an exclusive rental right at least to producers of phonograms. The provisions on rental rights apply also to any other right holders in phonograms as determined in national law.

Broadcasting organizations shall have, in accordance with Article 14.3, the right to prohibit the unauthorized fixation, the reproduction of fixations, and the re-broadcasting by wireless means of broadcasts, as well as the communication to the public of their television broadcasts.

The term of protection is at least 50 years for performers and producers of phonograms, and 20 years for broadcasting organizations (Article 14.5).

Article 14.6 provides that any Member may, in relation to the protection of performers, producers of phonograms and broadcasting organizations, provide for conditions, limitations, exceptions and reservations to the extent permitted by the Rome Convention.

WCT and WPPT

Two treaties were concluded in 1996 at WIPO. One, the WIPO Copyright Treaty (WCT), deals with protection for authors of literary and artistic works, such as writings and computer programs; original databases; musical works; audiovisual works; works of fine art and photographs. The other, the WIPO Performances and Phonograms Treaty (WPPT), protects certain “related rights” (that is, rights related to copyright): in the WPPT, these are rights of performers and producers of phonograms.

The purpose of the two treaties is to update and supplement the major existing WIPO treaties on copyright and related rights, primarily in order to respond to developments in technology and in the marketplace. Since the Berne and Rome Conventions were adopted or lastly revised more than a quarter century ago, new types of works, new markets, and new methods of use and dissemination have evolved. Among other things, both the WCT and the WPPT address the challenges posed by today’s digital technologies, in particular the dissemination of protected material over digital networks such as the Internet. For this reason, they have sometimes been referred to as the “Internet treaties.”

The WCT entered into force on March 6, 2002. For the WPPT, the date of entry into force was May 20, 2002. A number of countries have implemented the provisions of the two treaties in their national legislation. As of May 30, 2008, WCT has 65 member States, whereas WPPT has 63 member States.

The WCT is a special agreement under the Berne Convention. Any Contracting Party (even if it is not bound by the Berne Convention) must comply with the substantive provisions of the 1971 (Paris) Act of the Berne Convention for the Protection of Literary and Artistic Works (1886). Furthermore, the Treaty mentions two subject matters to be protected by copyright,

- (i) Computer programs, whatever may be the mode or form of their expression, and
- (ii) Compilations of data or other material (“databases”), in any form, which by reason of the selection or arrangement of their contents constitute intellectual creations. (Where a database does not constitute such a creation, it is outside the scope of this Treaty.)

As to the rights of authors, the Treaty deals with three:

- (i) the right of distribution,
- (ii) the right of rental, and
- (iii) the right of communication to the public.

Each of them is an exclusive right, subject to certain limitations and exceptions. Not all of the limitations or exceptions are mentioned in the following:

- the right of distribution is the right to authorize the making available to the public of the original and copies of a work through sale or other transfer of ownership,
- the right of rental is the right to authorize commercial rental to the public of the original and copies of three kinds of works:
 - (i) computer programs (except where the computer program itself is not the essential object of the rental),
 - (ii) cinematographic works (but only in cases where commercial rental has led to widespread copying of such works materially impairing the exclusive right of reproduction), and
 - (iii) works embodied in phonograms as determined in the national law of the Contracting Parties (except for countries that since April 15, 1994, have in force a system of equitable remuneration for such rental),
- the right of communication to the public is the right to authorize any communication to the public, by wire or wireless means, including “the making available to the public of works in a way that the members of the public may access the work from a place and at a time individually chosen by them.” The quoted expression covers in particular on-demand, interactive communication through the Internet.

The Treaty obliges the Contracting Parties to provide legal remedies against the circumvention of technological measures (e.g., encryption) used by authors in connection with the exercise of their rights and against the removal or altering of information, such as certain data that identify works or their authors, necessary for the management (e.g., licensing, collecting and distribution of royalties) of their rights (“rights management information”).

The Treaty obliges each Contracting Party to adopt, in accordance with its legal system, the measures necessary to ensure the application of the Treaty. In particular, the Contracting Party must ensure that enforcement procedures are available under its law so as to permit effective action against any act of infringement of rights covered by the Treaty. Such action must include expeditious remedies to prevent infringement and remedies which constitute a deterrent to further infringements.

Furthermore, the Treaty provides that performers and producers of phonograms enjoy the right to a single equitable remuneration for the direct or indirect use of phonograms, published for commercial purposes, for broadcasting or for communication to the public.

However, any Contracting Party may restrict or—provided that it makes a reservation to the Treaty—deny this right. In the case and to the extent of a reservation by a Contracting Party, the other Contracting Parties are permitted to deny, *vis-à-vis* the reserving Contracting Party, national treatment (“reciprocity”). The term of protection must be at least 50 years.

Balancing of Interests; Exceptions and Limitations

At the outset of the negotiations that led to the formation of the Berne Convention in 1884, the distinguished Swiss delegate Numa Droz stated that it should be remembered that “limits to absolute protection are rightly set by the public interest.” In consequence, from the original Berne Act of 1886, the Berne Convention has contained provisions granting latitude to Member States to limit the rights of authors in certain circumstances.

In keeping with this approach, the present international conventions on copyright and related rights contain a mixture of limitations and exceptions on protection that may be adopted under national laws. According to Professor Sam Ricketson, University of Melbourne, these can be grouped, very roughly, under the following headings:

1. Provisions that exclude, or allow for the exclusion of, protection for particular categories of works or material. There are several striking instances of such provisions in the Paris Act of the Berne Convention: for official texts of a legislative, administrative and legal nature (Article 2(4)), news of the day (Article 2(8)), and speeches delivered in the course of legal proceedings (Article 2*bis*(1)). For the purposes of analysis, these might be described as “limitations” on protection, in the sense that no protection is required for the particular kind of subject-matter in question.
2. Provisions that allow for the giving of immunity (usually on a permissive, rather than mandatory, basis) from infringement proceedings for particular kinds of use, for example, where this is for the purposes of news reporting or education, or where particular conditions are satisfied. These can be termed “permitted uses,” or exceptions to protection, in that they allow for the removal of liability that would otherwise arise. In the case of the Paris Act of the Berne Convention, examples are to be found in Articles 2*bis*(2) (reproduction and communication to the public of public addresses, lectures, etc, by the press), 9(2) (certain exceptions to the reproduction right, subject to specific conditions), 10 (quotation and use for teaching purposes) and 10*bis* (certain uses for reporting of news and the like). Analogous exceptions are to be found in art 15 of the Rome Convention, while the TRIPS Agreement (Article 13), the WCT (Article 10) and the WPPT (Article 16) adopt and extend the template of the three conditions in Article 9(2) of Berne as the basis for exceptions that are to be applied generally under that agreement (the “three-step” test, of which more below).

3. By provisions that allow a particular use of copyright material, subject to the payment of compensation to the copyright owner. These are usually described as “compulsory” or “obligatory licenses,” and specific dispositions permitting them are found in Articles 11*bis*(2) and 13, and the Appendix of the Paris Act of the Berne Convention. It is also possible that such licenses may be allowable under other provisions of this and the other conventions listed above, where certain conditions are met.

The juridical and policy basis for each kind of provision is different. The first proceeds on the assumption that there are clear public policy grounds that copyright protection should not exist in the works in question, for example, because of the importance of the need for ready availability of such works from the point of view of the general public.

The second represents a more limited concession that certain kinds of uses of works that are otherwise protected should be allowed: there is a public interest present here that justifies overriding the private rights of authors in their works in these particular circumstances.

In the third category of cases, the author’s rights continue to be protected but are significantly abridged: public interest still justifies the continuance of the use, regardless of the author’s consent, but subject to the payment of appropriate remuneration. Instances of all three kinds of provisions are to be found in each of the conventions that are the subject of the present study, although they are most developed in the case of the Paris Act of Berne. For the most part, they are not made mandatory, but are left as matters for the national legislation of member states to determine for themselves, albeit usually within strict boundaries that are set by the provision in question.

(cited from WIPO Study prepared by Prof. Ricketson)

The Three-Step Test

Among provisions relating to limitations and exceptions included in the Berne Convention, the one that has now come to assume a life of its own, particularly as the template for exceptions in later conventions including the TRIPS Agreement and WCT and WPPT, is a so-called “three-step test” in Article 9(2). It was inserted in the Berne Convention in the 1971 Paris revision.

Article 9 of the Berne Convention is as follows:

(1) Authors of literary and artistic works protected by this Convention shall have the exclusive right of authorizing the reproduction of these works, in any manner or form.

(2) It shall be a matter for legislation in the countries of the Union to permit the reproduction of such works in certain special cases, provided that such reproduction does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author.

(3) Any sound or visual recording shall be considered as a reproduction for the purposes of this Convention.

The first step requires that exceptions should be confined to “certain special cases.” The second requires that exceptions “do not conflict with a normal exploitation of a work” –or of a performance or a phonogram, when, as in the WPPT, the test is applied to these things rather than copyright works. The third step of the test requires that exceptions “do not unreasonably prejudice the legitimate interests of the author,” or, correspondingly, of the performer or phonogram producer. It should be noted that the three steps of the test are cumulative, that is, all of them apply jointly to exceptions so that if an exception fails to comply with any one of the steps, it does not meet the test.

In June 2000, WTO issued a report of a panel appointed under the TRIPS dispute settlement procedures reached conclusions on a dispute between the European Union (EU) and the United States of America over an exception to copyright in the law of the United States of America, which the European Union had argued to be inconsistent with the TRIPS obligations, including the three-step-test in Article 13 of the TRIPS Agreement (see the panel report available at the following web site: http://www.wto.org/english/tratop_e/dispu_e/1234da.pdf)

The issue in the dispute between the European Union and the United States of America is an exception in the copyright law of the United States of America to rights in respect of the public performance of music as covered in Articles 11 and 11*bis* of the Berne Convention, and more particularly an exception applying where music is performed indirectly, that is, by causing a broadcast or other transmission containing music to be heard in public. The report of the panel provided useful opinions on the interpretation of the Berne Convention Article 9(2) and the three-step test.

WCT and WPPT provide countries with flexibility to establish exceptions or limitations to rights in the digital environment. Countries may, in appropriate circumstances and subject to the three-step test contained in Berne, TRIPS and the WCT/WPPT, grant exceptions for uses deemed to be in the public interest, such as for libraries or non-profit educational and research purposes.

Exceptions and limitations on copyright and related rights vary from country to country, though most of them are in compliance with international treaties.

For instance, the European Commission Directive permits European Union States to provide exceptions for certain purposes, although it does not require each European Union State to provide exceptions in any or all of these areas. In particular, European

Union States will be permitted by the Directive to provide exceptions for the following purposes:

- copying for private use;
- copying in libraries, educational establishments, museums and archives— examples here might be copying for preservation or conservation purposes in museums or archives, and the recording of broadcasts for use in schools;
- illustration for teaching or research;
- use by people with disabilities, for example, to allow Braille copies to be made for the blind;
- reporting of current events;
- criticism or review;
- use in administrative or judicial proceedings or the like;
- photography or the like, such as painting or broadcasting images of, works of art in public places, such as buildings or sculptures;
- advertising the exhibition or sale of works of art;
- use for caricature, parody or pastiche.

Technological Measures and DRM

The WIPO Internet Treaties provide remedies for misuse of technological measures of protection and rights management information, aimed at ensuring (but not requiring) that right holders can effectively use technology to protect their rights and to license their works online to users. The first obligation requires countries to provide adequate legal protection and effective remedies against the circumvention of technological measures, such as digital rights management (DRM) systems and encryption used by right holders to protect their rights.

DRM refers to access control technologies used by publishers and copyright holders to limit usage of digital media or devices. Technologies for DRG are used for preventing access, copying or conversion by end users to other formats.

The second obligation requires remedies against the deliberate alteration or deletion of electronic information which accompanies any protected material, and which identifies the work, right owners, and the terms and conditions for its use, among other things.

The set of rights and obligations contained in the WIPO Internet Treaties have added complexity to the traditional balancing of the interests of right holders and users, including in the field of education. Striking the right balance between the legitimate interests of right owners and users of educational materials is not a straightforward process in the digital environment. Use of DRM is a good example: while the Internet Treaties do not mandate (require) that DRMs be used, beneficiaries of limitations and exceptions have raised concerns that application of DRMs might thwart certain legitimate uses of works. In their view, DRMs may hinder legitimate access to content in electronic

form or hamper the conversion process of works into alternative formats or, in general, weaken the exercise of limitations and exceptions to copyright, for example fair use.

Enforcement of Copyright and Related Rights in Cyber Space

Some of the most controversial legal issues associated with the online use of IP-protected material relate to enforcement of the rights involved. The inherent international character of the Internet, along with its potential for anonymous operation, challenges existing enforcement mechanisms and concepts. This creates considerable uncertainty, not only for businesses operating in this environment, but also for consumers that, lacking a predictable framework, may similarly be dissuaded from engaging in online contracts. The following summarizes some of the issues involved.

(i) Identification of the infringer

Faced with illicit uses of IP-protected material on the Internet, a first concern from the rights holder's perspective will often be the identification of the alleged infringer. However, whether or not disclosure of the identity of the user, and other related information, may be requested from service providers, depends on national legislation.

(ii) Private international law issues

To sue for infringement of IP-protected material in relation to online uses frequently involves cross-territorial action. This will raise questions as to jurisdictional competence, applicable law, and, eventually, the enforcement of a judgment abroad, touching upon complex issues of private international law and procedure. In general, these issues do not form an entirely new debate. Private international law doctrines and principles have long been developed around the globe, and it is certainly not necessary to question these principles altogether. Nevertheless, there is a difference in both degree and nature when applying these concepts to disputes relating to the Internet.

As an illustration, in order to assert jurisdiction in matters relating to IP right infringement, the instrument governing jurisdiction in the European Union establishes special jurisdiction at the courts of the place where the "harmful event" occurred, understood to refer to both the places of the causal event and of the damage. Would, for instance, the mere online accessibility of allegedly infringing content in a country be deemed sufficient for localizing a damage in that country, and thus for a court to exercise jurisdiction? Would such jurisdiction extend over adjudication upon compensation for the entire damage suffered, potentially, in a large number of countries? How should forum-shopping practices be dealt with if redress can be sought in multiple courts? Case law has, over the past few years, gradually developed standards for the application of private international law principles in this online environment. It is notable,

however, that, since these issues are largely not harmonized, the different national or regional private international laws systems continue to coexist.

(iii) The risk of being sued abroad

From a legal point of view, an important and specific feature for trading in IP online is that compliance with the laws of the country where the company operates may no longer be sufficient to assure an acute and predictable management of legal risks. A company may well comply with the applicable IP standards as to uses on its own territory, but use on the Internet, obviously, results in instant accessibility in numerous fora, where the resulting uses may not be legitimate. While a number of international treaties provide for harmonized minimum standards of protection of the various areas of IP, national laws may, under certain circumstances, make use of limitations of these standards, or, on the other hand, formulate higher standards of protection. For instance, in the area of copyright, a number of countries provide for extended terms of protection, or apply different positions as to the subject matter of protection.

Alternatives to court litigation, in particular arbitration and mediation, allow parties to avoid many of these disadvantages, and to sidestep the complicated private international law issues of determining a competent jurisdiction and the applicable law. Arbitration and mediation provide a single international forum for resolving a dispute in its entirety – regardless of its territorial links; they can be tailored to fit the efficiency demands of parties, as well as their confidentiality concerns; and they allow parties to select expert arbitrators or mediators who know the business, technical and legal issues that may be involved in the dispute. WIPO, therefore, in 1994 established an Arbitration and Mediation Center to offer arbitration and mediation procedures, which are specifically tailored to meet the specific needs of technology, entertainment and other disputes involving IP.

(c) Technological protection measures (TPMs), such as passwords and encryption, are increasingly being used by copyright rights holders as a means of exercising and enforcing their rights in digital content. Countries acceding to the WIPO Internet Treaties (WCT and WPPT) must provide “adequate legal protection and effective legal remedies” against the circumvention of effective TPMs used by authors, performers and other rightsholders to restrict acts which are not authorized by the rightsholders concerned or permitted by law. These treaty obligations are phrased in general, flexible terms, but different approaches have been taken to implementing them in national law.

The application of TPMs to digital content is at the center of international copyright debates. On the one hand, rights holders have a legitimate interest in applying TPMs in order to exercise and enforce their rights in digital copyright content; yet it is increasingly argued that rights of access to digital content for certain development purposes, particularly where education and research materials are concerned, should in certain cases take precedence over TPMs as an enforcement mechanism. Even if this proposition were generally accepted, how can it be achieved and who is to decide?

(d) Neither the WIPO Internet Treaties nor national laws implementing them *require* (“mandate”, in legal language) the application of TPMs and/or digital rights managements (DRMs) to digital copyright content. Rather, the treaties require that where TPMs are applied by copyright rights holders, national legislation must provide remedies against circumventing TPMs without authorization. This means that at present much *de facto* control over access to and use of digital content to which TPMs are applied is left in the hands of rights holders, though some recent legislation has tried to build in safeguards to ensure, for example, continued access to content by beneficiaries of copyright limitations and exceptions. In addition, DRM technologies enable data collection concerning users’ online use habits, raising concerns about violations of individual privacy rights which many believe are not addressed adequately or consistently across jurisdictions.

Liability of Online Service Providers

a. The common law has recognized that liability for infringement is not limited only to those individuals who themselves actually violate the exclusive rights of copyright owners, but also those who enable or facilitate such violations. For example, in the United States of America, for approximately 100 years, the courts have found liability on “intermediaries” and others who facilitate copyright infringement in certain circumstances, and have developed two forms of such liability. As on-line services providers are regarded as such intermediaries, a question arose as to whether and to what extent such providers should have the liability of copyright infringements. National laws addressed this question. In the United States of America, the Digital Millennium Copyright Act of 1998 was legislated to (i) add certainty for service providers; (ii) deter litigation; (iii) eliminate “unreasonable” liability; (iv) maintain incentives for service providers to cooperate with right holders; and (v) preserve ability of right holders to enforce against ongoing infringement.

Debate on Policy Issues (taken from On-line Forum conducted in 2006; <http://www-test.wipo.int/ipisforum/en/>)

1. The IP system and freedom of expression and creativity: Help or hindrance?
2. The public domain and open access models of information creation: at odds with the IP system or enabled by it?
3. What is the impact of copyright law, both at international and national levels, on education and research?
4. How is IP policy made for the information society: and who makes it?
5. Emerging business models for distributing IP online: opportunity or threat?
6. What are the challenges for enforcement of IP rights in the digital environment?

Report of the On-line forum could be summarized here. See more at http://www-test.wipo.int/ipisforum/en/doc/wipo_crns_inf_1.doc

Reference

WIPO web site resources on copyright and related rights available at <http://www.wipo.int/copyright/en/>

WIPO Intellectual Property Handbook; Policy, Law and Use, Chapters 2 and 5, available at <http://www.wipo.int/export/sites/www/about-ip/en/iprm/pdf/ch2.pdf> and

<http://www.wipo.int/export/sites/www/about-ip/en/iprm/pdf/ch5.pdf>

“The Universality of Intellectual Property Rights: Origins and Development,” Dr. Peter Drahos, University of London, Herchel Smith Senior Fellow, Queen Mary Intellectual Property Research Institute, Queen Mary and Westfield College (London, United Kingdom) available at

<http://www.wipo.int/tk/en/hr/paneldiscussion/papers/word/drahos.doc>

WIPO Study on Limitations and Exceptions of Copyright and Related Rights in the Digital Environment on the Internet, prepared by Sam Ricketson and available at

http://www.wipo.int/edocs/mdocs/copyright/en/sccr_9/sccr_9_7.doc

WIPO Study on Copyright Limitations and Exceptions for visually impaired people, prepared by Judith Sullivan and available at

http://www.wipo.int/edocs/mdocs/copyright/en/sccr_15/sccr_15_7.doc

Intellectual Property and the Right to Culture, prepared by Christine Steiner Esq., for WIPO meeting on copyright and related rights and available at

<http://www.wipo.int/tk/en/hr/paneldiscussion/papers/pdf/steiner.pdf>

The Current Developments in the field of the Digital Rights Management, prepared by Mr. Jeffrey P. Cunard, Mr. Keith Hill and Mr. Chris Barlos for WIPO Standing Committee on Copyright, available at the following site:

http://www.wipo.int/documents/en/meetings/2003/sccr/pdf/sccr_10_2.pdf

Report of the WIPO On-line Forum on IP in the Information Society in 2005

http://www.wipo.int/export/sites/www/ipisforum/en/doc/wipo_crrs_inf_1.doc

Chapter 6

Collective Management of Copyright and Related Rights

What is collective management of copyright and related rights?

It has been mentioned that the creator of a work has the right to allow or to prohibit the use of his works; a playwright can consent to his work being performed on stage under certain agreed conditions; a writer can negotiate a contract with a publisher for the publication and distribution of a book; and a composer or a musician can agree to have his music or performance recorded on compact disc. These examples illustrate how the owners of the rights can exercise their rights in person.

Other cases show that individual management of rights is virtually impossible with regard to certain types of use for practical reasons. An author is not materially capable of monitoring all uses of his works; he cannot for instance contact every single radio or television station to negotiate licenses and remuneration for the use of his works. Conversely, it is not practical for a broadcasting organization to seek specific permission from every author for the use of every copyrighted work. An average of 60'000 musical works are broadcast on television every year, so thousands of owners of rights would have to be approached for authorization. It is practically difficult to manage these activities individually, both for the owner of rights and for the user. For this reason, a need has been recognized to create an organization which should have the role to bridge the gap between them. As the organization functions collectively to assist owners of rights in managing their rights, it is called "collective management." Collective management is the exercise of copyright and related rights by organizations acting in the interest and on behalf of the owners of rights.

