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THE PATHWAY TO INNOVATION

Protecting and Doing Business with Intellectual Property Assets: a Handbook for Entrepreneurs

THE PATHWAY TO INNOVATION
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THE PATHWAY TO INNOVATION
Protecting and Doing Business with Intellectual Property Assets: a Handbook for Entrepreneurs

Much diligent work, technical discussions and review of the most current literature were involved in preparing this publication.
We welcome contributions for improving and building knowledge on the topic of "intellectual property"
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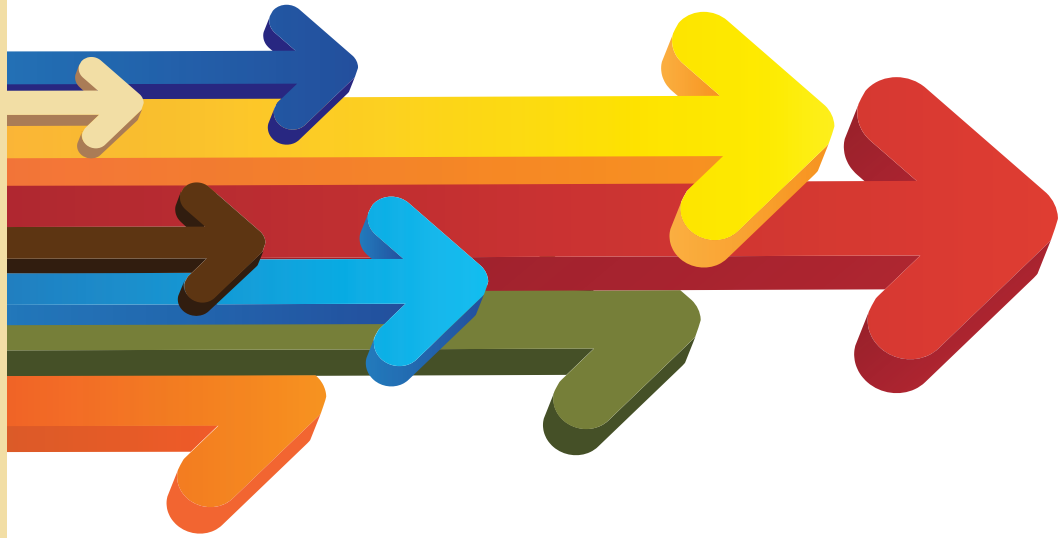

