

WIPO/IP/MOW/02/1

ORIGINAL:English

DATE:May2002



RUSSIAN AGENCY FOR PATENTS
AND TRADEMARKS (ROSPATENT)



WORLD INTELLECTUAL
PROPERTY ORGANIZATION

**WIPO INTERREGIONAL FORUM
ON SMALL AND MEDIUM-SIZED ENTERPRISES (SMEs)
AND INTELLECTUAL PROPERTY**

organized by
the World Intellectual Property Organization (WIPO)
in cooperation with
the Russian Agency for Patents and Trademarks (ROSPATENT)

Moscow, May 22 to 24, 2002

THE IMPORTANCE OF INTELLECTUAL PROPERTY (IP) FOR SMEs

Document prepared by the International Bureau of WIPO

Introduction

In the second half of the 20th century, and especially 1990s onwards, policymakers in national governments, private sector and civil society worldwide have increasingly begun to recognize the importance of small and medium-sized enterprises (SMEs) in the private sector as engines of sustainable national economic growth, job creation and exports. The rising star of the SME sector contrasts with the recently diminished role of the public sector as a provider of jobs, income and sustainable economic competitiveness in most countries worldwide.

As a result, creating a suitable enabling economic environment for the growth of SMEs has become a key policy focus in most countries including Russia. During this period, more and more countries have created *de novo* or strengthened existing special legislations, institutions, programs, projects and activities for meeting the special needs of SMEs at the national, subnational and local levels. In addition, an SME focus is emerging in all sectoral national policies as well. This is equally true at the provincial, local and institutional levels. And I suppose that we more or less share a common understanding that a vibrant and dynamic SMEs sector may be a key indicator of the health and competitiveness of a country, or a region, cluster or locality within it.

This common understanding is based on a number of empirical studies in several countries which demonstrate that SMEs do actually make a very significant contribution to productive investments, meaningful job creation, value-added exports and eventually to the overall socio-economic growth and development of those countries. And, on the whole, this trend is increasing. Notwithstanding the impressive performance of the SME sector in many countries, it is generally believed that still a lot remains to be done to ensure that the SMEs are fully equipped to benefit from the new opportunities and to deal effectively with the challenges posed by the quickening pace of globalization and the digital revolution that is radically transforming the way industry and business are run. Internet and E-Commerce are the new buzzwords in this ongoing strategic redirection of businesses and industry models in the wake of the information and communication technologies revolutions sweeping across most industries and businesses. The digital environment has made it easier than ever before to work together for creating, sharing and using new or original knowledge from idea generation, through various stages such as its refinement, design, development, prototyping, production, testing, distribution and marketing to delivery of the final product to the user or consumer. Interestingly, in this new digital context it is difficult, if not impossible, to segregate the content from the container, unlike in the traditional economy. And this emerging new situation highlights the importance of knowledge management or management of the intangible digital content, comprising of information, data, knowledge or intellectual assets, as never before in the evolving history of industry and business worldwide. Depending on the sector of the economy the intellectual or intangible component in the total value of the good produced or service rendered by an industry or business could be anything from 10 to 99% of its value and a corresponding proportion of the total market value of the industry or business concerned.

In this highly competitive information or service economy, creating and maintaining an economic environment conducive for creativity, innovation, knowledge creation and effective management of such new or original knowledge or technology has become a top priority for governments, civil society, and enterprises, so as to spur national economic development and strengthen international competitiveness. For most enterprises, big, medium or small, a core concern is how to remain ahead of their existing or future competitors. They may do so by introducing radically new products or services, but that is a rarity. Often all it takes is to make a small improvement to the quality of existing products or services as compared with those of the competitors. The next challenge is to successfully manage the production, distribution and marketing so as to maintain consistent quality while mass producing it and making it timely available to customers. Another challenge to be met is in communicating the message of consistent high quality of the products or services to the consumers or users for that alone would enable the country, region or enterprise to develop long-term customer loyalty. To make new or improved products or services, maintain consistent quality and communicate effectively with the consumers, forward-looking countries, regions and enterprises invariably make effective use of new and/or original knowledge.

In a country, region or enterprise, such useful new or original knowledge is created by itself or obtained from others, sometimes free but generally, on payment of a fee, or by entering into various types of contractual relationships such as outsourcing, subcontracting, licensing, partnerships, collaborations, joint ventures and strategic alliances. These contractual relationships and alliances may involve multiple stakeholders from the enterprise sector, be they big, medium or small, from research-based universities and from publicly funded research and development institutions. Often the government through its policies, support institutions, programs, and activities facilitates this collaborative process at the institutional, local provincial, and international levels. As a result this network of relationships among stakeholders increasingly involves countries, institutions and enterprises in a number of countries worldwide, depending on the degree of complementarity and potential for synergy in jointly creating newer, better and safer products for the globalizing marketplace. Knowledge sharing in an environment of "co-opetition" strengthens the individual members of such alliances or clusters. This process can be facilitated by improving the policy and business environment for technology development and transactions in and between countries, institutions and enterprises. The intellectual property system provides the means for doing so.