Needs

Composers, writers, musicians, singers, performers and other talented individuals are among society's most valuable assets. The fabric of our cultural lives is enriched by their creative genius. In order to develop their talent and encourage them to create, we have to give those individuals incentives, namely remuneration in return for permission to make use of their works.

Collective management organizations are an important link between creators and users of copyrighted works (such as radio stations) because they ensure that, as owners of rights, creators receive payment for the use of their works.

Membership

Membership of collective management organizations is open to all owners of copyright and related rights, whether authors, composers, publishers, writers, photographers, musicians, or performers. Broadcasting organizations are not included in the list, as they are considered users, even though they have certain rights in their broadcasts. On joining the collective management organization, members provide some personal particulars and declare the works that they have created. The information provided forms part of the documentation of the collective management organization that allows the link between the use of works and payment for the use of works to be made to the correct owner of the rights. The works declared by the organization's members constitute what is known as the "national" or "local" repertoire (as opposed to the international repertoire which is made up of the foreign works managed by collective management organizations in the world).

Types of Collective Management

Collective management organizations most commonly take care of the following rights:

- ✓ The right of public performance (music played or performed in discotheques, restaurants, and other public places);
- ✓ The right of broadcasting (live and recorded performances on radio and television);
- ✓ The mechanical reproduction rights in musical works (the reproduction of works in CDs, tapes, vinyl records, cassettes, mini-discs, or other forms of recordings);
- ✓ The performing rights in dramatic works (theater plays);
- ✓ The right of reprographic reproduction of literary and musical works (photocopying);
- ✓ Related rights (the rights of performers and producers of phonograms to obtain remuneration for broadcasting or the communication to the public of phonograms).

How does collective management work?

There are various kinds of collective management organization or groups of such organizations, depending on the category of works involved (music, dramatic works, "multimedia" productions, etc.) that will collectively manage different kinds of right. "Traditional" collective management organizations, acting on behalf of their members, negotiate rates and terms of use with users, issue licenses authorizing uses, collect and distribute royalties. The individual owner of rights does not become directly involved in any of these steps.

Rights clearance centers grant licenses to users that reflect the conditions for the use of works and the remuneration terms set by each individual holder of rights who is a member of the center (in the field of reprography, for instance, authors of written works such as books, magazines and periodicals). Here the center acts as an agent for the owner of the rights who remains directly involved in setting the terms of use of his works.

“One-stop-shops” are a sort of coalition of separate collective management organizations which offer users a centralized source where authorizations can be easily and quickly obtained. There is a growing tendency to set up such organizations on account of growing popularity of “multimedia” productions (productions composed of, or created from, several types of work, including computer software) which require a wide variety of authorizations.

In the field of Musical works (encompassing all types of music, modern, jazz, classical, symphonic, blues and pop whether instrumental or vocal), documentation, licensing and distribution are the three pillars on which the collective management of the rights of public performance and broadcasting is based.

The collective management organization negotiates with users (such as radio stations, broadcasters, discotheques, cinemas, restaurants and the like), or groups of users and authorizes them to use copyrighted works from its repertoire against payment and on certain conditions. On the basis of its documentation (information on members and their works) and the programs submitted by users (for instance, logs of music played on the radio), the collective management organization distributes copyright royalties to its members according to established distribution rules. A fee to cover administrative costs, and in certain countries also socio-cultural promotion activities, is generally deducted from the copyright royalties. The fees actually paid to the copyright owners correspond to the use of the works and are accompanied by a breakdown of that use. These activities and operations are performed with the aid of computerized systems especially designed for the purpose.

In the field of dramatic works (which includes scripts, screenplays, mime shows, ballets, theater plays, operas and musicals), the practice of collective management is rather different in that the collective management organization acts as an agent representing authors. It negotiates a general contract with the organizations representing theaters in which the minimum terms are specified for the exploitation of particular works.

The performance of each play then requires further authorization from the author, which takes the form of an individual contract setting out the author’s specific conditions. The collective management organization then announces that permission has been given by the author concerned and collects the corresponding remuneration.

In the field of printed works (meaning books, magazines, and other periodicals, newspapers, reports and the lyrics of songs), collective management mainly involves the grant of the right of reprographic reproduction, in other words allowing protected material to be photocopied by institutions such as libraries, public organizations, universities, schools and consumer associations. Non-voluntary licensing arrangements,

when allowed by international conventions, can be written into national legislation; in such cases, a right of use against remuneration is accorded that does not require the consent of the owner of rights. Collective management organizations administer the remuneration. In the special case of reproduction for private and personal use, some national legislation contains specific provision for equitable remuneration payable to the owners of rights and funded by a levy imposed on equipment or photocopies or both.

In the field of related works, the national legislation of some countries provide for a right of remuneration payable to performers or producers of phonograms or both when commercial sound recordings are communicated to the public or used for broadcasting. The fees for such uses are collected and distributed either by joint organizations set up by performers and producers of phonograms or separate ones, depending on the relation of those involved and the legal situation within the country.

Where do collective management organizations operate?

The application of national laws that establish rights in literary and artistic works and in related rights has an effect only within the boundaries of that country. According to the national treatment principle enshrined in both the Berne Convention and the Rome Convention, foreign owners of rights are treated in the same way as nationals in most respects. This principle is upheld by collective management organizations which, under reciprocal representation agreements, administer foreign repertoires on their national territory, exchange information and pay royalties to foreign owners of rights.

Links to non-governmental organizations

There is now a well-established global network of collective management organizations, and they are strongly represented by non-governmental organizations such as the International Confederation of Societies of Authors and Composers (CISAC), the International Federation of Reprographic Reproduction Organisations (IFRRO), and at the European level, the Association of European Performers Organizations (AEPO), to mention only those.

As part of its international development cooperation activities, WIPO is working closely with the above organizations, and also with others, such as the International Federation of Actors (FIA), the International Federation of Musicians (FIM), the International Federation of the Phonographic Industry (IFPI). The aim is to assist developing countries, upon their request, in establishing collective management organizations, and to strengthen existing organizations to ensure that they can be fully efficient and effective, among other things in their response to the challenges of the digital environment. Such activities are carried on under the WIPO Cooperation for Development Program.

Socio-economic and cultural dimension

Collective management does a valuable service to the world of music and other creative arts. By managing their rights, the system is rewarding creators for their work, and the creators in turn are more inclined to develop and apply their talents in an environment that provides adequate copyright and related rights protection and an efficient system for the management of rights. Such a situation encourages creators to contribute to the development of the cultural sector, attracts foreign investment and generally enables the public to make the most of a broad array of works. Together, these factors have an undeniably favorable impact on national economies; cultural industries contribute up to 6% of the gross national product of some major countries, income from the collective management of copyright and related rights accounts for a substantial part of that percentage.

Some collective management organizations offer various kinds of social welfare protection to their members. The benefits often include assistance with payment for medical treatment or insurance, annuities on retirement or some sort of guaranteed income based on the members royalty payments history.

Collective management organizations may sponsor cultural activities to promote the national repertoire of works at home and abroad. They promote the holding of theater festivals, music competitions, productions of national folklore and music anthologies and other such activities.

Welfare protection and the promotion of cultural activities are not compulsory. When they are provided for, however, they may take the form of a deduction that the collective management organization makes from the royalties collected. There is no unanimous view among collective management organizations on the idea of a deduction, which according to the rules of CISAC should not represent more than 10% of net income.

Collective management and the digital environment

Copyrighted works will be increasingly delivered in digital form via global networks such as the Internet. As a result the collective management of copyright and related rights by public, semi-public and market sector entities will be re-engineered to take advantage of the efficiency gains offered by information technology. The ever-increasing opportunities offered to the holders of rights by the Internet and the advent of “multimedia” productions are affecting the conditions of protection, the exercise and management of copyright and related rights, and also the enforcement of rights.

In the online world of the new millennium, the management of rights is taking on a new dimension. Protected works are now digitized, compressed, uploaded, downloaded, copied and distributed on the Internet to any place in the world. The expanding power of this network allows mass storage and online delivery of protected material. The possibility of downloading the contents of a book, or to listen to and record music from

cyberspace is now a reality. While this presents immeasurable opportunities, there are also many challenges for owners, users and collective management organizations.

Many collective management organizations have developed systems for online delivery of information relating to the licensing of works and content, the monitoring of uses and the collection and distribution of remuneration for various categories of works within the digital environment. These digital information systems, which depend on the development and use of unique numbering systems and codes that are embedded in digital carriers such as CDs, films, allow works, the rights owners, the digital carriers themselves to be properly identified and provide other relevant information. Adequate legal protection is needed to prevent acts intended to circumvent technical protection measures, and also to insure against the removal or alteration of any elements of the digital information systems or other such practices.

Two treaties were concluded in 1996, under the auspices of WIPO, to respond to the challenges of protecting and managing copyright and related rights in the digital age.

WCT and WPPT deal among other things with obligations concerning technological protection measures and rights management information in the digital environment; they ensure that the owners of rights are protected when their works are disseminated on the Internet; they also contain provisions requiring national legislators to provide efficient protection for technological measures, by prohibiting the import, manufacture and distribution of illicit circumvention tools or material and also outlawing acts detrimental to rights management information systems.

Reference

From Artist to Audience (WIPO Publication No. 922)

www.wipo.int/wipo_magazine/en/2007/01/article_0004.html

“Introduction to collective management of copyright and related rights” prepared by the International Bureau of WIPO

http://www.wipo.int/arab/en/meetings/2002/muscat_forum_ip/pdf/iptk_mct02_i6.pdf

Chapter 7

TRIPS Agreement

History and WTO System

Trade ministers in the world agreed to launch a new round of negotiation on international trade issues and tariff concessions in September 1986, in Punta del Este, Uruguay (the Uruguay Round). They eventually accepted a negotiating agenda that covered virtually every outstanding trade policy issue. The talks were going to extend the trading system into several new areas, notably trade in services and IP, and to reform trade in the sensitive sectors of agriculture and textiles. It was the biggest negotiating mandate on trade ever agreed, and the ministers gave themselves four years to complete it.

However, the Uruguay Round took seven and a half years, almost twice the original schedule. By the end, 123 countries were taking part. “The Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations”, signed by ministers in Marrakesh on 15 April 1994 is 550 pages long and contains legal texts which spell out the results of the negotiations. On this occasion, it was also agreed to establish the World Trade Organization (WTO). Its structure is headed by a Ministerial Conference meeting to be held at least once every two years. Also established were subsidiary bodies including the TRIPS Council. The WTO framework ensures a “single undertaking approach” to the results of the Uruguay Round — thus, membership in the WTO entails accepting all the results of the Round without exception. This means that the agreement on trade-related aspects of IP has been fully integrated into other trade related agreements as the legally binding package agreement.

Overview of TRIPS Agreement

The TRIPS Agreement covers five broad issues:

- (1) how basic principles of the trading system and other international IP agreements should be applied
- (2) How to give adequate protection to IP rights
- (3) How countries should enforce those rights adequately in their own territories

(4) How to settle disputes on IP between members of the WTO

(5) Special transitional arrangements during the period when the new system is being introduced.

General Provisions and Basic Principles (PART I)

Articles 3 and 4 provide for basic principles, namely, national treatment (treating one's own nationals and foreigners equally), and most-favored-nation treatment (equal treatment for nationals of all trading partners in the WTO).

The TRIPS Agreement has an additional important principle: IP protection should contribute to technical innovation and the transfer of technology. Both producers and users should benefit, and economic and social welfare should be enhanced.

The Relation with the Paris Convention and the Berne Convention

The obligations of the two Conventions already existed before the WTO was created are integrated into the TRIPS Agreement. Some areas in the TRIPS Agreement are not covered by these Conventions. In some cases, the standards of protection prescribed were thought inadequate. So the TRIPS agreement adds a significant number of new or higher standards.

Standards Concerning the Availability, Scope and Use of IPRs (PART II)

The TRIPS Agreement provides for standards concerning the availability, scope and use of the following eight specifically mentioned types or areas of IP rights:

- ✓ Copyright and Related Rights
- ✓ Trademarks
- ✓ Geographical Indications
- ✓ Industrial Designs
- ✓ Patents
- ✓ Layout-Designs (Topographies) of Integrated Circuits
- ✓ Protection of Undisclosed Information
- ✓ Control of Anti-Competitive Practices in Contractual Licenses

WTO web site includes a brief explanation of this part as follows (for further details, see the corresponding chapters to each type of IP):

Copyright

The TRIPS agreement ensures that computer programs will be protected as literary works under the Berne Convention and outlines how databases should be protected.

It also expands international copyright rules to cover rental rights. Authors of computer programs and producers of sound recordings must have the right to prohibit the commercial rental of their works to the public. A similar exclusive right applies to films where commercial rental has led to widespread copying, affecting copyright-owners' potential earnings from their films.

The agreement says performers must also have the right to prevent unauthorized recording, reproduction and broadcast of live performances (bootlegging) for no less than 50 years. Producers of sound recordings must have the right to prevent the unauthorized reproduction of recordings for a period of 50 years.

Trademarks

The agreement defines what types of signs must be eligible for protection as trademarks, and what the minimum rights conferred on their owners must be. It says that service marks must be protected in the same way as trademarks used for goods. Marks that have become well-known in a particular country enjoy additional protection.

Geographical Indications

A place name is sometimes used to identify a product. This "geographical indication" does not only say where the product was made. More importantly, it identifies the product's special characteristics, which are the result of the product's origins.

Well-known examples include "Champagne", "Scotch", "Tequila", and "Roquefort" cheese. Wine and spirits makers are particularly concerned about the use of place-names to identify products, and the TRIPS Agreement contains special provisions for these products. But the issue is also important for other types of goods.

Using the place name when the product was made elsewhere or when it does not have the usual characteristics can mislead consumers, and it can lead to unfair competition. The TRIPS Agreement says countries have to prevent this misuse of place names.

For wines and spirits, the agreement provides higher levels of protection, i.e. even where there is no danger of the public being misled.

Some exceptions are allowed, for example if the name is already protected as a trademark or if it has become a generic term. For example, "cheddar" now refers to a particular type of cheese not necessarily made in Cheddar, in the UK. But any country wanting to make an exception for these reasons must be willing to negotiate with the country which wants to protect the geographical indication in question.

The agreement provides for further negotiations in the WTO to establish a multilateral system of notification and registration of geographical indications for wines. These are now part of the Doha Development Agenda and they include spirits. Also debated in the WTO is whether to negotiate extending this higher level of protection beyond wines and spirits.

Industrial Designs

Under the TRIPS Agreement, industrial designs must be protected for at least 10 years. Owners of protected designs must be able to prevent the manufacture, sale or importation of articles bearing or embodying a design which is a copy of the protected design.

Patents

The agreement says patent protection must be available for inventions for at least 20 years. Patent protection must be available for both products and processes, in almost all fields of technology. Governments can refuse to issue a patent for an invention if its commercial exploitation is prohibited for reasons of public order or morality. They can also exclude diagnostic, therapeutic and surgical methods, plants and animals (other than microorganisms), and biological processes for the production of plants or animals (other than microbiological processes).

Plant varieties, however, must be protectable by patents or by a special system (such as the breeder's rights provided in the conventions of UPOV).

The agreement describes the minimum rights that a patent owner must enjoy. But it also allows certain exceptions. A patent owner could abuse his rights, for example by failing to supply the product on the market. To deal with that possibility, the agreement says governments can issue "compulsory licences", allowing a competitor to produce the product or use the process under licence. But this can only be done under certain conditions aimed at safeguarding the legitimate interests of the patent-holder.

If a patent is issued for a production process, then the rights must extend to the product directly obtained from the process. Under certain conditions alleged infringers may be ordered by a court to prove that they have not used the patented process.

An issue that has arisen recently is how to ensure patent protection for pharmaceutical products does not prevent people in poor countries from having access to medicines — while at the same time maintaining the patent system's role in providing incentives for research and development into new medicines. Flexibilities such as compulsory licensing are written into the TRIPS Agreement, but some governments were unsure of how these would be interpreted, and how far their right to use them would be respected.

A large part of this was settled when WTO ministers issued a special declaration at the Doha Ministerial Conference in November 2001. They agreed that the TRIPS Agreement does not and should not prevent members from taking measures to protect public health.

They underscored countries' ability to use the flexibilities that are built into the TRIPS Agreement. And they agreed to extend exemptions on pharmaceutical patent protection for least-developed countries until 2016. On one remaining question, they assigned further work to the TRIPS Council — to sort out how to provide extra flexibility, so that countries unable to produce pharmaceuticals domestically can import patented drugs made under compulsory licensing. A waiver providing this flexibility was agreed on 30 August 2003.

Integrated Circuits Layout Designs

The basis for protecting integrated circuit designs (“topographies”) in the TRIPS agreement is the Washington Treaty on IP in Respect of Integrated Circuits, which comes under the WIPO. This was adopted in 1989 but has not yet entered into force. The TRIPS agreement adds a number of provisions: for example, protection must be available for at least 10 years.

Undisclosed information and trade secrets

Trade secrets and other types of “undisclosed information” which have commercial value must be protected against breach of confidence and other acts contrary to honest commercial practices. But reasonable steps must have been taken to keep the information secret. Test data submitted to governments in order to obtain marketing approval for new pharmaceutical or agricultural chemicals must also be protected against unfair commercial use.

Curbing anti-competitive licensing contracts

The owner of a copyright, patent or other form of IP right can issue a license for someone else to produce or copy the protected trademark, work, invention, design, etc. The agreement recognizes that the terms of a licensing contract could restrict competition or impede technology transfer. It says that under certain conditions, governments have the right to take action to prevent anti-competitive licensing that abuses IP rights. It also says governments must be prepared to consult each other on controlling anti-competitive licensing.

Enforcement of IPRs (Part III)

The TRIPS Agreement also provides for a number of provisions concerning enforcement of IP rights.

Having IP laws is not enough. They have to be enforced. This is covered in Part 3 of TRIPS. The agreement says governments have to ensure that IP rights can be enforced under their laws, and that the penalties for infringement are tough enough to deter further violations. The procedures must be fair and equitable, and not unnecessarily complicated or costly. They should not entail unreasonable time-limits or unwarranted delays. People

involved should be able to ask a court to review an administrative decision or to appeal a lower court's ruling.

The agreement describes in some detail how enforcement should be handled, including rules for obtaining evidence, provisional measures, injunctions, damages and other penalties. It says courts should have the right, under certain conditions, to order the disposal or destruction of pirated or counterfeit goods. Willful trademark counterfeiting or copyright piracy on a commercial scale should be criminal offences. Governments should make sure that IP rights owners can receive the assistance of customs authorities to prevent imports of counterfeit and pirated goods.

Dispute Prevention and Settlement (PART V)

The TRIPS Agreement contains Articles 63 and 64 which allow WTO Members to use the WTO's procedure for resolving trade quarrels under the Dispute Settlement Understanding. This is one of the most important consequences of the inclusion of TRIPS in the WTO Agreement. WTO's panel procedures provide for vital multilateral disputes settlement mechanisms to enforce the rules including TRIPS Agreement. A dispute arises when a member government believes another member government is violating an agreement or a commitment that it has made in the WTO. As of May 2008, some 30 cases of disputes on TRIPS have been filed and some of them were resolved. WTO web site includes the search facilities to locate panel reports at the following site: http://www.wto.org/english/tratop_e/dispu_e/find_dispu_cases_e.htm

Transitional Arrangements (PART VI)

Developed countries were given one year to ensure that their laws and practices conform with the TRIPS agreement when the round negotiation was concluded in 1995. Developing countries and (under certain conditions) transition economies were given five years, until 2000. Least-developed countries have 11 years, until 2006 — now extended to 2016 for pharmaceutical patents.

Analysis of the TRIPS Agreement from perspectives of development

The TRIPS Agreement also includes a number of provisions to assist developing countries in implementing the Agreement for national development.

First of all, on technology transfer which developing countries in particular place the emphasis as benefit of acceding to the TRIPS Agreement and actually as part of the bargain in which they have agreed to protect IP rights, the TRIPS Agreement includes a number of provisions on the facilitation of transfer of technologies from developed countries to developing countries including a requirement that developed countries'

governments to provide incentives for their companies to transfer technology to least-developed countries.

Secondly, transitional arrangement was made for some countries to delay the implementation of the TRIPS (see above).

If a developing country did not provide product patent protection in a particular area of technology when the TRIPS Agreement came into force (January 1, 1995), it had up to 10 years to introduce the protection. But for pharmaceutical and agricultural chemical products, the country had to accept the filing of patent applications from the beginning of the transitional period, though the patent did not need to be granted until the end of this period. If the government allowed the relevant pharmaceutical or agricultural chemical to be marketed during the transition period, it had to — subject to certain conditions — provide an exclusive marketing right for the product for five years, or until a product patent was granted, whichever was shorter.

Subject to certain exceptions, the general rule is that obligations in the agreement apply to IP rights that existed at the end of a country's transition period as well as to new ones.