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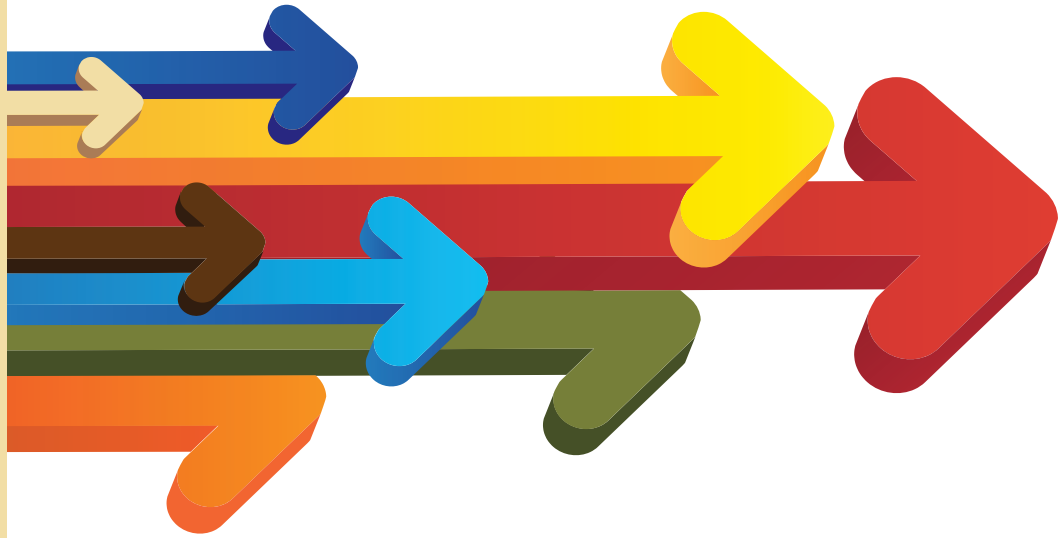
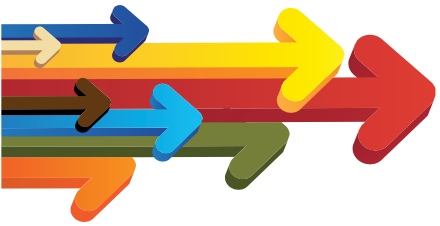
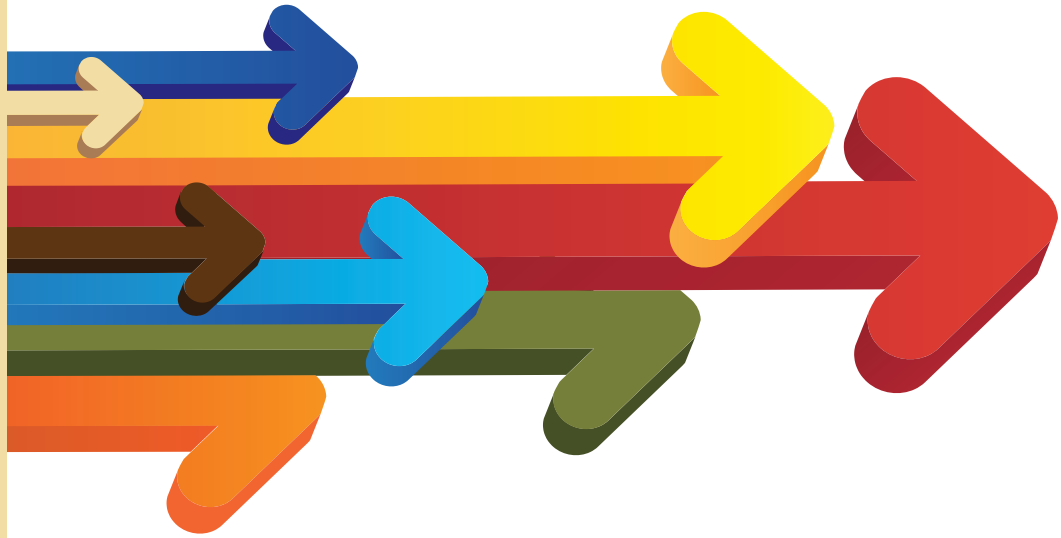


SUMMARY





PRESENTATION

As a major tool for promoting innovation in industry, the management of intellectual property is strategic for Brazilian companies to gain competitiveness in the global market. Through it, business leaders can seek out opportunities, monitor competition and identify, among other things, levels of investment and development of products and processes.