To illustrate my point, let me quote a recent observation made by Mr. Sergey Glaziev, Chairman of the Committee for Economic Policy and Business Undertakings of the State Duma of the Russian Federation, at the third international forum on "High Technology in the Defense Industry" that was held in Moscow from April 22 to 26, 2002. He said, (I quote), "In the conditions of globalization of the world economy, a scientific, industrial and intellectual potential becomes the principal factor of competition, while development and introduction of new technologies, as well as receiving intellectual rent becomes the basis of competition between firms, countries and societies." (Unquote)

It is in this background that during my presentation today I shall try to provide some answer to the basic question on everyone's mind, namely, how the performance of SMEs in the marketplace could be enhanced through the effective use of intellectual property (IP) system. In other words, how does the IP system contribute to the competitiveness of SMEs at the enterprise, sectoral and national levels. Before elaborating on this issue, let me clarify for the purpose of my presentation, that I broadly define competitiveness as "the ability of SMEs to face the challenges related to selling of their products or services in the marketplace". This is because the concept of "competitiveness" has to be defined differently, depending on the issue at hand.

To enable a lively discussion following the presentation, I shall address the following issues, namely (i) Participation of SMEs in economic activities, (ii) Using IP assets for developing new products or services, (iii) Using IP assets to market new products and Services, (iv) Becoming and remaining competitive in the global market arena, and (v) ICTs, intellectual property assets and competitiveness.

Participation of SMEs in Economic Activities

There is no universally accepted definition of SMEs. I do not intend to come up with a definition in this presentation. However, since we have participants from different countries I would like you to keep in mind the applicable working definition(s) of SMEs in your respective countries. The only thing that I would wish to point out at this juncture is the fact that definitions of SMEs in most, if not all, countries are based on the number of employees or the level of assets or sales turnover or various combinations of these. I should also point out that to a large extent the definition of an SME in a country depends on the level of its economic development and therefore it evolves over a period of time. In any case, the focus of WIPO on SMEs is to dispel the myth that the IP system is not meant to be of value to only the big enterprises, as is often believed by many, including by those representing the SMEs, but is of as much use to SMEs.

The current wave of interest in strengthening SMEs worldwide, be it by governments, academic institutions, international organizations or non-governmental organizations, is a vivid proof of global recognition of the important role that SMEs are playing in economic growth. It bears repetition that it is now widely acknowledged that SMEs contribute very significantly to employment (job creation), social and political stability, innovative activities and competitive power of many countries. The following statistics provide a perspective on this issue:

In the European Union, SMEs represent 99.8% of the 16 million enterprises, excluding the non-agricultural market sectors and they provide gainful employment to more than 101 million people, which constitutes two thirds of the private sector workforce and generate almost two thirds of the total turnover of all non-agricultural market sectors.¹

¹Workshop on "SMEs - Their Role in Foreign Trade" held in Kyiv, 13 - 14 November, 1997. The workshop was jointly organized by the United Nations Economic Commission for Europe and the Permanent International Secretariat of the Black Sea Economic Cooperation (BSEC) with the financial support of the Konrad Adenauer Foundation and in cooperation with the KOSGEB Small and Medium Industry Development Organization and the Balkan Centre for Cooperation among SMEs., <http://www.unece.org/indust/sme/bsec.htm> (April 30, 2002)

In Asia and the Pacific region, SMEs account for 90% of enterprises and provide 32% to 40% of employment. SMEs also contribute from 60% to 80% of GDP in individual Asia/Pacific economies ².

In the United States of America, the share of the 500 largest American firms (the Fortune 500 companies) in employment has dropped from 20% in 1970 to 8.5% in 1996 ³.

In Latin America, SMEs make up more than 98% of enterprises and employ more than 80% of the workforce.

In Africa, though I have not been able to come across results of an empirical study on the participation of SMEs in overall economic activities of the region, it can be safely surmised that SMEs make up more than 90% of all business and employ a substantial number of people, especially in urban areas.

Similarly, in the countries in transition, namely those of Central and Eastern Europe, Russia and the CIS countries, a similar trend is emerging even though the number of SMEs set up by budding entrepreneurs or as a result of privatization of state owned enterprises is relatively small at present.

SMEs, therefore, are or would soon be at the heart of economic well being of most nations and any action aimed at enhancing their competitiveness has the potential of not only securing existing jobs and creating new ones, but also of creating, owning and sharing the fruits of economic wealth by the majority of the population in every country and thereby improving the quality of the lives of the majority in every country. A key tool that could be used to achieve this goal is proper creation, use and further development of the intellectual property system. Unfortunately, most recent studies on the use of the intellectual property system by SMEs as part of their business strategy show that most SMEs in most countries worldwide do not use the IP system effectively, if at all.