“Flexibilities” of the TRIPS Agreement

The TRIPS Agreement incorporates certain “flexibilities.” These aim to permit developing and least-developed countries to use TRIPS-compatible norms in a manner that enables them to pursue their own public policies, either in specific fields like access to pharmaceutical products or protection of their biodiversity, or more generally, in establishing macroeconomic, institutional conditions that support economic development.

Government offices in charge of drafting laws frequently request advice from WIPO regarding how to use the TRIPS flexibilities so as to accommodate particular national interests or resolve issues that are specific to their countries. Advice is provided only after careful consideration of the flexibilities, TRIPS-consistency and their legal, technical and economic implications. The ultimate decision regarding the choice of legislative options lies exclusively with each individual Member State.

Flexibilities of the TRIPS Agreement could be grouped as follows:

1. Flexibilities as to the method of implementing TRIPS obligations

These result from the language of Article 1.1 of the TRIPS Agreement. Under these flexibilities, WTO Members can exploit creative solutions to transpose into national law and practice those concepts that the TRIPS Agreement simply enunciates but does not define. Examples of those flexibilities include concepts such as novelty and inventiveness; or of situations of extreme urgency for the purposes of compulsory licenses.

2. Flexibilities as to substantive standards of protection

These flexibilities can operate either downward or upward, i.e. they may permit measures that reduce or limit the rights conferred; or measures that raise the level of protection above the minimum standards established by the TRIPS Agreement. (The latter are sometimes referred to as TRIPS plus). Examples of the former are the introduction of exceptions to rights conferred (such as experimental use and the “Bolar” exceptions; and the limitation to the use of trademarks in packages and advertisement of products considered prejudicial to health, like alcohol and tobacco). Examples of raising the level of protection are the introduction of temporary protection of industrial property rights before the grant of protection; the extension of the term of patents to compensate for delays in granting the marketing approval of products; or the extension of the scope of patentability and/or registrability of trademarks beyond the minimums established, respectively, by Articles 27 and 15 of the TRIPS Agreement.

3. Flexibilities as to mechanisms of enforcement

In the field of enforcement, the TRIPS Agreement (in Part III)

(a) identifies the mechanisms that Members are obliged to adopt in order to make enforcement rights available to IP owners; and

(b) prohibits Members from adopting stricter measures against defendants than those that are established.

Nevertheless, Members can resort to their own legal system and practices to implement enforcement obligations. WTO Members are, for example, free to maintain their own judicial system. They also can use enforcement measures to implement flexibilities as to the standards of protection.

4. Flexibilities as to areas not covered by the TRIPS Agreement

The TRIPS Agreement does not cover a number of areas of IP subject matter, either because there was no consensus at the time the Agreement was negotiated, or because the areas in question had not yet emerged, or simply because the negotiators of the TRIPS Agreement did not consider that problems of barriers to trade existed in those areas. Some of those areas are of particular interest to developing countries, such as utility models, traditional knowledge and handicrafts.

Unlike the “upward” standards of protection mentioned above, these flexibilities lie outside the TRIPS Agreement. Therefore, countries legislating on those subjects do not need to conform to the principles and provisions of the Agreement. For example, the protection of traditional knowledge can be extended to foreigners on a basis of reciprocity only.

The Doha Ministerial Conference of WTO and the Special Declaration on IP and Public Health

At the Fourth Ministerial Conference in Doha, Qatar, in November 2001 WTO member governments agreed to launch new negotiations and adopted the declaration and a separate declaration on IP and public health.

In the separate declaration, ministers stress that it is important to implement and interpret the TRIPS Agreement in a way that supports public health — by promoting both access to existing medicines and the creation of new medicines. They refer to their separate declaration on this subject. This declaration on TRIPS and public health is designed to respond to concerns about the possible implications of the TRIPS Agreement for access to medicines.

It emphasizes that the TRIPS Agreement does not and should not prevent member governments from acting to protect public health. It affirms governments' right to use the agreement's flexibilities in order to avoid any reticence the governments may feel. The separate declaration clarifies some of the forms of flexibility available, in particular compulsory licensing and parallel importing.

For the Doha agenda, this separate declaration sets two specific task. The TRIPS Council has to find a solution to the problems countries may face in making use of compulsory licensing if they have too little or no pharmaceutical manufacturing capacity, reporting to the General Council on this by the end of 2002. The declaration also extends the deadline for least-developed countries to apply provisions on pharmaceutical patents until January 1, 2016.

Criticism against the TRIPS Agreement and “TRIPS Plus”

Criticism of the TRIPS Agreement arose from both sides, namely those who wish to promote stronger protection of IP, and those who consider that the minimum standard set forth in the Agreement is too high to allow developing countries to formulate policies for development.

The former argue that the TRIPS Agreement does not necessarily provide for adequate and effective protection and support and promote the conclusion of bilateral free trade agreements including provisions which provide for the standards exceeding the minimum standard of the TRIPS Agreement (so-called “TRIPS-plus” agreements).

The latter argue that efforts by developing countries aimed at improving the balance from their perspective should be reflected in the review of the TRIPS Agreement and the following issues are of particular concern among developing countries:

- TRIPS and public health,
- Article 27.3(b), relation with CBD, traditional knowledge and folklore,
- Transfer of technology, and
- Transitional arrangements.

Reference

WTO web site TRIPS Agreement resources

http://www.wto.org/english/tratop_e/trips_e/trips_e.htm

Agreement between WIPO and WTO

http://www.wipo.int/treaties/en/agreement/trtdocs_wo030.html

Chapter 8

IP and Public Health Policy

Introduction

Although scientific and technological innovation has contributed to significant improvements in health conditions, health crises, relating, in particular, to HIV/AIDS, malaria, tuberculosis, and, most recently, avian influenza, continue to create major problems in many parts of the world. In various national and international fora, solutions are sought in respect of the role of patents in pharmaceutical innovation and fair and affordable access to health care.

The patent system is designed to promote innovation and, at the same time, offer a mechanism ensuring that the fruits of that innovation are accessible to society. In the contexts of public health, the challenge for policy makers is to find an optimal balance between the rights of patent owners, who provide technological innovations to improve health conditions, and the needs of the general public.

In general, the development of new drugs requires heavy investment and long-term research, coupled with expensive clinical trials and regulatory approval procedures. The exclusive right conferred by a patent is one of the incentives for developers of new drugs to make the necessary investments into that research. Clearing issues, such as ownership and licensing policies for innovation derived from public research, would contribute to the promotion of a more effective deployment of public funds and public R&D programs. At the same time, the patent system also contributes to society by making available patent information, which is freely available to other researchers to further improve existing technologies. With a view to facilitating commercialization and ensuring access to patented technologies, the patent system is primarily based on conferring an exclusive right, in conjunction with a voluntary licensing mechanism. However, taking into account the public interest and policy objectives beyond the patent system, there are a number of flexible mechanisms built in the patent system, such as the possibility of issuing compulsory licenses, research exceptions and parallel imports.

On the other hand, some consider that the current patent system does not adequately address public health crises. It is argued that the commercial incentives provided by the patent system are not sufficient to ensure the development of new products in certain areas, for example, in respect of neglected diseases, and that patent rights, which are enforced on the basis of commercial and market-based considerations, prevent access to, or increase prices of, essential medicines. Some criticize that the safeguard mechanisms built in the patent system, such as compulsory licenses or research exceptions, are not sufficiently broad to cover existing needs. Further, the number and, at times, the broad

scope of patents granted in the field of early fundamental research have raised concerns about patent thickets and royalty stacking. In particular, reach-through claims in respect of research tools are considered a potential obstacle to further research and development.

Access to Anti-retroviral drugs for HIV/AIDS patients and compulsory licenses

Since the middle of 1990's, political tension arose over an issue concerning treatment of HIV/AIDS patients who need the use of a combination of anti-retroviral drugs. The drugs had already reduced the number of HIV/AIDS deaths in developed countries. As the cost of the treatment and drugs were expensive (more than \$10,000 per year for each patient), the price of these life-saving drugs kept these medicines out of reach of millions of infected people particularly in developing countries.

Why are these drugs so expensive? It is because the cost of development of new drugs consists not only of a large amount of research and development cost, but also the cost for a series of tests required for the approval of drugs by the national healthcare authority. According to one of the two researchers who developed the medicine it was estimated that to bring a drug from conception to the marketplace costs \$500 to \$800 million.

The High Court case between 39 pharmaceutical companies (applicant) and the South African Government over the terms of its 1997 Medicines Act (giving the authority to the Health Minister to grant a compulsory license and permit a parallel importation on the grounds of public health) resulted in the withdrawal of the law suit by the applicant with agreement between the Government of South Africa and the applicant in which a statement was included to the effect that IP protection is an essential incentive for innovation, not an obstacle to access to medicines.

Since the event in South Africa, some pharmaceutical companies have started to introduce tiered pricing (differential pricing) of anti-HIV/AIDS drugs and other essential drugs for facilitating access to those in low-income developing countries.

On the other hand, governments of developing countries have started to use compulsory licensing as a tool to negotiate more favorable prices of essential drugs. At the backdrop of the price negotiation, generic drugs manufacturers, such as Cipla Ltd. In India, played an important role in providing a variety of essential drugs at more affordable prices to developing countries.

In some countries, mainly for reasons from economic and trade policy, it is permitted to import a product to country A from country B where the produce is legally marketed and acquired, even if the importer does not have the consent of the owner of the patent that is valid for the product in country A. This importation is called parallel importation. In the context of access to essential drugs, parallel importation is explored mainly in countries where there is no local industry and technical potential to manufacture drugs, and it is an immediate solution to import affordable drugs from other countries producing patented (if affordable) or generic drugs (generally cheap). Whether TRIPS allows countries to

import drugs that have been manufactured, as a result of the grant of a compulsory license, was an important question to clarify in the 1990's.

It was in this context that WTO Ministerial Conference was held in November 2001. Before discussing what was concluded at the Doha Conference, provisions of the TRIPS Agreement concerning public health issues and patents will be briefly summarized below.

WTO perspectives

The TRIPS Agreement attempts to strike a balance between the long term social objective of providing incentives for future inventions and creation, and the short term objective of allowing people to use existing inventions and creations.

According to WTO, the balance works in three ways:

1. Invention and creativity in themselves should provide social and technological benefits. IP protection encourages inventors and creators because they can expect to earn some future benefits from their creativity. This encourages new inventions, such as new drugs, whose development costs can sometimes be extremely high, so private rights also bring social benefits.
2. The way IP is protected can also serve social goals. For example, patented inventions have to be disclosed, allowing others to study the invention even while its patent is being protected. This helps technological progress and technology dissemination and transfer. After a period, the protection expires, which means that the invention becomes available for others to use. All of this avoids "re-inventing the wheel".
3. The TRIPS Agreement provides flexibility for governments to fine tune the protection granted in order to meet social goals. For patents, it allows governments to make exceptions to patent holders' rights such as in national emergencies, anti-competitive practices, or if the right-holder does not supply the invention, provided certain conditions are fulfilled.

WTO Doha Declaration

Some governments were unsure of how these TRIPS flexibilities would be interpreted, and how far their right to use them would be respected. The African Group (all the African members of the WTO) were among the members pushing for clarification. A large part of this was settled at the Doha Ministerial Conference in November 2001.

In the main Doha Ministerial Declaration of 14 November 2001, WTO member governments stressed that it is important to implement and interpret the TRIPS Agreement in a way that supports public health — by promoting both access to existing medicines and the creation of new medicines.

They therefore adopted a separate declaration on TRIPS and Public Health. They agreed that the TRIPS Agreement does not and should not prevent members from taking measures to protect public health. They underscored countries' ability to use the flexibilities that are built into the TRIPS Agreement, including compulsory licensing and parallel importing. And they agreed to extend exemptions on pharmaceutical patent protection for least-developed countries until 2016.

On one remaining question, they assigned further work to the TRIPS Council — to sort out how to provide extra flexibility, so that countries unable to produce pharmaceuticals domestically can obtain supplies of copies of patented drugs from other countries. (This is sometimes called the “Paragraph 6” issue, because it comes under that paragraph in the separate Doha declaration on TRIPS and public health.)

The Decision of the General Council of WTO of August 30, 2003 (compulsory licenses)

For pharmaceutical patents, the flexibility has been clarified and enhanced by the 2001 Doha Declaration on TRIPS and Public Health.

The enhancement was put into practice in 2003 with a decision enabling countries that cannot make medicines themselves, to import pharmaceuticals made under compulsory license (this decision was included in paragraph 6 of the Doha Declaration).

Article 31(f) of the TRIPS Agreement says products made under compulsory licensing must be “predominantly for the supply of the domestic market”. This applies to countries that can manufacture drugs — it limits the amount they can export when the drug is made under compulsory license. And it has an impact on countries unable to make medicines and therefore wanting to import generics. They would find it difficult to find countries that can supply them with drugs made under compulsory licensing.

The legal problem for exporting countries was resolved on August 30, 2003 when WTO General Council decided on legal changes which made it easier for countries to import cheaper generics made under compulsory licensing if they are unable to manufacture the medicines themselves.

http://www.wto.org/english/tratop_e/trips_e/implem_para6_e.htm

When members agreed on the decision, the General Council chairperson also read out a statement setting out members' shared understandings on how the decision would be interpreted and implemented. This was designed to assure governments that the decision will not be abused.

The decision actually contains three waivers:

1. Exporting countries' obligations under Article 31(f) are waived — any member country can export generic pharmaceutical products made under compulsory licenses to meet the needs of importing countries.
2. Importing countries' obligations on remuneration to the patent holder under compulsory licensing are waived to avoid double payment. Remuneration is only required on the export side.
3. Exporting constraints are waived for developing and least-developed countries so that they can export within a regional trade agreement, when at least half of the members were categorized as least-developed countries at the time of the decision. That way, developing countries can make use of economies of scale.

Carefully negotiated conditions apply to pharmaceutical products imported under the system. These conditions aim to ensure that beneficiary countries can import the generics without undermining patent systems, particularly in rich countries. They include measures to prevent the medicines from being diverted to the wrong markets. And they require governments using the system to keep all other members informed each time they use the system, although WTO approval is not required. At the same time phrases such as “reasonable measures within their means” and “proportionate to their administrative capacities” are included to prevent the conditions becoming burdensome and impractical for the importing countries.

Decision on the Amendment of the TRIPS Agreement

In December 2005, WTO members approved changes to the TRIPS Agreement making permanent a decision on patents and public health originally adopted in 2003. This will now be formally built into the TRIPS Agreement when two thirds of the WTO's members have accepted the change. They originally set themselves until December 1, 2007 to do this. The deadline was extended to December 31, 2009 under a decision by the General Council on December 18, 2007.

Parallel Importation

Parallel or grey-market imports are not imports of counterfeit products or illegal copies. These are products marketed by the patent owner (or trademark- or copyright-owner, etc) or with the patent owner's permission in one country and imported into another country without the approval of the patent owner. For example, suppose company A has a drug patented in the Republic of Belladonna and the Kingdom of Calamine, which it sells at a lower price in Calamine. If a second company buys the drug in Calamine and imports it into Belladonna at a price that is lower than company A's price, that would be a parallel or grey import. The legal principle here is “exhaustion”, the idea that once company A

has sold a batch of its product (in this case, in Calamine), its patent rights are exhausted on that batch and it no longer has any rights over what happens to that batch.

The TRIPS Agreement simply says that none of its provisions, except those dealing with non-discrimination (“national treatment” and “most-favored-nation treatment”), can be used to address the issue of exhaustion of IP rights in a WTO dispute. In other words, even if a country allows parallel imports in a way that another country might think violates the TRIPS Agreement, this cannot be raised as a dispute in the WTO unless fundamental principles of non-discrimination are involved. The Doha Declaration clarifies that this means that members can choose how to deal with exhaustion in a way that best fits their domestic policy objectives.

“Bolar” Provision

Many countries use this provision to advance science and technology. They allow researchers to use a patented invention for research, in order to understand the invention more fully. In addition, some countries allow manufacturers of generic drugs to use the patented invention to obtain marketing approval — for example from public health authorities — without the patent owner’s permission and before the patent protection expires. The generic producers can then market their versions as soon as the patent expires. This provision is sometimes called the “regulatory exception” or “Bolar” provision. This has been upheld as conforming to the TRIPS Agreement in a WTO dispute ruling. In its report adopted on April 7, 2000, a WTO dispute settlement panel said Canadian law conforms to the TRIPS Agreement in allowing manufacturers to do this. (The case was titled “Canada — Patent Protection for Pharmaceutical Products”)

WHO perspectives

The plight of people in terms of health conditions has been recognized as one of the top priorities that the international community should urgently address in the UN Millennium Goals. More than 1/3 of world’s population lack regular access to essential drugs.

Since 1999, four WHO Assembly resolutions have given WHO the mandate to:

1. Assist Member States to develop medicines and health policies related to international trade agreements
2. Monitor, analyse, study and report on health implications of international trade agreements
3. Produce an analysis of IPR, innovation and public health, including appropriate funding and incentive mechanisms for the creation of new medicines

- 4 Encourage that bilateral trade agreements take into account the flexibilities of the TRIPS Agreement

WHO strategy addressed the issue by categorizing diseases into the following three groups:

- *Type I:* Incentives for R&D exist in the rich country markets
- *Type II:* Incentives exist in the rich country markets, but the level of R&D spending on a global basis is not commensurate with disease burden
- *Type III:* Extremely little incentives for R&D, and essentially no commercially based R&D in the rich countries.

In 2003, the WHO started discussions on public health, innovation and IP at the Commission and then at the Intergovernmental Working Group (IGWG).

In June 2008, the WHO Assembly endorsed a report prepared by the IGWG. According to WHO, the public health, innovation and IP strategy included in the report is designed to promote new approaches to pharmaceutical research and development (R&D), and to enhance access to medicines. It is also designed to provide a medium-term framework for enhancing and making sustainable essential R&D relevant to diseases impacting developing countries.

In May 2006, the Fifty-ninth WHA considered the recommendations included in the Commission's report of April 2006 and recommended that WHO IGWG for Public Health, Innovation and IP Rights should further elaborate the strategy.

The text of the resolution WHA 61.21 is made available at the following web site.

http://www.who.int/gb/ebwha/pdf_files/A61/A61_R21-en.pdf

The global strategy and plan of action should aim, inter alia, at:

- ✓ securing an enhanced and sustainable basis for needs-driven, essential health research and development relevant to diseases that disproportionately affect developing countries,
- ✓ proposing clear objectives and priorities for research and development, and
- ✓ estimating funding needs in this area.

WHO's perspectives focus on the following messages to Member States:

- ✓ Introduction of a public health perspective into the IP protection regime,
- ✓ Use of the flexibilities permitted by the TRIPS Agreement in the revision of national laws and regulations (e.g. Bolar provision, compulsory licensing, exceptions to exclusive rights, extension of the transitional period),
- ✓ Implementation of the WTO Doha Declaration,
- ✓ Caution with "TRIPS-plus" provisions,

- ✓ Monitoring of the public health impact of new trade agreements.

According to WHO, the report is designed to promote new approaches to pharmaceutical R&D, and to enhance access to medicines. It is also designed to provide a medium-term framework for enhancing and making sustainable essential R&D relevant to diseases impacting developing countries. The strategy proposes clear objectives and priorities, and estimates of funding needs in this area, and it includes IP-related strategy and policies in particular in Element 5 (Application and management of IP to contribute to innovation and to promote public health).

Issues for policy debate

- Do international treaties concerning patent protection (such as TRIPS and bilateral trade agreements) interfere with basic human rights to life-saving drugs?
- Are problems in access to health care and essential drugs due to the patent system?
- Discuss advantages and disadvantages that developing countries would have if they issue a compulsory license of a patent for the availability of an essential drug.
- Discuss the role of the patent system in developing a new drug.
- Discuss measures and policies that could promote innovation for the development of a new drug.

Reference

WIPO resources on emerging issues on patents and public health issues at <http://www.wipo.int/patent-law/en/developments/publichealth.html>

WTO resources on pharmaceutical products and the TRIPS Agreement at http://www.wto.org/english/tratop_e/trips_e/factsheet_pharm00_e.htm

WHO resources on public health, innovation and IP at <http://www.who.int/phi/en/>

Other relevant web resources

IFPMA

<http://www.ifpma.org/Issues/>

CPTech

<http://www.cptech.org/ip/health/>

Chapter 9

Functions of an IP Office and Regional Systems for IP Protection

IP Office Functions

The first component of the IP system is the legislative framework that defines and clarifies rights and procedures. This component starts with international treaties and conventions and flows outward to the national level, where there are national laws, rules, and regulations. The second component is comprised of the institutions and facilities through which rights and interests are actualized; this includes the acquisition and maintenance of IPR through IP national and regional Offices, as well as the enforcement of IPR by institutions that serve to clarify and enforce rights, such as the courts, customs, and police.

The IP Office is part of this second component within a government and is in charge of administering the system of IPR acquisitions. The type of administrative system for IP protection that should be established and made available to the public is a key economic policy question, particularly for policy makers. The costs associated with the second component consist of administrative cost for the acquisition and maintenance of rights, and of administrative and judicial cost for enforcing IPR against infringement.

The economic and social cost of establishing and maintaining an IP Office have recently come under special attention, as users of the IP system have requested a reduction of the fees for filing an application, and obtaining and maintaining IPR. Users have become aware of the cost, as many wish to expand their IPR protection to other countries in response to the globalization of markets and trade, as well as the advent of e-commerce. However, cost reduction is difficult for many IP Offices that have an increasing workload with limited resources.

