11. INTELLECTUAL PROPERTY RIGHTS - AN OVERVIEW

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Intellectual property, very broadly, means the legal rights, which result from intellectual activity in the industrial, scientific, literary and artistic fields. Countries have laws to protect intellectual property 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, intellectual property 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, intellectual property is traditionally divided into two branches, "industrial property" and "copyright."

The Convention Establishing the World Intellectual Property Organization (WIPO), concluded in Stockholm on July 14, 1967 (Article 2(viii)) provides that "intellectual property shall include rights relating to:

[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] trademarks, service marks, and commercial names and designations
[7] protection against unfair competition and all other rights resulting from industrial activity in the industrial, scientific, literary or artistic fields."

The areas mentioned under [1] belong to the copyright branch of intellectual property. The areas mentioned in [2] are usually called "neighboring rights," that is, rights neighboring on copyright. The areas mentioned under [3], [5] and [6] constitute the industrial property branch of intellectual property. The area mentioned under [7] may also be considered as belonging to that branch, the more so as Article 1(2) of the Paris Convention for the Protection of Industrial Property (Stockholm Act of 1967) (the "Paris Convention") includes "the repression of unfair competition" among the areas of "the protection of industrial property"; the said Convention states that "any act of competition contrary to honest practices in industrial and commercial matters constitutes an act of unfair competition" (Article 10bis(2)).

The expression "industrial property" covers inventions and industrial designs. Simply stated, inventions are new solutions to technical problems, and industrial designs are aesthetic creations determining the appearance of industrial products. In addition, industrial property
includes trademarks, service marks, commercial names and designations, including indications of source and appellations of origin, and protection against unfair competition. Here, the aspect of intellectual creations—although existent—is less prominent, but what counts here is that the object of industrial property typically consists of signs transmitting information to consumers, in particular, as regards products and services offered on the market, and that the protection is directed against unauthorized use of such signs which is likely to mislead consumers, and misleading practices in general.

Scientific discoveries, the area mentioned in the WIPO Convention under [4], are not the same as inventions. The Geneva Treaty on the International Recording of Scientific Discoveries (1978) defines a scientific discovery as "the recognition of phenomena, properties or laws of the material universe not hitherto recognized and capable of verification" (Article 1(1)(i)). Inventions are new solutions to specific technical problems. Such solutions must, naturally, rely on the properties or laws of the material universe (otherwise they could not be materially or "technically" applied), but those properties or laws need not be properties or laws "not hitherto recognized." An invention puts to new use, to new technical use, the said properties or laws, whether they are recognized ("discovered") simultaneously with making the invention or whether they were already recognized ("discovered") before, and independently from, the invention.

The fields of intellectual property protection include: Patents, Copyright and neighboring rights, trademarks, Industrial designs and integrated circuits and geographical indications.

**PATENTS**

A patent is a document, issued, upon application, by a government office (or a regional office acting for several countries), which describes an invention and creates a legal situation in which the patented invention can normally only be exploited (manufactured, used, sold, imported) with the authorization of the owner of the patent. 'Invention' means a solution to a specific problem in the field of technology. An invention may relate to a product or a process. The protection conferred by the patent is limited in time (generally 15 to 20 years).

Simply, a patent is the monopoly granted by the State to an inventor for a limited period, in return for the disclosure of the invention, so that others may gain the benefit of the invention. The disclosure of the invention is thus an important consideration in any patent granting procedure.

**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 industrially applicable (useful), it must be new (novel), it must exhibit a sufficient "inventive step" (be non-obvious), and the disclosure of the invention in the patent application must meet certain standards.

1. **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.

Examples of fields of technology, which may be excluded from the scope of patentable subject matter, include the following:

- Discoveries of materials or substances already existing in nature;
- Scientific theories or mathematical methods;
- Plant or animal varieties, or essentially biological processes for the production of such plant or animal varieties, other than microbiological processes;
- Schemes, rules or methods, such as those for doing business, performing purely mental acts or playing games;
- Methods of treatment for humans or animals, or diagnostic methods practiced on humans or animals (but not products for use in such methods).

In addition, temporary exclusions from patent protection may be provided for certain kinds of products or processes for reasons of public interest, such as, for example, pharmaceuticals, agricultural chemicals or inventions in the nuclear field. The current trend is away from such temporary exclusions.

(ii) Industrial Applicability (Utility)

An invention, in order to be patentable, must be of a kind which can be applied for practical purposes, not be purely theoretical. If the invention is intended to be a product or part of a product, it should be possible to make it. And if the invention is intended to be a process or part of a process, it should be possible to carry it out or "use" it (the general term) in practice.

"Applicability" and "industrial applicability" are expressions reflecting, respectively, the possibility of making and manufacturing in practice, and that of carrying out or using in practice. The word "industrial" in the same expression has a very special meaning in the terminology of patent laws. 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.

(iii) 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 new if it is not anticipated by the prior art. "Prior art" simply stated is all the knowledge that existed prior to the relevant filing or priority date of a patent application, whether it existed by way of written or oral disclosure. 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 tangible 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."

(iv) Inventive Step (Non-Obviousness)

In relation to the requirement of inventive step (also referred to as "non-obviousness"), 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 inclusion of a requirement like this in patent legislation is based on the premise that protection should not be given to what is already known as part of the prior art, or to anything that the person with ordinary skill could deduce as an obvious consequence thereof.

The expression "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.