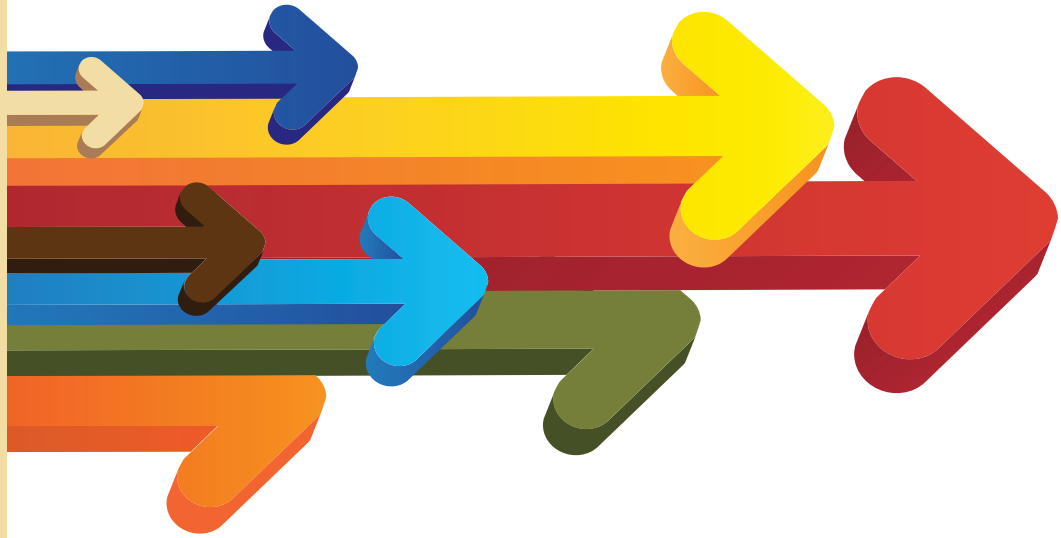
Aware of this need, the Euvaldo Lodi Institute (IEL), the National Industrial Apprenticeship Service (SENAI) and the National Institute for Industrial Property (INPI) joined forces and launched the Intellectual Property for Innovation in Industry Program, the goal of which is to disseminate the importance of the matter for Brazilian Industry to grow.

One of the actions contemplated in the program is the publication of this handbook, which was designed to provide entrepreneurs with key information on the main aspects of intellectual property. This topic, which is still very much exclusively associated with trademark registration and the issuing of patents, should be considered from a broader perspective. Enterprises need to understand its timeliness and relevance to maximize the correct ownership, protection and trade of these intangible assets, thus generating value and benefits for their business.

The National Confederation of Industry (CNI), leader of the project Mobilization for Business Innovation (MEI), recognizes that intellectual property should be given priority as a matter of great relevance for innovation. For this purpose, stimulating the development of new competences in enterprises is a must. This guide is a response to the commitment that was made. But other actions were also taken: IEL, SENAI and SESI professionals were trained to advise technicians and entrepreneurs on when, where and why their knowledge-based assets should be protected and to provide strategic and technological information contained in a database of patents, trademarks and industrial designs with the aim of monitoring trends and identifying partners that can contribute to innovation and competitiveness.

There is no doubt that innovation is key for Brazil's development. Innovation is a must for the economy to grow on a prosperous and sustainable basis, with higher productivity and better jobs and wages. Apart from all these gains for society, innovation is, above all, a business agenda that should also be given priority by government. Through it, our companies will be able to step up their competitiveness and include Brazil in the global market.

Armando de Queiroz Monteiro Neto
President of CNI



FOREWORD

In today's society of knowledge and creativity, intellectual property is a topic of increasing importance for the economy of all countries and a means of inclusion in the international community. In this scenario, an agreement was signed between the National Institute for Industrial Property (INPI), the Euvaldo Lodi Institute (IEL/NC) and National Industrial Apprenticeship Service (SENAI/DN) for implementing the "Intellectual Property Program for Industry," whose goal is to promote the strategic use of the system for protecting knowledge-based assets with the aim of enhancing the competitiveness of Brazilian industry.