IP Offices are increasingly under pressure to speed up their procedures for granting patents and registering trademarks and industrial designs. Particularly in the fields of information and communication technologies, where innovations are taking place at a startling pace, lengthy and time consuming procedures for granting patents pose the risk of undermining the potential of the IP system for promoting technological innovation and creativity.

A question as to whether or not substantive examination on a patent application should be carried out is an important one for a country with limited resources to decide in designing

its cost-effective and efficient IP Office. To do away with resource demanding substantive examination, some alternative solutions are emerging.

Some patent offices have established what is referred to as registration system with a prior art search. Under this system, the patent office conducts the prior art search and prepares a search report, which is made available to the applicant and to the public. In some cases, small patent offices with a limited number of examiners entrust the prior art searches to some of the larger patent offices better equipped for substantive examination, in exchange for a payment (for example, Singapore entrusts this task to IP Australia). Another option is to conduct only the formal examination and dispense with examination to determine prior art. Looking at the total balance sheet of the society as a whole, some cost is transferred to the judicial system, such as the validity of the patent, which will be decided, if contested, by the courts in a procedure between the owner of the patent and any person who wishes to contest the patent. From the point of view of the patent office, the simple registration system leads to considerable savings in terms of staff expenditure, and in general, more efficiency from a systemic viewpoint.

Regional Systems of IP Protection

Because of the effects of globalization, technological advancements, and the convergence of both technologies and enterprises, there is a clearly perceived need for enhanced regional cooperation through harmonization of IP legislation and of updated and more efficient practices in respect to the administration of IPR.

Those solutions encompass uniform legislation, the creation of common IP Offices and courts, sharing of examination databases, recognition of patent examination within regional organizations, and even supranational IPR.

Regional cooperation between certain countries has led to the establishment of regional IP Offices that have considerably facilitated the acquisition of patents, as well as enhanced efficiencies in human resources and finances for individual countries. The regional offices that are currently in operation are shown below.

Regional patent systems could be explored not only because of efficiency and leveraging of costs, but also because of the potential for synergy in regional markets for products and IP licensing. Regional IP systems could give a boost to developing country efforts to utilize IP as a tool for economic development.

Regional IP system makes sense also from the globalization of economic activities. For instance, certain countries promoting the economic integration and free flow of goods and services within the region adopted the regional trademark system such as the Benelux Office for intellectual Property and OHIM. That system has as one of its main benefits and objectives, a single, universal application; or stated conversely, the international system seeks to reduce the heavy burden of filing separate trademark registrations (and

renewals) in all countries of the world where the applicant wishes to conduct business using the subject mark.

Regional patents and registrations of trademarks have been linked with the corresponding international systems such as PCT and Madrid so as to allow applicants to file an application without taking duplicative procedural steps. This link has proved to be successful particularly in Euro-PCT (PCT filing based on European Patent application) and the international registration of trademarks based on the community trademarks.

Active Regional IP systems

| Intellectual Property Office | Since | Members | Headquarters | Types of IP |
|---|--|---|--|---------------------------------|
| African Intellectual Property Organization (OAPI) | 1962 and revised in 1977 and 1999 (Bangui Agreement) | 16 countries of French-speaking Africa (Benin, Burkina Faso, Cameroon, Central Africa Republic, Chad, Congo, Cote d'Ivoire, Equatorial Guinea, Gabon, Guinea, Guinea Bissau, Mali, Mauritania, Niger, Senegal, and Togo) | Yaounde, Cameroon | IP (see note 1) |
| African Regional Industrial Property Organization (ARIPO) | 1976 (Lusaka Agreement) | 16 countries of English-speaking Africa (Botswana, the Gambia, Ghana, Kenya, Lesotho, Malawi, Mozambique, Namibia, Sierra Leone, Somalia, Sudan, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe) | Harare, Zimbabwe | IP |
| European Patent Office (EPO) | 1977 | 34 European countries (Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Monaco, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom and Turkey) | The Hague, the Netherlands, Munich and Berlin, Germany | patents |
| Eurasian Patent Office (EAPO) | 1994 | 12 countries (Azerbaijan, Armenia, Belarus, Georgia, Kazakhstan, Kyrgyz Republic, Moldova, Russian Federation, Tajikistan, Turkmenistan and Ukraine) | Moscow, Russian Federation | patents |
| Office for Harmonization in the Internal Market (OHIM) | 1993 | 27 EU countries (Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, The Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Sweden, Spain, and United Kingdom) | Alicante, Spain | Trademark and industrial design |
| Benelux Office for Intellectual Property | 2005 | 3 countries (Belgium, Luxembourg, and The Netherlands) | Brussels | Trademark and industrial design |

Note 1: The Bangui Agreement and its Annexes constitute the national law of the OAPI Member States and it contains the following types of IP; Patents, Utility Models, Trademarks and Service Marks, Industrial Designs, Trade Names,

Geographical Indications, Copyright, Protection Against Unfair Competition, Layout-
Designs (Topographies) of Integrated Circuits and Protection of Plant Varieties.

Reference

List of Regional Offices web sites

<http://www.wipo.int/directory/en/urls.jsp>

Chapter 10

IP, Unfair Competition and Anti-trust Law

Introduction

A number of countries allow free competition between industrial and commercial enterprises within certain limits defined by law. Free competition between enterprises is considered the best means of satisfying supply and demand in the economy and of serving the interests of consumers and the economy as a whole. However, where there is competition, acts of unfair competition are liable to occur.

In economic competition, the winner should be the enterprise providing the most useful and effective product or service on the most economical and (to the consumer) satisfying terms. This result can only be achieved, however, if all participants play according to a certain set of basic rules. Violations of the basic rules of economic competition can take various forms, ranging from illegal but harmless acts (which can be committed by the most honest and careful entrepreneur) to malicious fouls, intended to harm competitors or mislead consumers.

Experience has shown that there is little hope of fairness in competition being achieved solely by the free play of market forces. In theory, consumers, in their role as referees of economic play, could deter dishonest entrepreneurs by disregarding their goods or services and favoring those of honest competitors. Reality, however, is different.

As an economic situation becomes more complex, consumers become less able to act as referees. Often they are not even in a position to detect by themselves acts of unfair competition, let alone react accordingly. Indeed it is the consumer who—along with the honest competitor—has to be protected against unfair competition.

Self-regulation has not proved to be a sufficient safeguard against unfair competition. If self-regulation is well developed and generally observed, it can even be faster, less expensive and more efficient than any court system. Yet it stands or falls on continuing observance by all participants. In order to prevent unfair competition effectively, self-regulation must, at least in certain areas, be supplemented by a system of legal enforcement.

In certain jurisdictions, the intellectual property laws, unfair competition laws and anti-trust (competition) laws have developed in such a way that they complement to each other with making an appropriate balance. The balance is necessary because “on the one hand, exclusive rights granted under IP laws by definition exclude competition in a particular setting and allow excluding third parties from directly competing with the IP

right holder; on the other hand, competition law seeks to facilitate direct competition and tends to limit the use of exclusive rights.” (Teaching of Intellectual Property; Chapter 6 Teaching intellectual property, unfair competition and anti-trust law by Thomas Cottier and Christophe Germann, Cambridge University Press 2008). However, in most developing countries, unfair competition laws and anti-trust laws are relatively weak to make such balance.

Anti-trust Law or Competition law

Anti-trust law is concerned with the preservation of the freedom of competition by combating restraints on trade and abuses of economic power, while unfair competition law is concerned with ensuring fairness in competition by forcing all participants to play according to the same rules. Both laws are equally important, although in different respects, and supplement each other.

Anti-trust laws or competition laws are to promote a business environment in support of sound competition for further innovation and economic efficiency. Agreements between corporations, whether they may or may not include IP aspects, are likely to discourage further innovation and increase prices of the products concerned, if such agreements contain arrangements or obligations which restrict marketing, prevent follow-on improvements of technologies, control the price of the product and abuse the licensor’s dominant position in the market. Anti-trust laws or competition laws are intended to correct such restrictive and abusive business practices and activities. To balance anti-trust laws or competition laws on one hand, and the IP laws on the other requires constant review of all the relevant laws and case-by-case analysis of contractual agreements. Anti-trust authorities in some jurisdictions tried to codify guidelines for IP licensing agreements as follows:

- US Fair Trade Commission;
<http://www.usdoj.gov/atr/public/guidelines/0558.htm>
- EC Technology Transfer Block Exemptions;
<http://www.ipit-update.com/compec04.htm>
- Japan Fair Trade Commission’s Guidelines for the Use of Intellectual Property under the Anti-monopoly Act;
http://www.jftc.go.jp/e-page/legislation/ama/070928_IP_Guideline.pdf

These guidelines reflect their different approaches to the issues but often provide coherent rules. For example, concerning grant back (an arrangement under which a licensee agrees to extend to the licensor of intellectual property the right to use the licensee's improvements to the licensed technology), exclusive grant backs are generally considered anti-competitive. In other words, non-exclusive grant back is considered pro-competitive and permissive under anti-trust laws and competition laws, because “non-

exclusive grant back arrangements provide a means for the licensee and the licensor to share risks and reward the licensor for making possible further innovation based on or informed by the licensed technology, and both promote innovation in the first place and promote the subsequent licensing of the results of the innovation.” (cited from the US Guidelines)

IP and Unfair Competition

IP rights often interfere with many public policy areas. Public policies facilitating free and fair competition sometimes have a potential conflict with IP rights. The relations between IP rights and competition or anti-trust laws have been much studied in connection with the potential abuse of IP rights to monopolize the market. IP rights and the market monopoly are not inherently linked. The majority of licensing agreements today involve IP rights and most of them contribute to fair competition in the market in pursuit of greater and enhanced level of innovation in the economy.

IP system and competition policies are not regarded as an inherent trade-off and dichotomy. The relationships between them are considered as supplementary and mutually supportive. Patent and anti-trust law are actually complementary, as both are aimed at encouraging innovation, industry, and competition.” (US Fair Trade Commission Report on ‘Competition and Intellectual Property Law and Policy in the Knowledge-Based Economy’ (2003)).

The protection of trademarks and industrial design also promote fair competition through branding and consumer protection, since they function to clearly identify the origin of products and services. To provide safeguards and checking mechanisms against the abuse of IP rights, however, makes it necessary to manage the interface between competition policies and IP system and policies. In some countries, for example, guidelines regulating misappropriation of IP rights in licensing have been actively debated and reviewed. In many countries, the abuse of market-related IP rights is checked by unfair competition laws or anti-trust laws.

Protection from Unfair Competition

IP rights are granted on application by IP Offices and confer exclusive rights with respect to the subject matter concerned. On the other hand, protection against unfair competition is based not on such grants of rights but on the consideration—either stated in legislative provisions or recognized as a general principle of law—that acts contrary to honest business practice are to be prohibited.

Nevertheless, the link between the two kinds of protection is clear when certain cases of unfair competition are considered. For example, in many countries unauthorized use of a trademark that has not been registered is considered illegal on the basis of general

principles that belong to the field of protection against unfair competition (in a number of countries such unauthorized use is called “passing-off”).

What is “unfair”?

Protection against unfair competition has been recognized as forming part of IP protection for almost a century. It was in 1900, at the Brussels Diplomatic Conference for the Revision of the Paris Convention that this recognition was first manifested by the insertion of Article *10bis* in the Convention. As a result of the subsequent revision conferences, the Article now reads as follows (in the Stockholm Act (1967) of the Paris Convention):

“(1) The countries of the Union are bound to assure to nationals of such countries effective protection against unfair competition.

Any act of competition contrary to honest practices in industrial or commercial matters constitutes an act of unfair competition.

The following in particular shall be prohibited:

- all acts of such a nature as to create confusion by any means whatever with the establishment, the goods, or the industrial or commercial activities, of a competitor;
- false allegations in the course of trade of such a nature as to discredit the establishment, the goods, or the industrial or commercial activities, of a competitor;
- indications or allegations the use of which in the course of trade is liable to mislead the public as to the nature, the manufacturing process, the characteristics, the suitability for their purpose, or the quantity, of the goods.”

Article 1(2) of the Paris Convention mentions the repression of unfair competition along with patents, utility models, industrial designs, trademarks, trade names, indications of source and appellations of origin among the objects of industrial property protection, and Article *10bis* contains an express provision on the repression of unfair competition. In the more than one hundred and fifty States party to the Paris Convention, the legal basis for the protection against unfair competition may thus be found not only in national legislation but also at the international level.

Under Article *10bis*(1) of the Paris Convention, the countries of the Paris Union are bound to ensure effective protection against unfair competition. Article *10ter*(1) of the Convention further provides for the obligation to ensure “appropriate legal remedies.” In particular, measures must be taken to permit federations and associations representing interested industrialists, producers or merchants to take action, provided that this is not contrary to the laws of the country concerned and does not exceed the rights normally granted to national associations.

Article 10*bis*(2) of the Paris Convention defines unfair competition as any act of competition contrary to honest practices in industrial or commercial matters. This definition leaves the determination of the notion of “commercial honesty” to the national courts and administrative authorities. Member States of the Paris Union are also free to grant protection against certain acts even if the parties involved are not competing against each other.

Article 10*bis*(3) of the Paris Convention gives three examples of cases that “in particular” have to be prohibited. These examples must not be seen as exhaustive, but rather as the minimum protection that has to be granted by all member States. The first two—creating confusion and discrediting—can be regarded as belonging to the “traditional” field of competition law, namely that of competitor protection. The third one—misleading—was added by the 1958 Revision Conference in Lisbon, and takes into account the interests of both competitors and consumers.

Apart from Articles 10*bis* and 10*ter*, the Paris Convention contains several provisions relevant to protection against acts of unfair competition in a broader sense, especially those concerning trademarks and trade names. These provisions have been explained in Module II.

TRIPS Agreement

Provisions included in the TRIPS Agreement in connection with unfair competition are grouped into two categories: undisclosed information such as trade secret, and anti-competitive practices in contractual licenses.

The TRIPS Agreement requires undisclosed information - trade secrets or know-how - to benefit from protection. According to Article 39.2, the protection must apply to information that is secret, that has commercial value because it is secret and that has been subject to reasonable steps to keep it secret. The Agreement does not require undisclosed information to be treated as a form of property, but it does require that a person lawfully in control of such information must have the possibility of preventing it from being disclosed to, acquired by, or used by others without his or her consent in a manner contrary to honest commercial practices. “Manner contrary to honest commercial practices” includes breach of contract, breach of confidence and inducement to breach, as well as the acquisition of undisclosed information by third parties who knew, or were grossly negligent in failing to know, that such practices were involved in the acquisition.

The TRIPS Agreement also contains provisions on undisclosed test data and other data whose submission is required by governments as a condition of approving the marketing of pharmaceutical or agricultural chemical products which use new chemical entities. In such a situation the Member government concerned must protect the data against unfair commercial use. In addition, Members must protect such data against disclosure, except

where necessary to protect the public, or unless steps are taken to ensure that the data are protected against unfair commercial use.

Article 40 of the TRIPS Agreement recognizes that some licensing practices or conditions pertaining to IP rights which restrain competition may have adverse effects on trade and may impede the transfer and dissemination of technology (paragraph 1). Member countries may adopt, consistently with the other provisions of the TRIPS Agreement, appropriate measures to prevent or control practices in the licensing of IP rights which are abusive and anti-competitive (paragraph 2).

The TRIPS Agreement provides for a mechanism whereby a country seeking to take action against such practices involving the companies of another Member country can enter into consultations with that other Member and exchange publicly available non-confidential information of relevance to the matter in question and of other information available to that Member, subject to domestic law and to the conclusion of mutually satisfactory agreements concerning the safeguarding of its confidentiality by the requesting Member (paragraph 3). Similarly, a country whose companies are subject to such action in another Member can enter into consultations with that Member (paragraph 4).

National Laws

Most countries with special laws on unfair competition have adopted the same or similar definitions for their general provision—using such terms as “honest trade practices” (Belgium and Luxembourg), “the principle of good faith” (Spain and Switzerland), “professional correctness” (Italy) and “good morals” (Germany, Greece and Poland).

In the absence of specific legislation, the courts have defined fair competition with phrases like “the principles of honesty and fair dealing” or “the morals of the marketplace” (United States of America).

Competition and Patents

There is a close link between patent rights and competition, which, in simple terms, can be characterized by two factors: on the one hand, patent laws aim to prevent the copying or imitation of patented goods, and thus complement competition policies in that they contribute to a fair market behavior. On the other hand, competition laws may limit patent rights in that patent holders may be barred from abusing their rights by applying monopolistic practices. In sum, experience shows that too high or too low protection of both patents and competition may lead to trade distortions. A balance has thus to be found between competition policy and patent rights, and this balance must achieve the goal of preventing abuses of patent rights, without annulling the reward provided for by the patent system when appropriately used.

The search for this balance between patents and competition policy objectives is reflected both within the patent system as well as in respect of its relationship with competition law.

Within the patent system, the core principles of the system have been framed precisely with a view to ensure that the system simultaneously fosters innovation and remains consistent with fair market rules. Therefore, safeguards and boundaries have been built into the patent system, among which are the fact that most patent systems protect only inventions, not discoveries, the limitation of patent rights as to their contents and their duration, and the conditions of patentability that have been framed precisely in a way that should allow the system to generate patents only for those inventions which are most likely to serve the public interest, but should prevent patents for those inventions that would appear not to benefit society.

On the other hand, competition law has as its objective to prevent undesired market behavior and, in particular, abuses of a market position. In relation to patent rights, such behavior would cover activities going beyond the objectives and boundaries set by the patent system. Such situations may occur, for example, where an exclusive license totally excludes other competitors from market entry, through restrictive selling practices or where patent rights are used to create horizontal agreements for fixing price levels. Against this backdrop, competition policies and laws can be an important instrument to regulate potential abuses of patent rights and to complement patent inherent boundaries.

Reference

WIPO web resources on competition and patents

<http://www.wipo.int/patent-law/en/developments/competition.html>

Chapter 11

Technology Transfer and Licensing

Introduction

The transfer of technology and licenses play an important role for the further development of technology. To provide a legal and policy framework for IP licenses becomes more important.

In a globalized economy, transfer of technology and licensing are also important factors in strategic alliances and international joint ventures in order to maintain a competitive edge in a market economy. Thus, policy tools to facilitate licensing and technology transfer at the international level have often been considered in the context of creating an appropriate climate for investment and economic development in particular in developing countries. The minimum skills for negotiating IP licenses are also essential to strengthening the competitiveness of companies in the global market in particular small and medium-sized companies and start-ups.

Technology Transfer and Government Policies

Although the business sector plays a major role for research and development on activities with a commercial objective, many of the fundamental technologies having great implications for everyday life came from publicly funded research that was not intended for immediate commercial use.

The importance of ensuring a greater collaboration between the private sector and the public research sector has been recognized in the recent past, and the need for universities and public research institutions to develop IP policies has been emphasized in many countries in order to properly manage the IP rights relating to their research results.

In past decades, many developing countries realized that the transfer of technology from other countries had a negligible impact on the creation of a base for the development of the so-called knowledge industry, unless the transfer is followed up by a mechanism that empowers local researchers, engineers, entrepreneurs, and other innovators to use the transfer as a spring board for the creation of new knowledge. It is not enough for developing countries to invite in foreign technology businesses for investment and manufacturing; the transfer of technology from such ventures alone may be small. Technology transfer, in other words, is not automatic. Effective transfer of technology is an ongoing process that must include active local participation.

In many cases, transfer of technology takes place in conjunction with foreign direct investment (FDI) or joint venture agreements (JV). In emerging economies, FDI and JV are promoted by a wide range of policies including policies ensuring adequate protection and effective enforcement of IP rights.

The UK Commission Report “Integrating Intellectual Property Rights and Development Policy” recommended that successful transfer of technology needs serious consideration of a number of measures including appropriate incentive policies to promote technology transfer such as tax breaks for companies that license technology to developing countries, establishment of effective competition policies, more public funds available to promote indigenous scientific and technological capability in developing countries through scientific and technological cooperation, commitment to ensure that benefits of publicly funded research are available to all, and commitments to ensure open access to scientific databases.

In the context of strengthening indigenous basis of science and technological research as well as successful exploitation of publicly funded research projects, patent licensing policy of universities and public research institutions have been reviewed in many countries, in particular in developing countries where most of knowledge and research results are generated at universities or public research institutions.

In the last decade, a number of countries reviewed patent policies for promoting the transfer of technologies from universities to industry. Most of them have been inspired by a successful review of patent policies with respect to the patent ownership and licensing conditions for commercializing research results of publicly funded projects in the United States of America.

In the United States of America, the Bayh–Dole Act of 1980 was formulated as a result of a study and debate concerning the patent policy of the government in the 1960s and 1970s. At that time, there was no government-wide policy regarding the ownership of inventions made using federal funding. The Act had two purposes: (1) to allow universities, non-profit corporations, and small businesses to patent and commercialize their federally funded inventions; and (2) to allow federal agencies to grant licenses for their technology to provide more incentives to businesses. Before the adoption of this Act, the US government’s policies were more restrictive on licensing.

Licensing

A licensing agreement may or may not include IP components. As economic activities are more knowledge-based, however, most licensing agreements include IP components. More and more licensing agreements are driven by reasons for acquiring knowledge and technologies, in which case IP components are dominant factors of the licensing agreements (hereinafter called “IP licensing”).