Several reasons have been given to explain why most SMEs, even in countries where the overall IP legal regime and IP institutions are considered to be well established, do not effectively use the intellectual property system. Some of the important reasons given to explain the present situation are as follows:

- Perceived lack of relevance of the IP system;
- Perceived high cost and complexity of the IP system;
- Inadequate or lack of awareness on the usefulness of IP system;
- Lack of qualified human resource to use the IP system; and
- Infancy or underdevelopment of the IP system in some countries (i.e., where the national IP legislations have not been updated so as to bring these in line with current or modern IP legislations based on current international standards in the field of IP) and/or poorly functioning institutions meant for registering/granting, managing, administering and enforcing different types of IP rights.

²ibid.

³Thurik, R. and Wennekers, S. "A Note on Entrepreneurship, Small Business and Economic Growth" pg.3
www.irim.eur.nl (April 30, 2002)

These are real obstacles to the proper and effective use of the IP system for achieving the full potential of SMEs. The use of IP assets in the overall business strategy of an enterprise could significantly improve the competitiveness position of an enterprise be it an innovative or high-tech SME or a more traditional SME, including a retail shop.

All other things being considered, the competitiveness of an enterprise is increasingly determined by the manner in which it handles new and existing knowledge, be it as a user or generator of such knowledge. At the macroeconomic level, there is increasing acceptance worldwide of the central role played by technological progress in economic growth of a country. Technological progress is dependent on the use of new or original knowledge. As mentioned earlier, we are now witnessing a paradigm shift where the source of competitiveness of a firm is moving towards knowledge-based factors of production and marketing, while the traditional sources of competitiveness such as location of a firm, cheap labor, abundant natural resources are taking the backseat.

In fact, competitiveness in agriculture, mining, industry and business are all being driven by new technologies that are making everything knowledge-intensive and high-tech. Increasingly, it is incorrect to talk of agricultural commodities anymore; even petroleum products are no longer commodities to be merely extracted or mined and used as such or with some refining. A huge amount of value is added after the extraction of the raw output of mining by using various types of high technologies, leading to not just better products but also newer and newer products which are often produced or contributed to by SMEs. High technology has even obliterated the borderline between agriculture and industry in more ways than one. We talk of SMEs in the agro-biotech sector as today genetically engineered microorganisms and living things, such as plants, insects and animals, have become factories that produce products like pharmaceuticals and yarn, apart from designer crops and animals. Bringing risky new technologies to the market requires investments that would not happen without a system that provides a mechanism for a limited period of exclusivity for such knowledge-intensive products in the market place. The IP system provides the mechanism for doing so, as it enables the IP right holder to prevent all others from free riding on the success of its innovative and creative new products and services. At the same time the IP system enables faster dissemination of new ideas and products/services, provided the IP system is periodically suitably finetuned to balance the competing interests of different categories of stakeholders in the IP system.

In the new digital or high-tech environment, IP awareness and actual use of intellectual property assets as an integral part of business strategy in achieving competitiveness has become an absolute necessity. Even as a passive player in the market place, an SME has to make sure that it does not inadvertently infringe the IP rights of others, as innocent mistakes are generally no excuse in a court of law. Often such mistakes can prove to be costly or may even result in the demise of an SME. As an active player, an SME has to seek opportunities in the external environment that it has to exploit to remain and grow in business. The IP system also allows it to gather business intelligence in a respectable way. Some of you might be wondering how could this happen. This brings me to the main subject of my presentation.

Using IP Assets for Developing New Products or Services

One or more types of IP rights need to be carefully defined, protected and managed for taking an innovative or creative idea through various stages of development to the successful launch of a new product or service in the market place. I highlight the role of patents, including patent information, trade secrets, and copyright and related rights in this context.

Patents

Innovative and creative ideas are at the heart of most successful businesses. Ideas by themselves, however, have little value. They need to be developed, turned into innovative products or services and commercialized successfully so as to enable your SME to reap the benefits of your innovation and creativity. Intellectual Property (IP), patents, in particular, can be crucial for turning innovative ideas and inventions into competitive products that significantly increase profit margins. A patent is an exclusive right granted for a product or a process that provides a new way of doing something or offers a new technical solution to a problem (for a more detailed explanation, see <http://www.wipo.int/about-ip/en/patents.html>).