It should be noted that novelty and inventive step are different criteria. Novelty exists if there is any difference between the invention and the prior art. The question, "is there inventive step?" only arises if there is novelty. 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 noticeable 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.

In order to assess the nature of the differences, which are relied upon as constituting an inventive step, account has to be taken of the prior art as a whole. Thus, as distinct from the assessment of novelty, the subject matter of the claim under examination is compared not with each publication or other disclosure separately, but with the combinations thereof, insofar as each such combination is obvious to the person having ordinary skill in the art. The combination may be global, whereas the claim may define a set of subject matter known separately, for instance a new form of washing machine including a particular type of motor coupled to a particular type of pump. For the inventive step to be denied, it is necessary that not only the combination, but also the choice of the combined elements, is obvious. It is the sum of the differences that have been discovered which must be compared with the prior art and judged as to obviousness, and not each of the new elements taken individually, except where there is no technical link between them.

The evaluation of the differences should not neglect any of the three aspects that typifies all inventions, namely:
- a problem to be solved;
- a solution to that problem; and
- a result guaranteed by the application of that solution.

If the problem is known or obvious, the examination will bear on the originality of the solution claimed. If no inventive step is found in the solution, the question becomes whether or not the result is obvious or whether it is surprising either by its nature or by its extent. If a person having ordinary skill in the art would have been able to pose the problem, solve it
in the manner claimed, and foresee the result, the inventive step is lacking.

(v) Disclosure of the Invention

An additional requirement of patentability is whether or not the invention is sufficiently disclosed in the application.

In a complete disclosure, while the prior art setting may be mentioned in general terms in the description, the essential novelty, the essence of the invention, must be described in such detail, including proportions and techniques where appropriate, so as to enable those persons skilled in the art to make and use the invention, as of the filing date of the application.

Drafting and Filing a Patent Application

(i) Identification of the Invention

The first task in drafting a patent application is the identification of the invention. This involves:

- summarizing all the necessary features which in combination solve a particular technical problem; and

- an examination of this combination to determine whether it would, according to one's own judgment, fulfill the requirements for patentability, especially inventive step.

It is during this process that a full comprehension of the essence of the invention is obtained, and this is important in helping to draft the description and claims.

Often the invention contains many new features. It is essential to identify the critical feature or features and to have an explanation of why they contribute to an effective solution to the problem. There are two important reasons for this. First, the claims should be as broad as possible; the broadest claim is the one restricted by the least number of features. Second, having identified the critical features and their effect, it is then necessary to ask how else may this effect be achieved, that is, can the specific features be substituted or altered while still achieving the end result. This is important not only in drafting the claims, which must be wide enough to cover these substitutes or alternatives, but also in the description of the invention which must include details of the substitutes or alternatives so that the broad claim can be supported by the description.

(ii) Practical Aspects of Drafting Patent Applications

Drafting practices and requirements differ from country to country. However, there are typically three basic requirements to be complied with in the drafting of a patent application.

Firstly, there is a requirement that the application should relate to one invention only, or to a group of inventions so linked as to form a single general inventive concept. This requirement, referred to as "unity of invention," is particularly important when claims are being drafted.

Secondly, the description should disclose the invention in a manner sufficiently clear and complete for the invention to be evaluated, and to be carried out by a person having ordinary skill in the art. This is of fundamental importance, since one of the main functions of the description is to provide new technical information to third parties. An important phrase to note in this requirement is "a person having ordinary skill in the art." This allows for a simplified description since it can be assumed that the reader will be an informed reader having the background knowledge, which makes it unnecessary to describe every basic detail of the invention.

Thirdly, the application must contain claims, which determine the scope of the protection. The claims must be clear and concise and
fully supported by the description. This third basic requirement is important since the claims are the basis of interpretation of patent protection. It is from the claims that third parties are able to know what they may do and what they may not do. The claims may not be significantly broader or different from that which has been described.

In the fourth section of the description, two elements are generally found, namely a brief description of the drawings, if drawings are appropriate, and a detailed description of one or more embodiments of the invention.

The claims are the center or the heart of any granted patent because they define the protection, which is the purpose of the patent, that is to say, they define clearly the scope of the exclusive right provided by the patent. Therefore it is the most important task in the work of the patent agent when preparing the application, to produce a wording of the claims, which defines the invention in terms of the technical features, disclosed in the description and which does not contain any reference to commercial advantages.

The series of claims drafted by the patent agent generally commences with a broad main claim followed by a number of claims of narrower scope. The broad claim is drafted so as to just avoid the prior art known at the time of preparing the application. The patent agent drafts the succeeding claims more narrowly, and hopefully this results in stronger claims which could withstand any anticipation by more relevant prior art which might be produced by a Patent Office during examination, or by third parties during any opposition or invalidation proceeding. It should be emphasized that there must be some element of additional invention in each succeeding claim in order for it to be stronger.

The narrower claims following the broad main claim usually refer back to one or more of the preceding claims. They are therefore usually called dependent claims. The features introduced in each of the dependent claims must find some basis in the description. There it is usually explained that these are preferred features, which produce a better technical form of the invention.

The last element of a patent is the abstract. The abstract presents a short summary of the description and the claims. It serves the purpose of enabling third parties to obtain quick information about the essential contents of the invention. It must be emphasized that it is not used to interpret the scope of protection.

With increasing awareness more patent applications would come out from SAUs and other research institutions in our country and the adage "patent and prosper" would be the order of the day.