Then IP licensing is a partnership between an IP rights owner (licensor), and another who is authorized to use such rights (licensee) in exchange for an agreed payment (fee or royalty). A variety of IP licensing agreements are available, which may be broadly categorized as follows:

- ✓ Technology Licensing (including patent licensing)
- ✓ Trademark Licensing (in some cases, part of Franchising Agreement)
- ✓ Copyright Licensing (including computer software licensing)

Technology Licensing may be for certain IP rights only (e.g., a license to practice an identified patent or to copy and distribute a certain work of authorship). Licenses may be for all the IP rights of any kind that are necessary to reproduce, make, use, market, and sell products based on a type of technology (e.g. a license to develop a new software product that is protected by patent, copyright, trademark and trade secret law). Patent licensing is a part of technology licensing but often is the most important one.

In case of trademark licensing, the trademark owner retains ownership and merely agrees to the use of the trademark by one or more other companies. Depending on the nature of the agreement, the licensor often retains some degree of control over the licensee to guarantee that a certain quality is maintained. It is common practice for trademark owners to license third parties to use their trademarks locally in the country where they exercise their own business. Today, the main importance of the possibility of licensing the use of trademarks lies in its usefulness in the global market. Licensing is indeed the principal means whereby the trademarks of foreign companies are used by local businesses. In many cases, as discussed below, they are not normally simple trademark licenses, but general agreements including the licensing of patents, trademarks, know-how and possibly other IP rights, as well as technical assistance to be given to the licensee. Through a franchise agreement the owner of certain technical or other expertise who has usually gained a reputation in connection with the use of a trademark or service mark (the franchiser) may team up with another enterprise (franchisee) who will bring in expertise of his own or financial resources to provide goods or services directly to the consumer. The franchiser will ensure, through the supply of technical and management skills, that the franchisee maintains the quality and other standards in relation to the use of the trade or service mark which often require certain standardized features like, for example, a uniform trade dress.

Copyright laws generally provide the right to authorize others to make use of the copyright work through licensing. The subject matter of copyright licensing includes literary works, musical works, dramatic works, choreographic works, pictorial, graphical and sculptural works, computer software, computer games, motion pictures and other audiovisual works, sound recordings and architectural works. In the context of technology transfer, for example, the licensing of copyright protecting computer software has supported the recent dissemination and expansion of the information technology which benefited from the very nature of licensing, that is, a significant increase of the value of the original product if it is distributed and used by more users through licensing,

rather than one-time off sale, while the owner can maintain the quality of the original product without depreciation.

Licensing in Practice

In practice, all or some of these agreements often form part of one single contract, since in transfers of this nature, many rights are involved and not simply one type of IP right. IP licensing agreements may also be concluded when IP is involved in the merger or acquisition of companies, or in the course of negotiating a JV.

As an IP owner and a licensor, you can expand its business to the frontiers of your partners' business and ensure a steady stream of additional income. As a licensee, you can manufacture, sell, import, export, distribute and market various goods or services which it may be prevented from doing otherwise.

In the international context, a formal licensing agreement is possible only if the IP right you wish to license is also protected in the other country or countries of interest to you. If your IP is not protected in such other country or countries then you would not only be unable to license it, but also you would have no legal right to put any restriction on its use by anyone else.

Strategy for Licensing

Preparation for negotiating a license agreement is necessary for both parties (a licensor and a licensee) to ask a number of questions as follows:

- ✓ business reasons for the licensing,
- ✓ the leverage you have (the terms of another agreement, possible investment, threat of IP litigation, etc.),
- ✓ the time frame for signing the license agreement,
- ✓ documents or data or training that you need,
- ✓ the profile of the members of the counterpart, and
- ✓ business and legal terms that you consider most important and necessary to be contained in the agreement.

The issues that are agreed upon in a license agreement are called the “terms” or “material terms” or “terms and conditions.”

Key terms could be grouped in four clusters as follows:

Cluster 1: The subject of the license (What is the subject matter of the license? Is the thing that is being licensed completed? Who owns the IP that underlines the technology?)

This cluster of issues relates to the definition of the technology that is being licensed. This may sound obvious, but it is an underestimated issue that can give rise to disputes after the agreement has been signed. Is the technology that you want to use a product, a formula, a specification, a protocol, a software program, a set of diagrams or documentation? If so, it is essential to describe this precisely. Or do you need a license to practice a specified patent or set of patents? Or is the subject matter of the license all the IP and technology required in order to meet a specified standard (standards licensing)? The licensor's interest is in narrowing the definition of what is being licensed. The licensee's interest is in having a broad definition of the technology. In some cases, both sides will seek refuge in ambiguity about the technology for a number of reasons.

Cluster 2: What kind of rights does the license give? (What is the scope of rights? What is the territory? Is it exclusive or non-exclusive?)

An IP license includes several different “grants” of rights depending on the needs of the parties. Typical grants may include the rights:

- ✓ to reproduce the technology;
- ✓ to display it;
- ✓ to modify it;
- ✓ to make derivative works from it (making new versions or entirely new products or technologies by modifying and enhancing);
- ✓ to use it for research and product development;
- ✓ to manufacture it;
- ✓ to distribute and sell it;
- ✓ to sub-license it to another who can do any or all of the above.

It is essential to decide: what do you need to be able to do to the IP or technology in order to reach your business objectives? You will need to review this list of grants and decide—together with the technical experts in your business—what rights are needed in order for you to take advantage of the business opportunity presented by the license. A license agreement is a very flexible business tool; the license may cover only part of a single IP right.

IP rights are often territorial. In what country or region do you plan to use the technology? If you are going to make products from the technology, where do you plan to manufacture? The license agreement must specify whether your rights are worldwide or limited to a designated country or countries, region, or other territory. For trademark licenses, the agreement should be clear that you have the right to display the mark “in connection with” the sale of products throughout the territory where you intend to display and sell the products.

In order to make your use of the technology profitable, you may need to have the exclusive rights (as opposed to non-exclusive rights in which case other licensees may exist in competition) to make, use, distribute, etc. Generally, from the licensor's point of view, an exclusive license is not desirable, because it restricts the licensor's freedom to

do business with other licensees. Also, if the exclusive licensee fails to make good use of the technology, the result may be that the technology does not become commercially successful. Exclusive licenses are often considered where the licensee must make a substantial investment that cannot be used for a different purpose (e.g. custom equipment, hiring specialized labor, and committing resources to further development of the technologies).

Cluster 3: Financial Terms (How much will the licensee pay for the use of the technology?)

The financial terms of the license are often the first topics that are discussed when thinking of licensing. You will need to consider the value of the IP license in the context of all the other related transactions: the financial terms will vary depending on whether there is only an IP license or also a manufacturing and purchase agreement, a marketing agreement, a distribution agreement, a joint venture, etc. There are several methods that are often referred to in order to value a technology. You should know what these are, but keep in mind that they are all subjective and not exact methods. Also, more than one method can be used and they can be combined. These methods are, at best, only rough guides, and common sense must always be applied. The three classic methods include: the cost method, the income method and the market method.

As to how the licensee will pay, there are two types of payments that are common in technology licensing: royalties and lump sum payments. These can be combined in different ways. Royalties may be assessed based on gross or net prices or revenues (after subtracting various costs such as shipping, customs) but it is important to specify exactly how the royalty will be calculated, including providing sample calculations in an exhibit to the agreement. A lump sum payment may be made at the beginning of an agreement or at a later stage. Such payments may be in installments. Installments may be timed to coincide with development milestones.

Cluster 4: Technology's growth and development over time

It is important to clarify whether the licensee will have rights to future versions of the technology or product. In a pure IP license, it must be clear whether the licensee will have a license to improvements or derivative works. The licensor wants to limit its commitments to the licensee because, for the sake of the health and vitality of its business, it must be able to innovate and change directions and technologies in the future. Other important questions to be included in the agreement include the provision by the licensor of service and support (such as training) in the use of the technology or associated products.

Reference

WIPO web resources “Licensing and Technology Transfer”

<http://www.wipo.int/patent-law/en/developments/licensing.html>

“Successful Technology Licensing” (WIPO Publication No.903)

WIPO Magazine Article on “IP Licensing Reaping the Benefits”

http://www.wipo.int/export/sites/www/sme/en/documents/wipo_magazine/06_2003.pdf

WIPO SME web resources “To license a patent, or assign it: Factors influencing the choice”, prepared by Mr. Philip Mendes, Partner, Innovation Law, Brisbane

http://www.wipo.int/sme/en/documents/license_assign_patent.htm#author

WIPO Guide on the Licensing of Copyright and Related Rights (WIPO Publication No. 897)

Chapter 12

Protection of New Plant Varieties

Protection of a New Plant Variety

As the world is concerned about the advent of the food crisis, it is crucial to make a sustainable and good progress in agriculture, horticulture and forestry. In this context, protection of a new plant variety is necessary to provide plant breeders an incentive for the development of new plant varieties. Improved varieties are important and cost-effective means of improving the productivity, quality and marketability for farmers and growers the wealth and living standards of whom will significantly contribute to economic development particularly in developing countries.

Breeding new plant varieties requires a substantial investment in terms of skill, labor, material resources, money and time. The opportunity to obtain certain exclusive rights in respect of new varieties provides successful plant breeders with a better chance of recovering their costs and accumulating the funds necessary for further investment.

UPOV

The International Union for the Protection of New Varieties of Plants, known as “UPOV” is an intergovernmental organization with headquarters in Geneva (a sister organization of WIPO). The acronym UPOV is derived from the French name of the organization, *Union internationale pour la protection des obtentions yégitales*.

Its mission is as follows:

“To provide and promote an effective system of plant variety protection, with the aim of encouraging the development of new varieties of plants, for the benefit of society.”

The UPOV was established by the International Convention for the Protection of New Varieties of Plants. The Convention entered into force in 1968. As of June 2008, it has 65 member States.

The recent UPOV Report on the Impact of Plant Variety Protection concludes that “the UPOV system of plant variety protection provides an effective incentive for plant breeding in many different situations and in various sectors, and results in the development of new, improved varieties of benefit for farmers, growers and consumers....”

Benefits of the UPOV system include the following:

- ✓ Investment in breeding,
- ✓ More and better varieties for farmers and growers,
- ✓ Increased income for farmers,
- ✓ Rural development, and
- ✓ Development of international markets.

Under the UPOV system, the breeder (the person who bred, or discovered and developed, a variety) is entitled to the protection of the new plant variety.

A new variety is protected because:

- ✓ plant grouping- lowest known rank
- ✓ irrespective of whether conditions for the grant are met
- ✓ defined by the expression of the characteristics resulting from genotype(s)
- ✓ distinguished from other plant grouping
- ✓ unit suitable for being propagated unchanged

The conditions for the protection are:

- ✓ NOVELTY
- ✓ DISTINCTNESS
- ✓ UNIFORMITY
- ✓ STABILITY

The last three conditions are often referred to as “DUS”.

Other requirements are as follows:

- ✓ VARIETY DENOMINATION
- ✓ FORMALITIES
- ✓ PAYMENT OF FEES

If a new plant variety is protected under UPOV, the authorization by the owner of the right for the following acts is necessary:

- ✓ Production or reproduction (multiplication)
- ✓ Conditioning for the purpose of propagation
- ✓ Offering for sale
- ✓ Selling or marketing
- ✓ Exporting

- ✓ Importing
- ✓ Stocking for any of the above purposes

The protection covers the following material:

- ✓ All propagating material
- ✓ Harvested material under certain conditions
- ✓ Certain products (optional)

Exceptions to the breeder's right are acts done privately and for non-commercial purposes, or for experimental purposes or breeding other varieties.

Farmer's privileges

A Contracting Party may restrict breeder's rights in order to permit farmers to use for propagating purposes on their own holdings the product of the harvest obtained on their own holdings from the protected variety within reasonable limits subject to safeguarding legitimate interests of the breeder.

Breeder's exemption

This promotes further development of new varieties, because plant varieties as germplasm sources remain accessible to the community of breeders for breeding activities to improve plant varieties.

Reference

UPOV Web site

http://www.upov.org/index_en.html

Chapter 13

CBD, FAO, Biotechnology and IP

Introduction

Biotechnology is a field of technology of growing importance. Biotechnological inventions may have a very significant effect on our future, in particular in the fields of medicine, food, agriculture, energy and protection of the environment.

Biotechnology concerns living organisms, such as plants, animals, seeds and microorganisms, as well as biological material, such as, enzymes, proteins and plasmids (which are used in “genetic engineering”).

Patents and biotechnological inventions

Though biotechnology is one of the oldest technologies (for example, the production of wine or beer involves processes using living organisms goes back many centuries ago), in more recent times, scientists have developed biological processes to modify the genetic composition of living organisms (genetic engineering). For example, the microorganisms created by Chakrabarty (an inventor in the United States of America) were able to break down components of oil pollution in oceans and rivers. The patent on these microorganisms was the subject of a landmark decision by the United States Supreme Court, in which modified microorganisms were recognized as patentable subject matter. The Court noted that the laws of nature, physical phenomena and abstract ideas were not patentable. The claimed invention, however, was not directed to an existing natural phenomenon but to new bacteria with markedly different characteristics from any found in nature. The invention therefore resulted from the inventor’s ingenuity and effort. The United States Congress had defined statutory subject matter (any new article of manufacture or composition of matter) broadly to “include anything under the sun that is made by man.”

Genetic engineering processes are also used in the modification of microorganisms and plants for the production of new medicines. Biotechnology is expected to lead to important breakthroughs in medicine which may be effective in combating diseases such as cancer and HIV/AIDS. It may also lead to new opportunities for obtaining food and energy, and may provide solutions to the problems of pollution of the environment.

Today, biotechnology concerns the application of cellular and molecular biology to human needs and the use of cells and biological molecules to solve problems or make

useful products. It includes scientific and industrial disciplines directed to understanding and manipulating living or biologically active material at the molecular level. Often it refers to recombinant deoxyribonucleic acid (DNA) techniques and analysis of genetic information.

As in other fields of technology, there is a need for legal protection in respect of biotechnological inventions. Such inventions are creations of the human mind just as much as other inventions, and are generally the result of substantial research, inventive effort and investment in sophisticated laboratories. Typically, enterprises engaged in research only make investments if legal protection is available for the results of their research. As with other inventions, there is an obvious need for the protection of biotechnological inventions, not only in the interest of inventors and their employers, but also in the public interest in order to promote technological progress.

Selected patent-related issues unique to biotechnology

The first is the problem of whether there really is an invention rather than a discovery. If, for example, a microorganism as yet unknown is isolated by a sophisticated process, it may be argued that such a microorganism is not an invention but is a scientific discovery. The counter-argument would be that the isolation requires an important intervention by man using a highly sophisticated process, and that therefore the result is a solution of a technical problem (see paragraphs discussing the US Supreme Court decision on the case of Chakrabarty). It may also be argued that the isolated microorganism is not different from a chemical substance extracted from nature, which is patentable subject matter.

The second obstacle is the existence of express legislative provisions that exclude certain categories of biotechnological inventions from patent protection, in particular, for reasons of public order and morality. As discussed in Chapter 8, the TRIPS Agreement Article 27 allows Members to exclude from patentability plants and animals other than micro-organisms, and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes. As concerns a patent for an invention using microorganisms, WIPO concluded the Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure in 1977 with a view to facilitating the processing of such patent application.

Licensing and other issues related to the exploitation of patents on biological inventions are also areas of discussion. In the field of biotechnology and life sciences, it requires broad range of comprehensive research activities. It means that down-stream innovations may be covered by a broad patent granted at an early stage of innovation. The number and breadth of patents granted to early fundamental research have raised concerns about patent thickets and royalty stacking. In particular, reach-through claims in patents, especially for research tools, were flagged as a potential impediment to further research and development. Since universities and governmental research institutions also play an important role in the area of biotechnological research, it is essential to stimulate public-private partnership, generate revenue and protect investments. Facilitating the transfer of

technology from basic research to applied research and commercialization is one of the key elements for the successful research and commercialization of biotechnological inventions.

Thirdly, issues arise concerning the relationship between patents and other forms of IP protection. As discussed in Chapter 12, in the field of plant biotechnology, plant varieties are, in many countries, protected by a sui generis system, such as the UPOV system.

Finally, the relationship with other relevant issues, such as the conservation and preservation of the environment (including the protection of biodiversity), and moral and ethical dimensions of the protection and commercialization of biotechnological inventions has been discussed in many fora.

CBD

As concerns the protection of biodiversity, the Convention on Biological Diversity (CBD) was adopted in 1992 in Brazil. The CBD entered into force in 1993. It has 190 member States. The Convention has three main goals:

1. conservation of biological diversity (or biodiversity);
2. sustainable use of its components; and
3. fair and equitable sharing of benefits arising from genetic resources.

Article 16 (5) (Access to and Transfer of technology) provides that “the Contracting Parties, recognizing that patents and other IP rights may have an influence on the implementation of this Convention, shall cooperate in this regard subject to national legislation and international law in order to ensure that such rights are supportive of and do not run counter to its objectives.”

A number of countries requested that certain provisions of the TRIPS Agreement (which was adopted earlier than the CBD) should be revised to bring it in conformity with the CBD, as requested in Article 16(5). In 2001, at the WTO Ministerial Conference in Doha, trade ministers agreed that they instruct the Council for TRIPS, [...], to examine, inter alia, the relationship between the TRIPS Agreement and the CBD, the protection of traditional knowledge and folklore, and other relevant new developments [...].

In the meantime, the implementation of the CBD was left to the preparation of guidelines (Bonn Guidelines) to be completed before the next meeting of the Contracting Parties of the CBD in 2010.

WIPO's coordination with CBD and other fora

The WIPO Intergovernmental Committee (IGC) has dealt with a range of issues concerning the interplay between IP and genetic resources. A key feature of this work has been careful coordination with and responsiveness to the work of the CBD, the Food and Agricultural Organization of the United Nations (FAO) and the United Nations Environment Programme (UNEP). In particular, the Conference of Parties (COP) of the CBD and the FAO's Commission on Genetic Resources for Food and Agriculture have provided important guidance to the IGC in this work, since these bodies have fundamental roles in the international legal and policy framework for genetic resources.

The work has covered three main areas:

- ✓ Defensive protection of genetic resources through measures which prevent the grant of patents over genetic resources that do not fulfill the requirements of novelty and non-obviousness. The measures taken by WIPO include the creation of improved search tools and classification systems for patent examiners when they examine patent applications which claim genetic resources.
- ✓ IP aspects of access to genetic resources and equitable benefit-sharing arrangements that govern use of genetic resources. The IGC commissioned a database to serve as a capacity-building tool and to help inform policy debate. This database provides illustrative examples of the approaches actually taken when reaching mutually agreed terms concerning access and benefit-sharing. The IGC has also worked on broad principles and draft materials on guidelines for IP aspects of equitable benefit-sharing arrangements, in line with the encouragement of the CBD COP.
- ✓ Disclosure requirements in patent applications that relate to genetic resources and associated TK used in a claimed invention.

FAO

On November 3, 2001, the Thirty-first Session of the Conference of the Food and Agriculture Organization of the United Nations (FAO) adopted a binding International Treaty on Plant Genetic Resources for Food and Agriculture. The International Treaty is the outcome of seven years of negotiations to revise the International Undertaking on Plant Genetic Resources, in harmony with the CBD.

According to FAO, the objectives of the Treaty are the conservation and sustainable use of plant genetic resources for food and agriculture and the fair and equitable sharing of benefits derived from their use, in harmony with the CBD for sustainable agriculture and food security, and the Treaty is considered vital in ensuring the continued availability of the plant genetic resources that countries will need to feed their people.

The Treaty defines “plant genetic resources for food and agriculture” as any genetic material of plant origin of actual or potential value for food and agriculture.

Through the Treaty, countries agree to establish an efficient, effective and transparent Multilateral System to facilitate access to plant genetic resources for food and agriculture, and to share the benefits in a fair and equitable way. The Multilateral System applies to over 64 major crops and forages. The Governing Body of the Treaty, which will be composed of the countries that have ratified it, will set out the conditions for access and benefit-sharing in a “Material Transfer Agreement”.

Resources may be obtained from the Multilateral System for utilization and conservation in research, breeding and training. When a commercial product is developed using these resources, the Treaty provides for payment of an equitable share of the resulting monetary benefits, if this product may not be used without restriction by others for further research and breeding. If others may use it, payment is voluntary.

The Treaty provides for sharing the benefits of using plant genetic resources for food and agriculture through information-exchange, access to and the transfer of technology, and capacity-building. It also foresees a funding strategy to mobilize funds for activities, plans and programs to help, above all, small farmers in developing countries. This funding strategy also includes the share of the monetary benefits paid under the Multilateral System.

The Treaty came into force on June 29, 2004, ninety days after forty governments had ratified it.

Reference

WIPO web resources on Patent Law and Biotechnology
<http://www.wipo.int/patent-law/en/developments/biotechnology.html>

Chapter 14

Traditional Knowledge and Traditional Cultural Expressions

Introduction

IP issues related to genetic resources, traditional knowledge (TK) and folklore (or traditional cultural expressions (TCEs)) have emerged in a wide range of policy areas, including food and agriculture, biological diversity and the environment, human rights, cultural policy, trade and economic development. For example, IP rights have been granted for uses of plants which form part of traditional knowledge systems in the agricultural, health and environmental fields. Traditional designs, songs and dances have been used by the entertainment and fashion industries to create works which are protected by IP. Discussions about such uses of genetic resources, traditional knowledge and folklore have linked the protection of IP to policy objectives as diverse as the promotion of free trade, environmental conservation, food security, cultural diversity, etc. These linkages, established by discussions in other international fora, have significant technical, administrative and policy implications for the IP system.