A patent, once granted, gives the patent owner the right to stop all others from exploiting the patented (claimed) invention. A patent is granted to the patent owner by the government, generally for a period of 20 years, in return for a complete description of the invention in the patent application. This is considered to be a fair reward to the inventor or patent owner for an adequate disclosure of a claimed invention which is new, non-obvious and capable of industrial or business application. In this way the patents system seeks to balance the need for exclusivity of the patent owner with the need to encourage the wider dissemination of new knowledge or information so that others may learn from it and improve upon the so-called 'prior art' (which may otherwise be kept as a trade secret indefinitely). The patent owner can then benefit from a limited monopoly as defined in the claims of the granted patent - in that she/he can commercially exploit her/his invention, and/or can license the "intellectual property rights" to others to exploit the invention, perhaps in return for a royalty.

While the acquisition of patent protection is not a guarantee for commercial success, such an acquisition is always important in ensuring that the patent owner has the opportunity to look for ways in which he/she can commercialize his/her invention.

As SMEs are often at the center of innovative activities, therefore owners/managers of SMEs must be made aware of the basic principles and practices in designing and using the patents system. Let me therefore, very briefly summarize the key reasons why an SME should consider patenting an invention, provided it meets the criteria of patentability:

- **Exclusiverights** - Patents provide the exclusive rights, which usually allow your SME to use and exploit the invention for twenty years from the date of filing of the patent application in the national or regional Patent Office.
- **Strongmarketposition** - Through these exclusive rights, the SME is able to prevent others from commercially using your patented invention, thereby reducing competition and establishing itself in the market as a pre-eminent player.
- **Higherreturnsoninvestments** - Having invested a considerable amount of money and time in developing innovative products, an SME could, under the umbrella of these exclusive rights, commercialize the invention enabling it to obtain higher returns on its investments.
- **Opportunitytolicenseorselltheinvention** - If the SME chooses not to exploit the patent itself, then it may sell or license the right to commercialize it to another enterprise and get an one-time or recurring income.

- **Increase in negotiating power** - If an SME is in the process of acquiring the rights to use the patents of another enterprise, through a licensing contract, then its own patent portfolio will enhance its bargaining power. That is to say, the patents owned by an SME may prove to be of considerable interest to the other enterprise or institution with whom the SME is negotiating. Through a cross-licensing arrangement it becomes possible to exchange the patent rights between the two parties to mutual advantage.
- **Positive image of the SME** - Business partners, investors and shareholders may perceive patent portfolios as a demonstration of the high level of expertise, specialization and technological capacity within an SME. This may prove useful for raising funds, finding business partners and raising the market value of an SME.
- **Take action against free riders** - As a patent owner the SME is in a stronger position to combat unlawful imitation or copying by competitors.

It needs no emphasis that innovative SMEs alone can play a leading role in stimulating industrial evolution and development. Most of you will agree with me that in the new knowledge-driven economy the more innovative a firm/enterprise, the more competitive it can be. In order to maintain its competitive edge a firm can and should ensure that it has legally protected all its key inventions. Such protection is possible by obtaining a patent or by keeping it as a trade secret. In fact, most innovations or inventions do not meet the legal requirements of patentability and therefore the only way to legally protect such inventions is through the secrecy route. Before elaborating on trade secrets let me highlight the importance of making use of patent information as part of business strategy of an SME, as often that alone may provide the desired competitive advantage.

Patent Information

Effective use of patent information can be very useful in ascertaining a firm's competitive position in the marketplace. "Patent information" refers to the technical, commercial and legal information contained in patent documents that are published periodically by national and regional offices and by the World Intellectual Property Organization under the Patent Cooperation Treaty. A patent document includes the full description of the patented invention works and one or more "claims" which determine the scope of protection as well as details on who patented the invention, when it was patented and reference to relevant literature. About two-thirds of the technical information revealed in patents is never published elsewhere and the entire set of patent documents worldwide is well over 40 million documents. More than 90% of the information contained in patent documents is in the public domain, which means its use is in no way constrained by having to seek the prior approval of anyone. This makes patent documents as the single most comprehensive collection of classified technological information of immense commercial and technological value. Most SMEs are not aware of this basic fact and therefore do not use patent information. Access to patent information may also pose a challenge. The Internet and digitization of patent information is helping in reducing the access to patent information by SMEs. Affordability is still a concern for SMEs in many countries, apart from the inherent difficulty in interpreting the technical language in which "claims" are written.

Even so, learning to use patent information in many ways is the first step towards sustainable technological progress of an SME. The availability of such wealth of technical knowledge provides enterprises with the following competitive opportunities:

- Information on new or alternative source of inputs, components or machines: By using patent information an SME may be able to identify new or alternative sources of inputs, components or machines for its products or services. This may provide it with valuable options regarding price, quality and terms of delivery which may ultimately have an impact on the final price of its products or service, and hence on its competitiveness.
- Information about potential new markets: patent information can also prove to be a useful source of information on potential new markets. An SME can identify other enterprises that can use its products or services as inputs, components or machines.
- Avoiding unnecessary costs: investing in a new product is an expensive and risky exercise. The information contained in patent documents may save time and scarce financial resources from being wasted on a non-viable product, as someone else has already patented a key invention. The information can also enable an SME to avoid unintentional infringement of others' patents, thus saving the SME from unnecessary litigation procedures and expenses. It goes without saying that avoidance of unnecessary costs contributes to a firm/SME efficiency and competitiveness.
- Information on the market (market intelligence): for competitive enterprises information on the trends in the market and what the competitors are doing is very important. A proper analysis of patent information often provides the needed information. For example, by analyzing the patents owned or acquired by competitors it is possible to ascertain the trend of the market, and to plan the direction of the SME's future strategy which may sometimes involve taking timely steps not to invest further in plant and machinery for making products that would be unprofitable in the near future and/or to take timely action to exit business lines and products that would soon be obsolete with the emergence of alternate products in the marketplace. It can also provide valuable information on who are the emerging key players in the field i.e. who are going to be providing intense competition in the field/market. Such information would be very useful in reviewing an enterprise competition strategy. Apart from the manufacturer, even as a distributor or retailer of products patent information may be of great assistance in choosing new products early and wisely.

Trade Secrets

Today's business environment has increased the importance of trade secret protection for business by developing and implementing information protection practices that address the risks associated with a global marketplace, rapid advancements in technology and telecommunications, a mobile, highly skilled workforce, networked strategic business relationships, including extensive outsourcing. Technology is changing so rapidly that trade secret protection is, in some cases, the most attractive, effective and easily available intellectual property right. As with all intellectual property, trade secrets can be valuable to a company's growth, competitive advantage and, sometimes, survival.

A trade secret is information of any type that is actually or potentially valuable to its owner, not generally known or readily ascertainable by the public, and for which the owner has made reasonable efforts to keep it secret. A trade secret generally has some cost associated with its development, and is not common knowledge in the industry. Even negative information, such as research options that have been explored and found worthless, can be trade secrets. Practically any type of technical and business information may be protected as a trade secret provided it meets these requirements; the following categories are illustrative:

- Data compilations, for example lists of suppliers or customer (the more information a list contains, the more likely it would qualify for trade secret protection);
- Designs, drawings, architectural plans, blueprints, and maps;
- Algorithms and processes that are implemented in computer programs and the programs themselves;
- Instructional methods;
- Manufacturing or repair processes, techniques and know-how;
- Document tracking processes;
- Formulas for producing products;
- Business strategies, business plans, methods of doing business, marketing plans;
- Financial information;
- Personnel records;
- Production or maintenance schedules;
- Operating, maintenance or training manuals;
- Ingredients of products; and
- Information about research and development activities of the SME.

A trade secret may comprise of a combination of characteristics and components, each of which, by itself, is in the public domain, but where the unified process, design and operation of such characteristics or components, in combination, provides a competitive advantage.

Inventions and processes that are cannot be patented can be protected under trade secret law. SMEs should rely on trade secret law to safeguard the details of research and development, including draft patent applications, and patent applications before their official publication or grant. Even after grant of a patent, the associated knowledge is protected as a trade secret. A newly developed but not yet published or used industrial design or even trademark may be a valuable confidential information.

Trade secrets can create an advantage over competitors in many ways. The right to use trade secret information can also be licensed or sold. Although trade secrets provide no protection against those who independently develop the trade secret information, trade secrets never expire as do patents, industrial designs and copyright.

Copyright and Related Rights

In most countries worldwide 80 to 90% of the creative industries are SMEs. The creative industries sector includes publishing, software, music, television and radio, architecture, advertising, designer fashion, visual arts, crafts, etc. They account for 3 to 6% of the GDP in most countries. In fact, the creative industries are the backbone of a knowledge economy and their rapid growth demonstrates the potential for a future enterprise economy.

Protecting copyright and related rights is important because it enables creators and users of such works to support themselves from their artistic work and for creative entrepreneurs to generate profit to reinvest in tomorrow's creators. In addition, protection of such works promotes cultural integrity, diversity and variety as most of such works are created or used by SMEs.

Copyright literally means the right to make a copy of an original literary or artistic work. As a legal term, copyright refers to the rights given to creators for their literary and artistic works. The kinds of works covered by copyright include in particular literary works such as novels, poems, plays, reference works, newspapers and computer programs; databases; films, musical compositions, and choreography; and artistic works such as paintings, drawings, photographs and sculpture; architecture; and advertisements, maps and technical drawings.

Related rights are the rights that belong to the performers, the producers of phonograms and broadcasting organizations in relation to their performances, phonograms and broadcasts respectively. Related rights differ from copyright in that they belong to owners regarded as intermediaries in the production, recording or diffusion of works. The link with copyright is due to the fact that the three categories of related rights owners are auxiliaries in the intellectual creation process since they lend their assistance to authors in the communication of the latter's works to the public. A musician performs a musical work written by a composer; an actor performs a role in a play written by a playwright; producers of phonograms -- or more commonly "the record industry" -- record and produce songs and music written by authors and composers, played by musicians or sung by performers; broadcasting organizations broadcast works and phonograms on their stations.