Since the 1998-99 biennium, issues related to IP and genetic resources, traditional knowledge and folklore have been addressed in regular activities. Currently, the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC) discusses issues on TK, TCEs and genetic resources.

What is TK and TCEs?

The WIPO Secretariat uses the term “traditional knowledge” in two senses. First, within the IGC and elsewhere, TK is used in a narrow sense to refer to the content or substance of knowledge that is the result of intellectual activity and insight in a traditional context, and includes the know-how, skills, innovations, practices and learning that form part of traditional knowledge systems, and knowledge that is embodied in the traditional lifestyle of a community or people, or is contained in codified knowledge systems passed between generations. It is not limited to any specific technical field, and may include agricultural, environmental and medicinal knowledge, and knowledge associated with genetic resources.

Second, previously for the purposes of the fact-finding missions carried out by WIPO in 1998-1999, the WIPO Secretariat used the following all-encompassing and working concept of TK:

“ ‘traditional knowledge’ ... refer[s] to tradition-based literary, artistic or scientific works; performances; inventions; scientific discoveries; designs; marks, names and symbols; undisclosed information; and all other tradition-based innovations and creations resulting from intellectual activity in the industrial, scientific, literary or artistic fields.

“Tradition-based” refers to knowledge systems, creations, innovations and cultural expressions which: have generally been transmitted from generation to generation; are generally regarded as pertaining to a particular people or its territory; and, are constantly evolving in response to a changing environment.

Categories of traditional knowledge could include: agricultural knowledge; scientific knowledge; technical knowledge; ecological knowledge; medicinal knowledge, including related medicines and remedies; biodiversity-related knowledge; “traditional cultural expressions” (“expressions of folklore”) in the form of music, dance, song, handicrafts, designs, stories and artwork; elements of languages, such as names, geographical indications and symbols; and, movable cultural properties.

What is the problem?

TK has a strong practical component, since it is often developed in part as an intellectual response to the necessities of life. There are many examples of important technologies being derived directly from TK. But when others seek to benefit from TK, especially for industrial or commercial advantage, this can lead to concerns that the knowledge has been misappropriated and that the role and contribution of TK holders has not been recognized and respected.

The following cases that actually happened could illustrate the potential and the complexity of IP issues in relation to TK:

- ✓ Representatives of TK holders in India have opposed patents drawing on their TK (e.g., concerning the use of extracts from the neem tree, and the use of turmeric as a wound-healing agent),
- ✓ The Seri people of Mexico use the Arte Seri mark to distinguish their craftworks based on their TK and associated genetic resources,
- ✓ China granted some 3000 patents on innovative developments within the field of traditional Chinese medicine.

Is the IP system compatible with the values and interests of traditional communities or does it privilege individual rights over the collective interests of the community? Can IP

bolster the cultural identity of indigenous and local communities, and give them greater say in the management and use of their TK? Has the IP system been used to misappropriate TK? What can be done to ensure that the IP system functions better to serve the interests of traditional communities? These are some questions to be answered in the on-going discussions at WIPO.

IP issues in relation to TK

While the policy issues concerning TK are broad and diverse, the IP issues break down into two key themes: defensive protection of TK, or measures which ensure that IP rights over TK are not given to parties other than the customary TK holders (such as TK databases that may be used as evidence of prior art to defeat a claim to a patent on such TK), and positive protection of TK, or the creation of positive rights in TK that empower TK holders to protect and promote their TK. In some countries, *sui generis* legislation has been developed specifically to address the positive protection of TK. Providers and users may also enter into contractual agreements and/or use existing IP systems of protection.

TCEs protection

TCEs include music, art, designs, names, signs and symbols, performances, architectural forms, handicrafts and narratives. WPPT provides, amongst other things, protection for performers of expressions of folklore. WIPO has developed a model for *sui generis* protection of certain traditional knowledge-related subject matter in cooperation with UNESCO, namely the UNESCO-WIPO Model Provisions for National Laws on the Protection of Expressions of Folklore Against Illicit Exploitation and Other Prejudicial Actions (1982). The Model Provisions seek to maintain a balance between protection against abuses of expressions of folklore, on the one hand, and of the freedom and encouragement of further development and dissemination of folklore, on the other. They take into account that expressions of folklore form a living body of human culture which should not be stifled by too rigid protection. It also considered that any protection system should be practical and effective, rather than a system of imaginative requirements unworkable in reality.

WIPO will launch a Creative Heritage Project. It is developing best practices and guidelines for managing IP issues when recording, digitizing and disseminating intangible cultural heritage. The pilot program will begin in September, 2008, when two members of a Maasai community from Laikipia, Kenya and an expert from the National Museums of Kenya will travel to the American Folklife Center (AFC) and then to the Center for Documentary Studies (CDS) in the United States of America for intensive, hands-on training in documentary techniques and archival skills necessary for effective community-based cultural conservation. WIPO staff will provide IP training. WIPO will also provide the Maasai with a basic kit of field equipment, computers and software for their own use when they return to Kenya.

Initial Results of the IGC Work

The work of the IGC has led to the development of two sets of draft provisions for the protection of TCEs and for the protection of TK against misappropriation and misuse. http://www.wipo.int/export/sites/www/tk/en/consultations/draft_provisions/pdf/draft-provisions-booklet.pdf

Provisions of the Revised Draft Policy Objectives and Core Principles for Protection of TK are drafted as follows (headings only):

I. POLICY OBJECTIVES

- (i) Recognize value
- (ii) Promote respect
- (iii) Meet the actual needs of traditional knowledge holders
- (iv) Promote conservation and preservation of traditional knowledge
- (v) Empower holders of traditional knowledge and acknowledge the distinctive nature of traditional knowledge systems
- (vi) Support traditional knowledge systems
- (vii) Contribute to safeguarding traditional knowledge
- (viii) Repress unfair and inequitable uses
- (ix) Concord with relevant international agreements and processes
- (x) Promote innovation and creativity
- (xi) Ensure prior informed consent and exchanges based on mutually agreed terms
- (xii) Promote equitable benefit-sharing
- (xiii) Promote community development and legitimate trading activities
- (xiv) Preclude the grant of improper IP rights to unauthorized parties
- (xv) Enhance transparency and mutual confidence
- (xvi) Complement protection of traditional cultural expressions

CORE PRINCIPLES

II. GENERAL GUIDING PRINCIPLES

- (a) Responsiveness to the needs and expectations of traditional knowledge holders
- (b) Recognition of rights
- (c) Effectiveness and accessibility of protection
- (d) Flexibility and comprehensiveness
- (e) Equity and benefit-sharing
- (f) Consistency with existing legal systems governing access to associated genetic resources

- (g) Respect for and cooperation with other international and regional instruments and processes
- (h) Respect for customary use and transmission of traditional knowledge
- (i) Recognition of the specific characteristics of traditional knowledge
- (j) Providing assistance to address the needs of traditional knowledge holders

III. SUBSTANTIVE PRINCIPLES

1. Protection Against Misappropriation
2. Legal Form of Protection
3. General Scope of Subject Matter
4. Eligibility for Protection
5. Beneficiaries of Protection
6. Fair and Equitable Benefit-sharing and Recognition of Knowledge Holders
7. Principle of Prior Informed Consent
8. Exceptions and Limitations
9. Duration of Protection
10. Transitional Measures
11. Formalities
12. Consistency with the General Legal Framework
13. Administration and Enforcement of Protection
14. International and Regional Protection

Provisions of the Revised Draft Policy Objectives and Core Principles for Protection of TCEs are drafted as follows (headings only):

I. OBJECTIVES

- (i) Recognize value
- (ii) Promote respect
- (iii) Meet the actual needs of communities
- (iv) Prevent the misappropriation of traditional cultural expressions/expressions of folklore
- (v) Empower communities
- (vi) Support customary practices and community cooperation
- (vii) Contribute to safeguarding traditional cultures
- (viii) Encourage community innovation and creativity
- (ix) Promote intellectual and artistic freedom, research and cultural exchange on equitable terms
- (x) Contribute to cultural diversity
- (xi) Promote community development and legitimate trading activities
- (xii) Preclude unauthorized IP rights
- (xiii) Enhance certainty, transparency and mutual confidence

II. GENERAL GUIDING PRINCIPLES

- (a) Responsiveness to aspirations and expectations of relevant communities
- (b) Balance
- (c) Respect for and consistency with international and regional agreements and instruments
- (d) Flexibility and comprehensiveness
- (e) Recognition of the specific nature and characteristics of cultural expression
- (f) Complementarity with protection of traditional knowledge
- (g) Respect for rights of and obligations towards indigenous peoples and other traditional communities
- (h) Respect for customary use and transmission of TCEs/EoF
- (i) Effectiveness and accessibility of measures for protection

III. SUBSTANTIVE PRINCIPLES

1. Subject Matter of Protection
2. Beneficiaries
3. Acts of Misappropriation (Scope of Protection)
4. Management of Rights
5. Exceptions and Limitations
6. Term of Protection
7. Formalities
8. Sanctions, Remedies and Exercise of Rights
9. Transitional Measures
10. Relationship with IP Protection and Other Forms of Protection, Preservation and Promotion
11. International and Regional Protection

The drafts have not been adopted or endorsed by the IGC. The draft provisions draw upon a wide range of community, national and regional experiences, and have been developed over several years by and in consultation with Member States, indigenous peoples and other traditional and cultural communities, civil society organizations and a range of other interested parties. While the draft objectives and principles have no formal status, they illustrate some of the perspectives and approaches that are guiding work in this area, and could suggest possible frameworks for the protection of TCEs and TK against misappropriation and misuse. These draft materials are being used as points of reference in a range of national, regional and international policy discussions and standard-setting processes.

Reference

WIPO web resources on TK, TCEs and genetic resources

<http://www.wipo.int/tk/en/tk/>

WIPO brochure on intellectual property and traditional knowledge

http://www.wipo.int/export/sites/www/freepublications/en/tk/920/wipo_pub_920.pdf

Chapter 15

IP Rights Enforcement

Introduction

Modern legislation and effective administrative infrastructures for the acquisition of IP rights are important steps towards IP protection. But the acquisition of IP rights is of little economic value if these rights cannot be enforced effectively. The credibility of the IP system depends to a considerable extent on the enforceability of IP rights conferred thereby. Well-functioning IP enforcement mechanisms are the best means to limit the number of violations of IP rights and to ensure that right holders and the society as a whole can reap the benefits from the IP system.

Enforcement of IP rights is necessitated because people do not respect the rights of others. The reasons underlying such disrespect are many and varied, and range from greed, perceived necessity, lack of awareness, and ruthless criminal intent, all the way to innocent mistake. The scale of such disrespect also varies considerably, from illegal copying of protected works at home for personal use to large-scale commercial criminal enterprises, which produce hundreds of thousands of illegal copies. When illegal products take market share (or even kill a potential market), and when recouping an investment is prevented by intervening criminal activity, enforcement mechanisms are called into play to protect vital interests, not only of the holders of the rights involved, but also of the public in case of criminal offenses.

If someone infringes your IP rights, you must decide what action to take. You can use civil law provisions to make claims against the infringer to seek injunctions and or claim damages. As IP is a private property right, it is the right owner that should take action for enforcing the right. However, depending on national legislations, some IP infringement activities are also considered as criminal offenses committed by individuals who produce, distribute or sell counterfeit and pirated goods. To crack down on these activities is necessary also from the public policy objectives, action may be taken by the police, the customs offices or the prosecutors without being triggered by the IP owner.

IP right enforcement follows national legislation and provisions regulating the enforcement of the right in addition to provisions under the IP laws. Before the TRIPS Agreement was concluded, no international treaty existed to specifically deal with the IP rights enforcement. Thus, questions as to how countries should provide administrative and judicial measures to ensure an effective enforcement of IP rights were left to each country. The TRIPS Agreement did not attempt to harmonize different legal approaches such as common law approach and statutory law approach, but rather provided for the

international obligations to ensure that enforcement procedures should be made available to permit effective action against any act of IP infringement.

TRIPS Agreement

The international obligations for the effective enforcement of IP rights are covered in Part 3 of the TRIPS Agreement as follows:

- Section 1: General Obligations
- Section 2: Civil and Administrative Procedures and Remedies
- Section 3: Provisional Measures
- Section 4: Border Measures
- Section 5: Criminal Procedures

The Agreement says governments have to ensure that IP rights can be enforced under their laws, and that the penalties for infringement are tough enough to deter further violations. The procedures must be fair and equitable, and not unnecessarily complicated or costly. They should not entail unreasonable time-limits or unwarranted delays. People involved should be able to ask a court to review an administrative decision or to appeal a lower court's ruling.

The Agreement describes in some detail how enforcement should be handled, including rules for obtaining evidence, provisional measures, injunctions, damages and other penalties. It says courts should have the right, under certain conditions, to order the disposal or destruction of pirated or counterfeit goods. Willful trademark counterfeiting or copyright piracy on a commercial scale should be criminal offences. Governments should make sure that IP rights owners can receive the assistance of customs authorities to prevent imports of counterfeit and pirated goods.

IPR enforcement authorities

As the TRIPS Agreement indicates, a national level, a number of governments provide their legal framework and institutional arrangements to provide for an effective enforcement mechanism. Generally, enforcement of IPRs can take four basic forms as follows:

- ✓ Administrative enforcement such as seizure of IPR infringing goods (including counterfeiting and pirated goods) by a customs office at the border;
- ✓ Criminal enforcement, in which the government, generally through the police, is the moving party in a criminal action against infringer, if the act of IPR infringement is considered criminal offenses;

- ✓ Civil enforcement, in which the IPR owner or an assignee or licensee takes prescribed legal action such as in court by filing a civil action against an IPR infringer, seeking remedies (an injunction and compensation of damage),
- ✓ Technological enforcement, in which procedures of products and services employ technological measures to protect IPR against infringement (for example, encryption of digital copyright works).

Then the authorities involved are police, prosecutors, customs offices, and courts. As IPR infringement cases have become more technologically complex, in some countries have established specialized courts and judges dedicated to IPR cases (IP courts), and an officer-in-charge for counterfeiting and piracy matters at the customs office and the police.

IP Litigation

As concerns civil enforcement, an owner of IPR usually makes a cost-benefit analysis of the possible options to avoid the litigation, since the cost of IPR litigation has recently increased. Factors influencing the choice of options include an infringer identified (a licensee or others?), the nature and extent of the problem in terms of the location and amount, an estimated loss and the possibility of an escalation of the infringement, the strength and validity of the IPR infringed, and the likelihood of the settlement of the dispute by alternative dispute settlement (arbitration or mediation).

A first action is to send a letter (known as “cease and desist letter”) to the alleged infringer informing it of the possible existence of the IPR and a conflict between the alleged infringer’s business and the IPR.

The remedies typically available in civil enforcement are injunctions and damages. Most actions start with an application for preliminary or interlocutory relief in order to remove infringing goods or services from the market in a short time period. In most cases, the litigation does not go beyond this preliminary stage.

However, some cases are fought to the end. The recent trends in some countries indicate that the amount of remedies awarded by the court has shot up. One of famous cases is a court decision in the United States of America in 1990. The court awarded a total amount of \$873 to the patent owner Polaroid which sued Eastman Kodak.

Counterfeiting and Piracy

Intergovernmental and non-governmental organizations and industry bodies whose mandates involve dealing with some aspect of counterfeiting and piracy and its effects have estimated that the market in illegal, counterfeit products is between 5% and 7% of total world trade.

Countries in which counterfeiting and piracy take place with little or no focused government effort to prevent such activities, suffer losses on several levels, both tangible and intangible. For example, manufacturers of legitimate goods will establish their facilities in other countries which do enforce IP rights. This results in a loss of FDI, as well as the concomitant technology transfer and foreign know-how that may accompany it. Loss of FDI also manifests itself in a loss of foreign income, which ultimately affects a country's balance of payments.

The cycle continues in ways that hurt a country's long-term prospects. Local creators, inventors, and SMEs are discouraged by the certainty that their products will be illegally copied and sold, denying them a return on investment and restricting future growth, as well as dampening the very spirit and energy which are an integral part of the creativity process. That spirit, so important to a country's well-being, is notable when it thrives. Just look at the "Silicon Valleys" of California, in the U.S. and Bangalore in India.

The social consequences of counterfeiting and piracy are felt most personally by artists, creators, and entrepreneurs.

The counterfeiting of medicines, airplane and auto parts has a detrimental effect on the health and safety of the public. The World Health Organization (WHO) estimates that approximately 6% of pharmaceutical products sold worldwide are counterfeit. Developing countries account for the largest portion of such sales, with up to 70% of medicine sold in some African countries being fake.

WIPO is coordinating with other organizations in many areas and organized or participated in the following initiatives:

- ✓ Global Congress on combating counterfeiting and piracy; regional forums and congress on combating counterfeiting and piracy (www.ccapcongress.net);
- ✓ G8 Summit – 2005, 2006, 2007 Statements;
- ✓ The OECD global study on the economic impact of counterfeiting and piracy (www.oecd.org/dataoecd/11/38/38704571.pdf);
- ✓ The WHO-IMPACT project (counterfeit medicines)

Reference

WIPO web resources on IPR enforcement

<http://www.wipo.int/enforcement/en/>

WIPO Magazine special issue on IPR enforcement

http://www.wipo.int/export/sites/www/enforcement/en/pdf/global_congress.pdf

Chapter 16

IP Assets Management in Business

Introduction

IP has emerged as a strategic corporate asset and a critical value driver in the contemporary knowledge economy. Private firms in the United States of America are reported to be investing over one trillion dollars annually in IP and other intangible assets. Estimates of the portion of corporate value associated with intangibles vary but most professionals ascribe the figure to over 50%.

Globalization, deregulation and advances in information and communication technologies have dramatically transformed the economic landscape. Asian companies and organizations, leveraging the availability of a large pool of highly skilled scientific, technical and managerial manpower, have grown rapidly providing quality products and services worldwide.

To sustain growth, profit and market share, and to move up the value chain, companies need to emerge as technology leaders by aggressively deploying resources in research and development and product and process innovation.

The innovative ideas and products emerging from the R&D laboratories need to be effectively protected and converted into valuable IP assets. Evolving national, regional and international IP regimes impact business processes as well as provide new opportunities and challenges. Effective protection and management of IP rights (patents, trademarks, industrial designs, copyright) will be the key to survival and vitality. IP should become an integral part of the corporate strategy.

IP Management's Role within General Business Strategy

IP management has emerged as a major area of business competence. It has become as important as understanding innovation, technology, marketing, finance, corporate governance, industrial economics and strategy.

Sophisticated companies have recognized the value of IP and have developed systems, structures and capabilities to harvest rich financial rewards, establish superior market position and enhance company performance. Unlocking the hidden value in IP requires teamwork. Finance executives are playing an increasingly central role in the strategic management of IP assets.

According to a global survey conducted by *PriceWaterHouseCoopers*, a management consultancy, 82.6% of business executives surveyed think IP management is very important or important to the success of their company, and 68.9% of them think IP management is too often treated as a legal, not a strategic issue (“Exploiting intellectual property in a complex world,” the result of a survey in 2007 by PWC).

Tangible assets such as land, labor, and capital used to be the yardsticks of economic health, and the indicator of the value of the assets possessed by a company. In this century, this is no longer the case. The new drivers of wealth in contemporary society are intangible knowledge-based assets including IP rights. IP rights are now regarded not only as legal assets but also as economic assets and intangible assets of a company, since they have economic value and the potential of economic transaction. In the context of IP management, IP rights are often called IP assets.

IP assets are gaining ground as a measure of corporate viability and future performance. In 1982, some 62% of corporate assets in the United States of America were physical tangible assets, but by 2000, that figure had shrunk to a mere 30%, meaning that intangible assets account for 70%. Accenture, a management consultancy, calculates that intangible assets (essentially human capital and IP) have shot up from 20% of the value of companies in the S&P 500 in 1980 to around 70% today. Today, shareholders are increasingly sensitive to the value of IP assets and are using them as an indicator of company earning potential.

IP management strategy

Modern competitive management is mindful of the strategic use of IP (IP-minded management approach), and creates the environment for innovative thinking and knowledge-mining by its workers (e.g., sharing of skills among knowledge teams, strategic selection of innovations for IP protection, and valuation of IP assets).

The creation and exploitation of intellectual assets by empowering knowledge workers are fundamental strategies for companies. IP provides important motivation and incentives to workers through the recognition and rewarding of their intellectual contribution to the process of the internal assets generation and the seeking of legal protection thereafter.

A typical innovation cycle starts with investment in R&D to generate knowledge (e.g., new technologies and know-how). This generated knowledge could be codified as IP (e.g., patent, copyright, industrial design, trade secret, etc.). Such IP are also assets which could be converted into cash-flows. This appropriation of IP assets could be realized through different possibilities.

If a company has the manufacturing capability and marketing networks, it would commercially exploit IP in the subsequent steps in a chain creating its value (often called

the “value chain”). Such steps include the production of a product or the supply of services, marketing, distribution of the product, the making of profits to recover the initial investment and further investment. Each step will be supported by IP (e.g., IP protection, IP right enforcement to secure advantages in the market, branding in use of trademarks, trademark licensing for distributing products in the global market, etc.)