The related rights grew up around copyrighted works, and provides 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.

The owner of a copyright is the only person/entity who/which has the right to make a copy of it in any form, or to permit someone else to do so. The owner of a copyright has the sole right to control any copying/reproduction, public performance, recording or broadcasting of a work, and its translation or adaptation. This control may be exercised for a fee termed 'royalty'. Royalty payments may be arranged through performing rights societies, collective management organizations or societies, publishing houses or by the owners of copyright directly.

Collective management organizations or societies act on behalf of copyright or related rights owners and administer some or all of their rights on behalf of the membership and members of foreign affiliated rights societies. There are often separate national societies for different types of rights such as: performing and broadcasting rights for music, reprography rights, mechanical reproduction rights and retransmission rights. The primary function of these societies is to act as "licensing bodies" on behalf of the members. 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. Collective management organizations grant permission and give terms for use of works in their respective repertoires. After deducting the administration charges, the royalty collected is distributed periodically to the owners of copyright and related rights.

Examples of public performance are the playing of recordings in shopping malls, bars, nightclubs, discotheques, hotels, airlines, and restaurants. An example of the broadcasting of performances and sound recordings is radio airplay. In fact, radio stations are the largest single broadcast users of recorded music. Each time a radio station plays an eligible sound recording a royalty is paid to the composer, the maker of the sound recording and any performer whose performance is fixed in that recording. This makes it clear that various types of SMEs are users of works protected by copyright and related rights, not to mention the widespread use of software by an even wider range of SMEs.

The digital revolution and an era of converging technologies have created exciting business opportunities for SMEs in the entertainment, mass media, computer, and telecommunications industries, as well as for multimedia, consumer products and financial services companies that can take advantage of the new interactive technologies. There is a greater need than ever to safeguard copyrightable material on the Internet in the entertainment industry, including film, theater, music and print publishing transactions. While the first line of action concerns dealing with IP issues in relation to e-mails, the next one is about IP issues in relation to the website of the enterprise. All enterprises, including SMEs, have to take special measures to deal with the problem of protecting widely distributed factual confidential or copyrighted information or in relation to websites - even claiming trademark rights against unwelcome hypertext links to their websites.

Multimedia is a new form of expression made possible by digital technology. With multimedia technology, graphics, video, animation, text, still images, sound and data can simultaneously appear on a computer screen and the user can interact with the content. Copyright or related rights of course protect most of these works (music, photos, paintings, texts, film extracts, etc.). To exploit them in an interactive multimedia product, it is first necessary to clear the rights. Clearing the rights simply means obtaining authorization from the owner of the rights to exploit the work or parts thereof in a multimedia product, and negotiating how much that will cost. This authorization is generally in the form of a user license in writing granted by the owner of the rights. Examples of multimedia content include distance learning, virtual visits to historic sites, and interactive games for children. Frequently offered on CD-ROM or on the Internet, multimedia presentations have become an innovative and efficient means for communicating information and for storytelling or entertainment. Most multimedia companies are SMEs and many are being nurtured in high tech incubators in different countries. As users of copyright these companies need to understand the importance of proper use of the IP system in all facets of their business. This is not limited to use of copyright and related rights but often includes protection of trade secrets, creation, protection and use of trademarks, and protection of novel software by patents in some countries.

For more information on how an SME may benefit from works protected by copyright and related rights, please see the relevant area of the website of the SMEs Division of WIPO at <http://www.wipo.int/sme>.

Using IP Assets to Market New Products and Services

For most small and medium-sized enterprises (SMEs), marketing products or services is a major challenge. A marketing strategy should establish a clear link between your products or services and your SME, as the producer or provider of such products or services. That is to say, customers should be able to distinguish, at a glance, between your products or services and those of your competitors and associate them with certain desired qualities.

Intellectual property, when efficiently used, is an important tool in creating an image for your business in the minds of your current and potential customers and in positioning your business in the market. IP rights, combined with other marketing tools (such as advertisements and other sales promotion activities) are crucial for:

- Differentiating your products and services and making them easily recognizable;
- Promoting your products or services and creating a loyal clientele;
- Diversifying your market strategy to various target groups;
- Marketing your products or services in foreign countries.

Access to market is an important element in the overall competitiveness equation. To access a market and secure a stable and predictable market share is a major challenge facing most SMEs. In addition to patents and trade secrets, the proper use and protection of trademarks and industrial designs by an SME could provide it the much-needed competitive advantage.