Other companies without manufacturing facilities may license IP assets to others. This is another approach for appropriating IP assets. For instance, some companies (so-called fab-less companies or idea companies) focus on basic research in search of a new chemical compound for a new drug, whereas another company is specialized in designing a custom-made integrated circuit. They neither develop a product nor manufacture it. They generate IP assets and appropriate through licensing out their IP.

Internal IP Management

Companies have to develop a corporate IP strategy. Any IP strategy should support the business in achieving its objectives. The competitive environment, the company’s technology position, its size and the maturity of the business determine the IP strategy.

IP strategy should be agreed with R&D center and the business sector within the company. Once the IP strategy and policy of a company have been set, the scope of the work that needs to be done is known. For this work resources need to be made available. These resources include trained IP attorneys, business people to determine how to capture value from IP, business intelligence specialists to know the competition and the markets and financial and legal specialists. A certain core of specialists needs to be available in house, but other specialists can be hired from specialized companies, like law firms or firms of patent attorneys.

IP strategy needs to be implemented by all in the company for which a basic training program for building IP awareness and harnessing “IP culture” is necessary. In creating an active IP culture it is important that the top of the company realizes IP is important. Only if managers express that IP is important will employees act and work on IP issues. If members of the executive board cannot immediately reply to a question as to what sort of IP assets the company owns, the company is not qualified enough to leverage its IP assets through a strategic IP management.

IP management also needs a well-structured organization to create a synergy and cooperation between IP Department, R&D center and business sector within the company. The position of the IP Department within the company often reflects the importance the company attributes to IP. Focus on legal issues means the IP organization reports to the head of the legal function. Focus on protection of own inventions means the head of research is also heading the IP organization. Focus on IP as a strategic issue means reporting to the CEO or CFO of the company with a strong focus on financial and long term strategic issues.

Information management and IP management need to be well integrated, since knowledge generated or disseminated within the company takes a form of information (often confidential proprietary information) which may be codified as IP after all. Patent information of competitors and in the fields relevant to the company's business are valuable technological information to support R&D center and business sector. The state-of-the-art search (the status of the most up-to-date technological advancement) needs to be shared with researchers to assist them in taking the right decisions on their research activities, the acquisition of IP rights, and prevent possible conflicts with competitors. Patent information also includes information about competitor's activities and the legal status of their IPRs which are important to consider business competition or partnerships.

IP Financing and Valuation

Recent developments in financial regulations and accounting standards, combined with the increasing curiosity of shareholders, investors, analysts and tax authorities, is encouraging companies to provide a more transparent and reliable disclosure of a company's intangible assets either on the balance sheet, in the Management Discussion and Analysis section of the financial reports, or in a voluntary intangibles report. Recently, IP assets have been sold, licensed, used as collateral or security for debt finance.

To meet the requirements on disclosure of assets, effective methods of assessing the value of intangible assets, including IP, are needed. Experts have not found a robust method that could fully satisfy companies in different sectors of industry and this may also be another reason which prevents many companies from systematically assessing the value of IP assets.

Reference

WIPO web resources on executive program and on IP management

<http://www.wipo.int/academy/en/execed/index.html>

"Exploiting intellectual property in a complex world" a global survey conducted in 2007 by PriceWaterHouseCoopers

[http://www.pwc.com/extweb/pwcpublications.nsf/docid/F5DBAFA7B3F4501D852570830007AD84/\\$FILE/tecv4ip.pdf](http://www.pwc.com/extweb/pwcpublications.nsf/docid/F5DBAFA7B3F4501D852570830007AD84/$FILE/tecv4ip.pdf)

Chapter 17

Internet Domain Names and Alternative Dispute Resolutions

Introduction

As well as facilitating innovation and allowing its more efficient management and exploitation, the Internet has also raised some challenges for the IP community. One such internet-generated battle in the IP area is being fought over the eviction of cybersquatters who have taken over trademarks to which they have staked a claim in bad faith. Cybersquatters register domain names (roughly speaking website addresses but see below for more detailed definition), which they have no intention of using and that are identical or similar to registered trademarks or famous names, and then try to sell them back to the holders of the mark or famous name at a profit. Cybersquatters, and some of the cases brought against them under the WIPO domain-name dispute resolution procedure, have received wide-spread coverage in the press, highlighting the importance of trademarks and their new manifestation as website identifiers, in the world of commerce.

Domain names are the human-friendly forms of Internet addresses, and are commonly used to find web sites. For example, the domain name wipo.int is used to locate the WIPO web site at <http://www.wipo.int>. There are several levels of domain names. A gTLD is a generic top level domain. It is the top-level domain of an Internet address, for example: .com, .net and .org. In addition, seven new gTLDs were also selected by ICANN (the Internet Corporation for Assigned Names and Numbers) on November 16, 2000. These are: .aero (for the entire aviation community); .biz (for business purposes); .coop (for cooperatives); .info (unrestricted); .museum (for museums); .name (for personal names); .pro (for professionals).

While designed to serve the function of enabling users to locate computers (and people) in an easy manner, domain names have acquired a further significance as business identifiers and, as such, have come into conflict with the system of business identifiers that existed before the arrival of the Internet and that are protected by IP rights.

Domain name disputes arise largely from the practice of cybersquatting as discussed above. Cybersquatters exploit the first-come, first-served nature of the domain name registration system to register names of trademarks, famous people or businesses with

which they have no connection. Since registration of domain names is relatively simple, cybersquatters can register numerous examples of such names as domain names. As the holders of these registrations, cybersquatters often then put the domain names up for auction, or offer them for sale directly to the company or person involved, at prices far beyond the cost of registration. Alternatively, they can keep the registration and use the name of the person or business associated with that domain name to attract business for their own sites.

Why so many disputes? There is no agreement within the Internet community that would allow organizations that register domain names to pre-screen the filing of potentially problematic names. The reasons vary, ranging from allowing easy registrations to stimulate business, to the practical difficulties involved in determining who holds the rights to a name, to the principle of freedom of expression. Furthermore, the increasing business value of domain names on the Internet has led to more cybersquatting, which results in more disputes and litigation between the cybersquatters and the businesses or individuals whose names have been registered in bad faith.

WIPO Internet Domain Names Disputes Resolution services

The Internet grew rapidly over the last decade as a place to do business, although no international legal standards existed to resolve domain name disputes. The Internet Corporation for Assigned Names and Numbers (ICANN), the organization responsible for, among other things, management of the generic top level domains such as .com, .net and .org, was in urgent need of a solution to the dispute resolution problem. The process of negotiating a new international treaty was considered too slow, and new national laws would most likely be too diverse.

What was needed were internationally uniform and mandatory procedures to deal with what are frequently cross-border disputes. With the support of its member States, WIPO - which is mandated to promote the protection of IP worldwide - conducted extensive consultations with members of the Internet community around the world, after which it prepared and published a report containing recommendations dealing with domain name issues.

Based on the report's recommendations, ICANN adopted the Uniform Domain Name Dispute Resolution Policy (UDRP). The UDRP went into effect on December 1, 1999, for all ICANN-accredited registrars of Internet domain names. Under the UDRP, WIPO is the leading ICANN-accredited domain name dispute resolution service provider. As of the end of 2001, some 60 percent of all the cases filed under the UDRP were filed with WIPO. Additionally, a growing number of registrars of country code top-level domains have designated WIPO as a dispute resolution service provider.

The UDRP is the Uniform Domain Name Dispute Resolution Policy, adopted by the Internet Corporation for Assigned Names and Numbers (ICANN) on August 26, 1999. The UDRP is based on recommendations made by WIPO in the Report on the First

WIPO Internet Domain Name Process, focusing on the problems caused by the conflict between trademarks and domain names. A number of further issues identified in that Report that were considered to be outside the scope of the First WIPO Process have been addressed in the subsequent Report of the Second WIPO Internet Domain Name Process.

WIPO's resolution service offers highly qualified neutral panelists, thorough and expeditious administrative procedures, and overall impartiality and credibility. Dispute resolution at WIPO is much faster than normal litigation in the courts. A domain name case filed with WIPO is normally concluded within two months, using on-line procedures, whereas litigation can take much longer. Fees are also much lower than normal litigation. There are no in-person hearings, except in extraordinary cases. Minimal filing requirements also help reduce costs. For resolution of a case involving one to five domain names, with a single panelist, the current cost is US\$ 1,500; for three panelists, the total cost is US\$ 4,000. For six to ten domain names, the current cost is US\$ 2,000 for a case involving a sole panelist and US\$ 5,000 for a case involving three panelists.

What are the results of the procedures, and are they binding? A domain name is either transferred or the complaint is denied and the respondent keeps the domain name. It is also possible to seek cancellation of the domain name. There are no monetary damages applied in UDRP domain name disputes, and no injunctive relief is available. The accredited domain name registrars - which have agreed to abide by the UDRP - implement a decision after a period of ten days, unless the decision is appealed in court in that time. The panel decisions are mandatory in the sense that accredited registrars are bound to take the necessary steps to enforce a decision, such as transferring the name concerned. However, under the UDRP, either party retains the option to take the dispute to a court of competent jurisdiction for independent resolution. In practice, this is a relatively rare occurrence.

Alternative Dispute Resolution (ADR)

The potential of mediation and arbitration for preventing and resolving IP disputes has not been fully realized as most IP owners and IP lawyers still rely on traditional means of court litigation. But perceptions have started to change due to a number of related developments that have taken place over the last ten years.

First, the economic importance of IP has grown to the extent that, for many companies, IP rights are their basic assets, and disputes involving these rights can interfere with, or even paralyze, their activities. At the same time, as IP assets are marketed and exploited across borders, disputes involving these assets are likely to concern multiple jurisdictions. In addition, IP owners are increasingly engaged in complex contractual relationships which involve parties in different forms of cooperation in research and development, production or marketing.

The trend towards ADR has been reinforced by the success of domain name dispute resolution procedures such as UDRP. Moreover, a growing number of procedural laws encourage, or even require, the use of ADR.

The advantages of ADR are increasingly recognized. They include the following:

- ✓ A single procedure. Court litigation in international IP disputes can involve a multitude of procedures in different jurisdictions with a risk of inconsistent results. Through ADR, the parties can agree to resolve in a single procedure a dispute involving a right that is protected in a number of different countries, thereby avoiding the expense and complexity of multi-jurisdictional litigation.
- ✓ Party autonomy. Because of its private nature, ADR offers parties greater control over the way their dispute is resolved. Unlike in court litigation, the parties may choose the procedural rules, the applicable law, the place and the language of the proceedings.
- ✓ Neutrality. ADR can be neutral to the law, language and institutional culture of the parties. It can thus eliminate any home court advantage that one of the parties might otherwise enjoy in the context of court litigation, where familiarity with the applicable law and local processes can offer significant strategic advantages.
- ✓ Expertise. The parties can select arbitrators or mediators who have special expertise in the legal, technical or business area relevant for resolving their dispute.
- ✓ Confidentiality. ADR proceedings are private. Accordingly, the parties can agree to keep the proceedings and results confidential. This is particularly important where – as is often the case in IP disputes – confidential information or trade secrets are at stake. It also enables the parties to focus on the merits of the dispute, without being concerned about its public impact to their reputation.
- ✓ Finality and enforceability of arbitral awards. Unlike court decisions, which can generally be contested through one or more rounds of litigation, arbitral awards are not normally subject to appeal. Their enforcement across borders is greatly facilitated by the United Nations Convention for the Recognition and Enforcement of Foreign Arbitral Awards of 1958, known as the New York Convention, which requires all 137 Member States to recognize arbitral awards without review on the merits.

ADR does also have its limitations, and certain objectives can only be attained through court litigation. In particular, it is not possible to obtain through ADR a decision that would set a public legal precedent. The results of an ADR procedure, an arbitral award

or a settlement agreement, are in principle binding only on the parties involved. So for example, if a party wished to obtain a generally binding decision that the claims of a particular patent were valid/invalid, the only means of obtaining such a “public” decision would be a court judgment.

In addition, the consensual nature of ADR makes it less appropriate if one of the two parties is uncooperative. Since both parties must agree to use ADR, no party can force another to participate.

WIPO’s Arbitration and Mediation Center

In order to promote the use of ADR in IP disputes, WIPO offers the following procedures through its Arbitration and Mediation Center:

Mediation. A non-binding procedure in which a neutral intermediary, the mediator, assists the parties in reaching a settlement of the dispute.

Arbitration is a procedure in which a dispute is submitted, by agreement of the parties, to one or more arbitrators who make a binding decision on the dispute. In choosing arbitration, the parties opt for a private dispute resolution procedure instead of going to court.

In a mediation procedure, a neutral intermediary, the mediator, helps the parties to reach a mutually satisfactory settlement of their dispute. A party to a mediation cannot be forced to accept an outcome that it does not like. Unlike an arbitrator or a judge, the mediator is not a decision-maker. The mediator’s role is, rather, to assist the parties in reaching a settlement of the dispute.

These procedures are administered under rules which were developed with the active involvement of many leading ADR and IP practitioners and scholars. To facilitate the submission of disputes to one of these procedures, the Center has developed model clauses, which contain the elements on which parties should reach agreement before a procedure is initiated. These clauses can be found on the Center’s website.

Against the background of the increasingly international commercialization of IP assets, the Center has, over the last three years, observed an increase in the number of WIPO arbitrations and mediations. By March 2006, 47 arbitrations and 44 mediations had been filed covering disputes arising from patent or software licenses, joint ventures, R&D or trademark co-existence agreements, distribution agreements for pharmaceutical products, as well as domain name and patent infringement disputes.

Mediators and Arbitrators

Whatever the merits of the rules, the success of an ADR procedure depends in large part on the quality of the neutral, i.e. the mediator or arbitrator. In the case of IP disputes, a high level of dispute resolution skill and experience must be accompanied by specialized knowledge of the subject matter of the dispute. WIPO therefore places great emphasis on identifying suitable candidates to fill these roles. In referring a dispute to WIPO, parties can draw on a growing database containing the professional profiles of over 1,000 arbitrators and mediators from around 70 countries. These range from seasoned dispute-resolution generalists to highly specialized experts, covering the entire legal and technical spectrum of IP.

Based in Geneva, Switzerland, the WIPO Arbitration and Mediation Center was established in 1994 to offer ADR of international commercial disputes between private parties. Developed by leading experts in cross-border dispute settlement, the procedures offered by the Center are widely recognized as particularly appropriate for technology, entertainment and other disputes involving IP.

Reference

WIPO web site resources

<http://www.wipo.int/amc/en/>

Chapter 18

The Use of Patent Information

Introduction

A patent gives an inventor an exclusive right on a special knowledge and by doing so limits the possibilities of access to this special technology for other enterprises. In return for this, it requires that the inventor should disclose the information about the newly developed technology for public access. This second function of the patent system, often underestimated, is very important for the continuous development of the technology and for the enhancement of technological capability of the local industry.

The Internet opened a new window of opportunities to look at strategic and wise use of patent information in this century. Many countries accumulate and categorize patent information in patent databases that are searchable and published and updated on the Internet. Anyone with an Internet connection can browse through files of patent information organized by classification and generally searchable by key words and other fields. Collective and regional databases are also a rich source of on-line information, including those published on the Internet by the WIPO Intellectual Property Digital Libraries (IPDL) and PatentScope, the European Patent Office, Latin America, and the Trilateral Offices. WIPO's website maintains a list of all of these databases with direct links to their Internet sites.

Patent Information as valuable technological information

There are no exact statistics on the number of patent documents published so far from the beginning of the times when patents were first published. They can, however, be estimated at over 60 million. Normally, only the recent ones are of practical importance for those searching technological information; the older ones are frequently only of historical interest. Most information contained in patents are not made available in other technological journals.

Insufficient use of patent information causes considerable waste in R&D investment. For example, the EPO estimates that European industry is losing US\$ 20 billions every year due to a lack of patent information, which results in duplication of efforts such as re-inventing existing inventions, re-solving problems that have already been solved, and re-developing products that already are on the market. In some cases, it is possible to use patent information to develop new products or processes, and this is an important and

legitimate use of the patent system, as long as the new product does not infringe the claims of the patent.

Use of patent information for strategic business advantage may be even more effective than use for technical content. Patent information is used to observe market trends and develop data on competitors. Savvy businesses are able to assess the technical and product focus of their competitors by observing their filed applications and issued patents. Market information on technology trends and what R&D investment decisions companies are making can be gleaned. Names of individual inventors are often important information to competitors who wish to attract and hire talent.

The practice has shown that information contained in patent documents can be very useful to:

- avoid duplication of R&D work;
- identify specific new ideas and technical solutions, products or processes;
- identify the state-of-the-art in a specific technological field in order to be aware of the latest development;
- assess and evaluate specific technology and to identify possible licensors;
- identify alternative technology and its sources;
- locate of sources of know-how in a specific field of technology or in a given country;
- improvement of an existing product or process;
- development of new technical solutions, products or processes,
- identify existing or prospective industrial property rights (validity, ownership, ...), particularly to avoid infringement actions;
- assess novelty and patentability of own developments with a view of applying for a domestic or foreign industrial property right;
- monitor activities of competitors both within the country and abroad; and
- identify a market niche or to discover new trends in technology or product development at an early stage

The Structure of a Patent Document

The front page of a published patent document generally displays bibliographic information such as the title of the invention, the date of filing, the priority date, the relevant technical field, the name and address of applicant(s) and inventor(s). It also contains an abstract and a representative drawing. Bibliographic information is an essential means of identifying, locating and retrieving patent documents.

The patent specification is the most important part of a patent document, as it enables a person to understand the claimed invention and the technical information contained in it. The specification should disclose the invention clearly and precisely. Preferably, it should be illustrated by examples to explain how to work or carry out the invention in practice so as to enable anyone skilled in the relevant art to do so likewise, without undue

experimentation. In most countries, a specification of the invention includes the background of the invention, summary of invention, brief description of drawings (if necessary) and a detailed description of the invention.

Patent Information on the Internet

As of now, many national patent offices have launched free-of-charge patent information databases, which are open to the public. For example, the Full-Text and Full-Page Image Database of the United States Patent and Trademark Office (USPTO) is one of the earliest and free online patent information services. Another major on-line free patent database is esp@cenet®, which has some 60 million patent documents. The free services work well for simple searches, based on key words, such as a known patent number, name of the inventor(s) or applicant(s), a key word in the title, etc., but are not a suitable tool for executing more complex investigations and legally motivated searches. In 2007 Google included US patents in its Google patent with an impressive search engine and user-friendly navigation facilities.

Reference

WIPO web resources and portal of PatentScope

<http://www.wipo.int/patentscope/en/>

Google Patents

<http://www.google.com/patents?hl=en>

Chapter 19

Trade Secret

Introduction

A legal definition of a trade secret rarely exists. It is generally understood that trade secrets refers to any confidential information on technology or business. Examples of trade secrets are any information on a new manufacturing method, know-how, chemical formulae, blue prints or prototypes, sales methods, distribution methods, data obtained from experimental uses of a new product, results of clinical trials of a new drug, optimal conditions for the operation or manufacturing processes, business schedules, details of price agreements, lists of clients, advertising strategies and new directions in the R&D. While a final determination of what information constitutes a trade secret will depend on the circumstances of each individual case, clearly unfair practices in respect of secret information include industrial or commercial espionage, breach of contract and breach of confidence.

Protection

Depending on the legal system, the protection of trade secrets forms part of the general concept of protection against unfair competition or is based on specific provisions or case law on the protection of confidential information.

Trade secrets are protected without any procedural formalities. There are, however, some conditions for the information to be considered a trade secret.

Advantages and Disadvantages

Because of these conditions, the cost of keeping certain information as trade secrets may be more expensive in the long run than the protection by other means such as patents or industrial designs. To protect new technological information as a patent or as trade secrets is often a key business decision, involving a number of factors.

Some advantages of trade secrets include:

- ✓ Trade secret protection has the advantage of not being limited in time (patents last in general for up to 20 years). It may therefore continue indefinitely as long as the secret is not revealed to the public.

- ✓ Trade secrets involve no registration costs (though there may be high costs related to keeping the information confidential).
- ✓ Trade secrets have immediate effect.
- ✓ Trade secret protection does not require compliance with formalities such as disclosure of the information to a Government authority.

There are, however, some concrete disadvantages of protecting confidential business information as a trade secret, especially when the information meets the criteria for patentability:

- ✓ If the secret is embodied in an innovative product, others may be able to inspect it, dissect it and analyze it (i.e. “reverse engineer” it) and discover the secret and be thereafter entitled to use it.
- ✓ Trade secret protection of an invention in fact does not provide the exclusive right to exclude third parties from making commercial use of it. Only patents and utility models can provide this type of protection.
- ✓ Once the secret is made public, anyone may have access to it and use it at will.
- ✓ A trade secret is more difficult to enforce than a patent.
- ✓ The level of protection granted to trade secrets varies significantly from country to country, but is generally considered weak, particularly when compared with the protection granted by a patent.

Protection of Undisclosed Information under the TRIPS Agreement and the Paris Convention

The TRIPS Agreement requires undisclosed information to benefit from protection. According to Article 39.2, the protection must apply to information that is secret, that has commercial value because it is secret and that has been subject to reasonable steps to keep it secret.

The Agreement does not require undisclosed information to be treated as a form of property, but it does require that a person lawfully in control of such information must have the possibility of preventing it from being disclosed to, acquired by, or used by others without his or her consent in a manner contrary to honest commercial practices.

“Manner contrary to honest commercial practices” includes breach of contract, breach of confidence and inducement to breach, as well as the acquisition of undisclosed information by third parties who knew, or were grossly negligent in failing to know, that such practices were involved in the acquisition.

The Agreement also contains provisions on undisclosed test data and other data whose submission is required by governments as a condition of approving the marketing of pharmaceutical or agricultural chemical products which use new chemical entities.

In such a situation the Member government concerned must protect the data against unfair commercial use. In addition, Members must protect such data against disclosure, except where necessary to protect the public, or unless steps are taken to ensure that the data are protected against unfair commercial use.

Although the Paris Convention does not mention trade secrets as such, it is to be noted that Article 10bis on unfair competition requires protection against any act of competition contrary to honest practices in industrial and commercial matters.

Reference

WIPO resources on SME and Trade Secrets

http://www.wipo.int/sme/en/ip_business/trade_secrets/trade_secrets.htm

Chapter 20

IP Education and Research

Introduction

IP is an increasingly important generator of economic, social and cultural growth and development. What IP education aims to give law students in the past - a clear understanding of the IP system - has also become a necessity for all those associated with creative and innovative endeavor – from students in engineering and science faculties, economics, political science and MBA to policy-makers, business executives, educators and archivists, artists and inventors themselves.

Enhancing IP education in order to meet the growing need for informed and effective personnel trained in the field will continue to be one of the main challenges of the IP community and WIPO.

Recent Trends and Needs

In view of the expansion of the horizon of IP, IP education and research of IP policy issues also became interdisciplinary and international. It is difficult to estimate the number of universities in the world where IP is taught, due to the absence of reliable data, but a preliminary estimate by WIPO indicates there are some 700 of them, with most of their IP courses being centered in the law faculty. IP courses are elective and often fairly brief. The majority of universities with IP courses on their curricula offer only general IP programs primarily focusing on the nature and extent of the rights which may be protected under IP law, and the impact and role of IP in the context of the knowledge-based, globalized economy.

However, some countries offer more specialized and comprehensive IP courses. For example, in the United States of America, there are some 20 IP specialized LL.M. programs. In Japan, a few technical universities have started to offer a year-long IP course in conjunction with other technology-related disciplines such as the management of technology (MOT). In France, several universities have compulsory IP courses in the science faculty. Recent trends suggest that more universities will include IP courses in their curricula, while existing IP courses will continue to expand, particularly in countries where IP activities have grown. For example, in China, the Ministry of Education has officially encouraged universities to set up Masters and Ph. D. programs in IP law or IP management. As a result, at least 16 universities now offer IP courses, including 5 universities where IP courses are taught at their law school dedicated to teaching IP.

The recent trends show that an increasing number of countries have started to strengthen programs of the IP education in quality and quantity, in scope and in depth, and more universities have joined in the international cooperation or partnerships to reflect the global nature of the teaching subjects.

However, resources and experience in teaching IP are still poor in many countries. Our challenges require stronger cooperation between educational institutions and IP Academies. WIPO Academy set up a global network of IP Academies in 2007 to enhance the international cooperation in this field.

Sources of Useful Information for IP Research

Obviously the Internet contains vast amount of information on IP.

WIPO and WIPO Worldwide Academy aims to provide a portal of IP and of IP education and research, respectively.

www.wipo.int
<http://www.wipo.int/academy/en>

WIPO also provides a comprehensive database of national and regional laws of IP. The database of IP law collection is called “CLEA”. According to the cooperation agreement between WTO and WIPO, new laws and regulations as well as their revisions and updates that have been submitted by countries are included in the CLEA.

<http://www.wipo.int/clea/en/>

WIPO Library is the unique and authoritative center of IP documents including proceedings of all the diplomatic conferences of IP treaties.

<http://www.wipo.int/library/en/>

In addition to WIPO publications, WIPO Magazine includes a number of articles dealing with current topics on IP.

http://www.wipo.int/wipo_magazine/en/

Web sites dedicated to IP issues as well as IP blogs are often useful to keep abreast of what are being discussed in the area of IP. One of IP blogs is IPkat (<http://ipkitten.blogspot.com/>) which the latest issue of WIPO Magazine introduced.

http://www.wipo.int/wipo_magazine/en/2008/02/article_0006.html

[Annex I follows]

Annex I

Annotated Program of WIPO Summer School on Intellectual Property¹

Topic 1 WIPO and its Role in the Promotion of Intellectual Property

- History and Mission of WIPO
- Main Activities
- IP for Development

Topic 2 Orientation (and Projection of the Academy video clip)

Topic 3 Presentation of the Partner Institution

Topic 4 Introduction to IP

- Concept of Intellectual Property (IP)
- Main Branches of IP:
 - Industrial Property
 - Copyright and Related Rights
- Introduction to Main IP Categories:
 - Patents
 - Trademarks
 - Industrial Designs
 - Geographical Indications
 - Trade Secrets (undisclosed information)
 - Copyright and Related Rights

¹ This textbook is a compilation of reading material taken from WIPO publications, website resources and presentation slides used for the past summer schools. In preparing the textbook this annotated program has been used as a basis. For ease of reading and in view of recent updates, certain modifications have been made to the textbook which do not necessarily or strictly follow the annotated program. A total of 34 topics have been included in 18 Chapters as shown in the Table of Contents.

Topic 5 Patents

- History, Concept and Nature of a Patent
- Role of Patents for Economic Development
- Conditions of Patentability
- Patentable Subject Matter and Exclusions
- Rights Conferred
- Exceptions and Limitations to Right Conferred
- Compulsory Licenses
- Duration
- Utility Models
- Enforcement of Rights

Topic 6 International and Regional Patent Systems

Objectives and the main provisions of:

- Paris Convention for the Protection of Industrial Property (1883)
- Patent Cooperation Treaty (PCT-1970)
- Budapest Treaty (1977)
- Strasbourg Agreement Concerning the International Patent Classification (IPC) (1971)
- Patent Law Treaty (PLT) (2000)
- WTO TRIPS Agreement (1994)
- Regional Systems (EPO, EAPO, ARIPO, OAPI, Benelux Office for IP, OHIM, GCC)

Main Developments at WIPO:

Reform of the Patent Cooperation Treaty

- Negotiation of the Substantive Patent Law Treaty (SPLT)
- WIPO Development Agenda (Work of the Committee on Development and IP)

Topic 7 Patent Cooperation Treaty (PCT)

- History and Objectives of the PCT
- The Functioning of the PCT System:
 - Filing of International Application
 - International Search, International Publication
 - International Preliminary Examination
 - National Phase
- Advantages of the PCT System
- Various PCT Statistics
- Recent PCT Developments

Topic 8 Selected Cases on Patents

- 2-4 cases on the choice of the lecturer

Topic 9 Trademarks

- Definitions
- Signs which may Serve as Trademarks
- Criteria of Protectability and Grounds for Refusal
- Protection of Trademark Rights: on the basis of use / registration
- The Sources of Trademark law: national law, regional law, international treaties (Paris Convention, TRIPS Agreement)
- Collective Marks and Certification Marks
- Protection of Well-known Marks (Paris Convention and the TRIPS Agreement)
- Current Challenges:
 - New Types of Marks (work of the WIPO-SCT)
 - Use of Marks or Other Signs on the Internet (WIPO Joint Recommendation)

Topic 10 Geographical Indications

- Introduction- Why Protect Geographical Indications?
- Definitions (indication of source, appellation of origin, geographical indication)
- Protection of Geographical Indications at the National Level
- Protection of Geographical Indications at the International Level:
 - Paris Convention for the Protection of Industrial Property
 - Madrid Agreement for the Repression of False and Deceptive Indication of Source on Goods
 - Lisbon Agreement for the Protection of Appellation of origin and their International Registration
 - The TRIPS Agreement and Geographical Indications
- Current Challenges

Topic 11 Industrial Designs

- Definition of the Subject Matter of Protection
- Scope of Protection
- Conditions for Protection (formal and substantive)
- Rights Conferred
- Duration of protection
- Interface between Industrial Design Protection and Copyright Protection

Topic 12 Madrid and the Hague Systems

Madrid System:

- Objective of the Madrid System
- Functioning of the Madrid System
- Differences between the Agreement and the Protocol
- Advantages of the Madrid System
- Effects of the Madrid System
- Statistics

The Hague System:

- Objective of the Hague System
- Principle of the International Deposit
- Main Provisions of the Hague Agreement
- Benefits of Accession to the Hague Agreement
- The Geneva Act of the Hague Agreement
- Effects of the Hague Agreement
- Statistics

Topic 13 Copyright and Related Rights

- Introduction
- Subject Matter of Copyright Protection
- Rights Comprised in Copyright:
 - Moral Rights of the Author
 - Economic Rights
- Limitations and Exceptions (to be developed separately)
- Duration of Protection
- The Concept and Types of Related Rights:
 - Rights of Performers
 - Rights of Producers of phonograms
 - Rights of Broadcasting organizations
- Ownership of Copyright

Topic 14 International Protection of Copyright and Related Rights

- Introduction
- Substantive Provisions of:
 - Berne Convention for the Protection of Literary and Artistic Works
 - International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations (the Rome Convention)
 - Other Special Conventions in the Field of Copyright (the Phonograms and the Satellites Conventions)

- WIPO Copyright Treaty (WCT)
- WIPO Performance and Phonogram Treaty (WPPT)
- The TRIPS Agreement

Topic 15 Exceptions and Limitations of Copyright

- Introduction: Why Limit Copyright Protection?
- Relevant Provisions of the Berne Convention, the TRIPS Agreement, the WCT and the WPPT
- 3 Step-Test:
 - certain special cases
 - do not conflict with normal exploitation
 - do not prejudice the legitimate interests of right holders
- Existing Exceptions and Limitations under the National laws
 - excluding certain categories of works
 - permitting free uses for particular purposes
 - establishing non-voluntary licenses
- Limitations and Exceptions in the Digital Environment
 - Is analog different from digital?
 - solutions offered

Topic 16 Selected Cases on Trademarks and Geographical Indications

- 2-4 cases on the choice of the lecturer

Topic 17 The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement)

- Introduction: the WTO System
- General Provisions and Basic Principles (Part I)
- Standards Concerning the Availability, Scope and Use of IPRs (Part II)
 - Copyright and Related Rights
 - Trademarks
 - Geographical Indications
 - Industrial Designs
 - Patents
 - Layout-Designs of Integrated Circuits
 - Protection of Undisclosed Information
 - Control of Anti-Competitive Practices in Contractual Licenses
- Enforcement of IPRs (Part III)
- Dispute Prevention and Settlement (Part V)
- Transitional Arrangements (Part VI)
- Debated Issues under the Framework of the TRIPS Agreement

Topic 18 IP and Public Health: Issues and Challenges

I. WTO Perspectives

- Introduction: IPRs and Public Health- How to Strike a Balance?
- Legal Remedies within the WTO/TRIPS Context:
 - The Doha Declaration on the TRIPS Agreement and Public Health, November 14, 2001
 - The Decision of the General Council of WTO of August 30, 2003
 - The Decision of December 6, 2005: Protocol Amending the TRIPS Agreement

II. WHO Perspectives

- WHO's Work on IP and Public Health
 - The Report of the Commission on IPRs, Innovation and Public Health
 - Global Strategy and Plan of Action on Public Health, Innovation, and IP
 - WHO Perspectives on Access to Drugs:
 - Addressing the legal and political framework
 - Addressing the gaps: funding, tools, implementation
 - Training and enhancing capacity in developing countries

Topic 19 Collective Management of Copyright and Related Rights

- Introduction: Why Collective Management?
- How Collective Management Works?
- Types of Collective Management Organization
- Main Fields:
 - Music: composer-performers-producers
 - Broadcasting
 - Visual Arts: painting, manuscripts, sculpture
 - Dramatic Works
 - Reprography: photocopying
 - Home Taping (music)
- Current and Emerging Issues

Topic 20 Selected Cases on Copyright and Related Rights

- 2-4 cases on the choice of the lecturer

Topic 21 Unfair Competition and IP

- Introduction: What is Unfair Competition?
- Need for Protection
- Legal Basis for Protection:
 - National protection (variations in different countries' approach to unfair competition)
 - International protection (relevant provisions of the Paris Convention and the TRIPS Agreement)
- Acts of Unfair Competition:
 - Causing confusion
 - Misleading
 - Discrediting competitors
 - Disclosure of secret information
 - Taking advantage of another's achievements (free riding)
 - Comparative advertising

Topic 22 Transfer of Technology and Licensing: Issues

- Introduction
- Commercial Transfer and Acquisition of Technology
- Main Methods of Transfer of Technology and Licensing
- Negotiation of Licensing Agreements
- Technology Licensing: Key Terms grouped into 4 Clusters
 - Subject Matter: What is licensed?
 - Scope: What can you do with it?
 - Financial: What value is it?
 - Upgrades and maintenance: What will happen with it in the future?

Topic 23 Simulation Exercises on Transfer of Technology and Licensing

- 2-4 cases on the choice of the lecturer

Topic 24 Protection of New Plant Varieties

- Origin/Evolution of Plant Variety Protection Worldwide
- Rational behind Providing Protection to New Plant Varieties
- International Instruments:
 - TRIPS Agreement (art. 27.3(b))
 - Criteria of “effectiveness” of a sui generis system
 - UPOV, key provisions of the UPOV Convention:
 - breeders and varieties
 - conditions of protection
 - scope of the right
 - exceptions
 - duration

Topic 25 The Convention on Biological Diversity (CBD) and the FAO International Treaty on Plant Genetic Resources for Foods and Agriculture

- Introduction to the Issue of Relationship between IPRs and Biodiversity
- CBD, its Objectives (art.1) and Main Provisions
- Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization
- FAO International Treaty, its Objectives (art.1) and Main Provisions
- Current State of Discussions in the WTO - Revision of art. 27.3(b) of the TRIPS Agreement

Topic 26 Traditional Knowledge and Genetic Resources: Towards a Suitable Protection System

- Introduction: Why Protect TK?
- Concept of TK
- TK Issues Debated under the WIPO Intergovernmental Committee on IP and Genetic Resources, Traditional Knowledge and Folklore (IGC)
- Key Provisions of the Revised Draft Policy Objectives & Principles for Protection of TK
- Work of the IGC on Genetic Resources

Topic 27 Traditional Cultural Expressions (TCE) or Expressions of Folklore (EoF): Policy Issues

- Introduction: Why Protect TCE or EoF?
- International Cooperation on Folklore since 1970s:
 - Berne Convention, art 15.4;
 - UNESCO-WIPO Model Provisions for National Laws on the Protection of Expressions of Folklore, 1982;
 - WIPO Performances & Phonograms Treaty, 1996
- TCE or EoF Issues Debated under the IGC
- Key Provisions of the Revised Draft Policy Objectives & Core Principles for Protection of TCEs or EoF
- WIPO's Creative Heritage Project

Topic 28 IP and Promotion of Innovation: The Use of Patent Information

- Importance of Patent Information
- Features of Patent Documents
- Various Types of Searches
- Usefulness of Patent Documents
- Main User Groups of Patent Information
- Patent information and Universities and R&D Institutions
- Patent Information and Developing Countries

Topic 29 IP Management²

- IP Management's Role within General Business Strategy
 - General Principles of Business Strategy
 - Appropriation of Intangible and Intellectual Assets:
 - The strategic role of IPRs
 - Other 'strategic' non IPR related means of appropriation
 - The interaction of IPRs and complementary assets

² As proposed by Mr. Robert Pitkethly, Lecturer, Oxford University.

- Internal IP Management
 - Managing and Incentivising IP Creators
 - Promoting IP Awareness within Organizations
 - Organizational Aspects of IP Management:
 - Organizational structure and IP management
 - Resourcing IP management (e.g. IP dept staff & outsourcing policy)
 - Intra-organizational communication and IP management
 - Information Management and IPRs:
 - Patent information management
 - Management of other IP related information
 - IP Valuation

- External IP Management
 - Means of Exploiting IP - In-house, Licensing, Sale
 - Licensing Management Considerations
 - Litigation Management Considerations

Topic 30 IP and Small and Medium Sized Enterprises (SMEs)

- How IP can strengthen the Competitiveness of SMEs?
 - Why is IP Relevant to SMES?
 - How can IP Enhance the Market Value of SMEs?
 - What Types of IP may be used by SMEs to enhance their Competitiveness?
 - Why is IP Crucial for Marketing the Products or Services of SMEs?
- Can SMEs use IP Assets for Financing?
- Managing and Exploiting IP Assets
- Role of SMEs Support Institutions
- Services Provided by the SMEs Division of WIPO

Topic 31 Internet Domain Names and Alternative Dispute Resolutions: Cases and Simulation Exercises

- Mission of WIPO Arbitration and Mediation Center
- Purpose of the Uniform Dispute Resolution Policy (UDRP)
- UDRP Procedure
- Advantages of the use of UDRP
- Facts and figures
- The Internet Domain Name System
- UDRP Substance: the Three Elements:
 - Trademark is identical or confusingly similar to the domain name
 - The registrant of the domain name have no rights or legitimate interests in the domain name
 - The domain name is registered and used in bad faith
- Case Studies

Topic 32 Current Situation of Enforcement of IP Rights in the World

- IP Enforcement under TRIPS
 - Principal features of TRIPS
 - Enforcement provisions- Part III (art. 41-61)
- The Role of WIPO in the Enforcement of IPRs
 - Advisory Committee on Enforcement (ACE)
 - Technical assistance and legislative advice
 - Cooperation and coordination with IGOs and NGOs
 - Public education and awareness raising
- The Contemporary Challenges: Counterfeiting and Piracy
- WIPO's Actions in the Combat of Counterfeiting and Piracy

Topic 33 Review

- Brief review of each topic
- Questions and answers

Topic 34 Group Discussions

- Participants are split into four groups
- Discussion on selected IP topics
- Guidance by a coordinator for each group (expert on the issue)
- Report to be presented in the plenary

[Annex II follows]

Annex II

A List of Useful Web sites Addresses

WIPO

<http://www.wipo.int/portal/index.html.en>

WIPO Worldwide Academy

<http://www.wipo.int/academy/en>

WIPO Distance Learning Program

http://www.wipo.int/academy/en/courses/distance_learning/index.html

or

<http://academy.wipo.int/>

WIPO IP Handbook

<http://www.wipo.int/about-ip/en/iprm/>

WIPO Publication No. 888 “Intellectual Property as a Power Tool for Economic Growth”

http://www.wipo.int/about-wipo/en/dgo/wipo_pub_888/index_wipo_pub_888.html

WIPO Magazine

http://www.wipo.int/wipo_magazine/en/

WIPO Free Publications

<http://www.wipo.int/freepublications/en/>

WIPO Member States

<http://www.wipo.int/members/en/>

IP Offices Web sites Directory

<http://www.wipo.int/directory/en/urls.jsp>

WIPO Resources for Students

http://www.wipo.int/portal/en/resources_students.html

WIPO-administered Treaties

<http://www.wipo.int/treaties/en/>

National and Regional IP Laws Collection

<http://www.wipo.int/clea/en/>

WIPO Library

<http://www.wipo.int/library/en/>

Annex III

Abbreviations

| | |
|-------|--|
| ACE | Advisory Committee on Enforcement |
| ADR | alternative dispute resolution |
| AEPO | Association of European Performers Organizations |
| AFC | American Folklife Center |
| AIDS | acquired immune deficiency syndrome |
| ARIPO | African Regional Industrial Property Organization |
| CBD | Central Business District |
| CIPR | Coalition for Intellectual Property Rights |
| COP | Conference of Parties |
| DNA | DeoxyriboNucleic Acid |
| DRM | digital rights management |
| EAPO | Eurasian Patent Office |
| EoF | Expressions of Folklore |
| EU | European Union |
| FAO | Conference of the Food and Agriculture Organization of the United Nations |
| FDI | foreign direct investment |
| FIA | International Federation of Actors |
| FIM | International Federation of Musicians |
| HIV | Human immunodeficiency virus |
| IGC | Intergovernmental Committee |
| IP | intellectual property |
| IPR | intellectual property rights |
| LDCs | least developed countries |
| MDGs | Millennium Development Goals |
| MFN | most favored nation |
| MIT | Massachusetts Institute of Technology |
| MOT | management of technology |
| OAPI | African Intellectual Property Organization |
| OHIM | Office for Harmonization in the Internal Market |
| PCT | Patent Cooperation Treaty |
| PLT | Patent Law Treaty |
| R&D | research and development |
| SCP | Standing Committee on the Law of Patents |
| SCT | Standing Committee on the Law of Trademarks, Industrial Designs and Geographical Indications |
| SMEs | small and medium-sized enterprises |
| SPLT | Substantive Patent Law Treaty |
| TCEs | Traditional Cultural Expressions |
| TK | traditional knowledge |
| TM | trademark |

| | |
|-------|--|
| TPM | Technological protection measures |
| TRIPS | trade related aspects of intellectual property rights |
| UAW | United Auto Workers |
| UDRP | uniform dispute resolution policy |
| UDRP | Uniform dispute resolution policy |
| UN | United Nations |
| UPOV | International Convention for the Protection of New Varieties of Plants |
| US | United States of America |
| USPTO | United States Patent and Trademark Office |
| WCT | WIPO Copyright Treaty |
| WHO | World Health Organization |
| WIPO | World Intellectual Property Organization |
| WPPT | WIPO Performances and Phonograms Treaty |
| WTO | World Trade Organization |

[End of Textbook]