Trademarks

A well-crafted trademark often becomes a decisive factor in the success of an SME in the market place. A trademark enables users or consumers to distinguish products or services of an SME from those of its competitors and to associate the products or services of an SME with desired qualities. In other words, a trade or service mark is a distinctive sign which identifies certain products or services as those produced or provided by a specific person, enterprise or a group of persons/enterprises allowing the consumer to distinguish them from goods or services of others (for a more detailed explanation see <http://www.wipo.int/about-ip/en/trademarks.html>). A trademark may be a word, letter, symbol (logo), number, color, shape or, where the legislation of the country so allows, sound or smell, or a combination of two or more of these elements.

Nowonder, to develop trust, confidence and loyalty in its products or services, every forward-looking SME has to develop and maintain a distinct identity, image or reputation. Only then it would be able to distinguish itself and its products or services from those of its competitors. It must also, at the same time, provide a mechanism for linking the provider of a product or service to the valuable business asset of trust and goodwill. This is mostly achieved through a distinctive trade name and one or more trademarks.

These play a pivotal role in the marketing strategy of differentiating products or services from those of rivals and in developing longer-term positive – and often emotional – relationships with customers by communicating an assiduously nurtured image or reputation. Every business must woo customers to move them quickly from brand awareness, via brand recognition, to brand preference and finally to brand insistence, a point at which the consumer refuses to accept alternatives and is willing to pay an even higher premium for the desired branded product or service.

A major step in eliminating wasteful expense and reducing risk is to register the trademark early so that it is legally secure and others cannot free-ride on it. This is often done well before the marketing of the new product or service to avoid incurring expense on advertising and other promotional activities, only to discover the brand name is not available.

Some countries do provide a degree of protection to unregistered trademarks, but in most countries protection is contingent upon successful registration. Many countries allow registration without prior use, but the trademark may be cancelled if it is not used in the marketplace in relation to the product for a certain period of time. It is easier to deal with the willful free riding, known as counterfeiting of a trademark and with gray market products (so called parallel imports) if the trademark is validly registered.

Informed businesses take active steps to educate employees, dealers, distributors, newspaper editors, publishers of encyclopedias and the public that their trademark identifies their specific products alone and therefore should be used in a proper manner.

Industrial Designs

Industrial designs are compositions of lines or colors or any three-dimensional forms, which give a special appearance to a product or handicraft. They protect the ornamental or aesthetic aspect of a useful article, which usually appeals to the sense of sight or touch and can be reproduced in significant quantities (for a more detailed explanation see http://www.wipo.int/about-ip/en/industrial_designs.html and <http://www.wipo.int/hague/en/index.html>)

The terms design, industrial design or design patent, when used in intellectual property law and practice, have a specific connotation. In most cases they refer to the **eye appeal** of – that is, the features of **shape, configuration, pattern or ornament**, or any combination of these features – of a finished article made by hand, tool or machine, as opposed to functional features which may be protected by other types of intellectual property rights, such as patents, utility models or trade secrets. In many countries, the requirement of **eye appeal** of an article of manufacture or handicraft has been modified to that of **perceptible features** of appearance, and the rule of novelty has been replaced or supplemented by an individual character requirement.

A good design strategy must compare the various alternatives for protecting industrial designs, as there are different legal ways to prevent unscrupulous competitors from unauthorized copying. Legal options may include one or more of the following: protection under industrial design law, copyright law, trademark law – as a two or three-dimensional mark – and unfair competition law. In some countries the protection of these different laws may be mutually exclusive, in others it is cumulative to varying degree. It is advisable to seek expert advice.

Industrial design issues affect various types of business decisions of an SME. For example, the type of protection and its cost to effectiveness may affect which details should be disclosed to the designer, especially when the designer is employed by a contractor, whether to undertake design development entirely in-house, or to contractor commission an outside agency or do it jointly; timing of the initial use of a new design in advertising, marketing or public display in an exhibition; if and when to seek or continue to maintain design registration; if and when to initiate action against unauthorized/infringing acts of competitors, counterfeiters or importers; if and when to license or partially assign design; and if and when to register the design in other markets for export or for exploring the potential of entering into strategic business alliances, joint ventures, setting up wholly owned subsidiaries, etc.

It is therefore hardly surprising that smart SMEs take great pains to timely protect the new or original aesthetic aspect of its products so as to prevent such designs from being copied by competitors; otherwise the competitive edge may be easily lost even though functionally the product of an SME may be superior to those of its competitors.

Becoming and Remaining Competitive in the Global Market Arena

As I have mentioned at the beginning, we are now in what is called the knowledge economy. A major characteristic of the new economy is the increasing pace of globalization, resulting from the lowering of transaction, travel and transportation costs, and the gradual lowering of tariff and non-tariff barriers in international trade mostly under the aegis of the former GATT and its successor organization, the WTO. The digital economy has made a major contribution to this trend. As economies of the world are increasingly becoming inter-linked and interdependent for further growth, so are the markets becoming interdependent. With globalization we are witnessing an relentless increase in the intensity of international competition. This means, that, unlike in the past, SMEs can no longer focus only or mainly on the local or domestic market and hence worry only about local or national competitors. In fact, high-tech and SMEs increasingly begin to operate in the international market. At the same time, the traditional SMEs are facing competition in the domestic market from enterprises based abroad. To compete or partner with large, medium and small sized domestic and foreign companies, SMEs have to become "IP-smart" to realize their full potential.

In the support system for SMEs at the national, provincial, local and institutional levels many governments have built institutional linkages and mechanisms for delivery of IP services to SMEs. This often begins by formulating a clear policy framework on IP for SMEs at one, more or all of these levels. Next, the relevant SME support and financing institutions at each of these levels provides support for the development of relevant IP services for SMEs in the private sector, although awareness creation is initially done largely at government expense. For example, the Innovation Centers, or Business & Technology Development Centers that provide consulting, marketing and human resources services to promote the development of SMEs have included IP services in their portfolio of basic services for entrepreneurs, startups and SMEs.

Several countries have established funds for providing grants or soft loans for the promotion and use of technology. Often the conditions for access to such funds stress the importance of protecting and leveraging IP assets. Science and technology parks have been established in many countries which often have business or technological incubators for high tech industries that work in close collaboration with local universities, the private sector and the SME support and financing agencies, including venture capitalists. These are also very important institutions that often focus on IP management from the stage of writing a good business plan onward still the final commercialization. This begins by creating a focus on establishing an IP culture at an early stage of the life cycle of a new enterprise. But domestic SMEs often need foreign investors in order to grow and access global networks, while the latter can obtain important benefits from SMEs' know-how. Many small high technology firms have succeeded in penetrating global markets and networks, thanks to direct foreign investments financing their R&D expenditure often based on their past track record of protecting valuable IP rights.

Human resource development activities need a special focus as well. For example, many countries and institutions within them have begun to include practical IP matters in the curricula of various teaching and training programs for engineers, managers, entrepreneurs, etc. as this is a necessary condition for developing an IP culture and IP services in a country, whether these are provided by the government, the private sector or the civil society.

ICTs, Intellectual Property and Competitiveness

Sofar, the SMEs in developing countries and countries in transition are concentrated in the manufacturing sector, with a much smaller number in the services sector. As economies are becoming increasingly service driven, the future competitiveness of the national SME sector and therefore of countries would be increasingly based on creation of knowledge-driven high-tech service enterprises, the activities of which are complementary to those carried out by manufacturing SMEs. In the services sector, the software and multimedia industries are becoming the new engines of economic growth and competitiveness of countries. Therefore, understanding intellectual property issues in e-commerce is becoming a key concern for sustainable competitiveness of SMEs. Information may be obtained on the IP issues in e-commerce by going through the website of the SMEs Division of WIPO at www.wipo.int/sme.

The process of globalization goes hand in hand with the evolution in the field of information and communication technologies (ICTs). Developments in the field of ICTs have led to the removal of some of the major barriers to trade, such as national boundaries, transportation costs linked to distance. This, on the one hand, has resulted in increasing the intensity of competition and on the other in opening a wider range of new opportunities for SMEs. It is now possible for SMEs to reach out at a relatively lower cost to potential clients and establish niche markets in areas which until recently seemed to be out-of-bounds. In the ICT world time factor has become an important element of competitiveness. That is to say, a company that is able to reach the market first has the potential advantage of winning a larger share of that market than a late entrant.

With ICTs, e-commerce has become the “new boy in the streets” of the business community. Since being “on the net” has become quite fashionable and the possibility of reaching out to users or consumers in different parts of the world is too tempting, some SMEs have embraced this new activity without taking necessary precautions in safeguarding or protecting their intellectual property assets that provide the needed competitive advantage.

Effective use of the intellectual property system would enable SMEs in e-commerce to not only reap the business benefits brought about by the evolution in ICTs but would also enable them to maintain their competitive edge in the marketplace. Some of the basic steps that SMEs in e-commerce should take are as follows:

- Choosing a domain name which is distinctive and protectable under trademark law;
- Owning or licensing the intellectual property rights of the design of and content available through the website of the SME;
- Taking necessary measures to protect trade secrets of the SMEs which may be inadvertently disclosed on-line or by access to the server of the website hosting company;
- Taking special care when entering into contracts.

In this presentation I have focused on some of the key types of intellectual property rights, which can be used to enhance the competitiveness of SMEs in the marketplace. However, it should be noted that the successful use of intellectual property depends on many other factors such as the existence of an effective intellectual property system in a country, the level of intellectual property awareness of the business community and the society as a whole, the existence of SME support institutions and infrastructure, the overall legal framework --- just to name a few major areas.

For more information on how SMEs can benefit from effective use of the IP system please visit the website of WIPO's SMEs Division at <http://www.wipo.int/sme>.

[End of document]