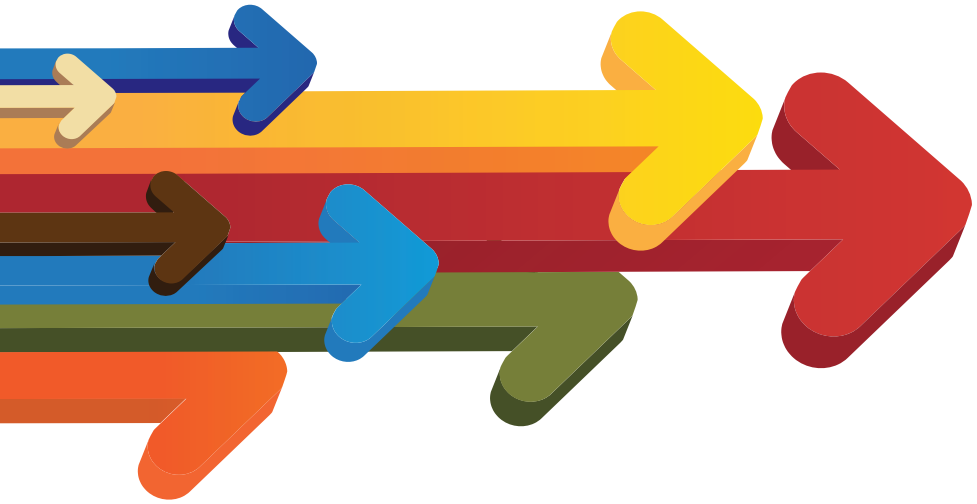
Appropriate management of Intellectual Property involves a set of activities that require specific and sometimes complex expertise on the part of enterprises. These activities include those of identifying patentable technologies and of negotiating and contracting licenses and the use of trademarks, industrial designs and patents to increase value added, promote competitive differentiation and step up exports.

The INPI is the federal government institution in charge of industrial property and of other areas related to Intellectual Property of interest to industry. Offering expertise in these fields to Brazilian industry is the main purpose of this initiative and the learning and managerial and technological support systems coordinated by SENAI and IEL, which are particularly important for micro, small and medium enterprises, are the main channels for disseminating it.

The program was also designed to reach the community of media professionals, given their ability to clarify Intellectual Property management concepts and their importance to an even broader audience.

Considering the scope of the program being presented here, we can say that it is the most comprehensive dissemination and training initiative to promote strategic use of Intellectual Property in Latin America.

Jorge de Paula Costa Ávila
President of INPI



INTRODUCTION 1

1.1 The importance of intellectual property

The history of technological development bears witness to the experience of great inventors such as Alexandre Graham Bell, Benjamin Franklin, Santos Dumont and Thomas Edison. In the field of arts and science, personalities such as Ludwig von Beethoven, Leonardo da Vinci, Shakespeare and Isaac Newton have also stood out for their achievements. The ingeniousness and capacity of these notable individuals revolutionized the way we live, communicate and transport ourselves and made it possible for us to enjoy the beauty of their creations and importance of their discoveries.

In today's world, development is making large strides. Its paradigm is that of instant communication, of a globalized world and of no boundaries for knowledge dissemination. This scenario favors the contributions of small business owners, entrepreneurs, inventors, scientists and artists, who more than ever before have now the means to invent, protect, disseminate and market their creations and innovations worldwide, generating economic returns to investments and bringing benefits to society.

It's important to understand that although new and creative ideas are at the heart of most successful businesses, "ideas" have little value in themselves. They need to be developed into products, processes or services and marketed successfully. That is, they require significant investments. Enterprises don't buy or invest in "ideas" only, but rather in their potential to develop into products that are economically viable and relevant for the market. This is the essence of the innovation process.

Successful innovative enterprises are those that manage to make a synthesis of the knowledge produced by humankind, involving economic and legal principles, and turn intellectual property into wealth.

Therefore, before deciding to invest time, talent, and economic and financial resources in developing any new venture, it is extremely important to assess the originality of an idea and its marketing potential. This starting point doesn't provide any guarantee that it will all work out in the end, but it surely minimizes risks and prevents future surprises.

1.2 Innovation and intellectual property

Knowledge and technology are becoming increasingly important as two of the most effective tools for promoting economic development in the global scenario. New services, products and production processes are being developed at an increasing speed. With appropriate incentives, this innovative movement has proven to contribute to the process of generating wealth and improving the quality of life of populations rapidly. For this reason, the need to attach a value to and protect ingenious works of human beings is undeniable, especially considering the economic return they can potentially provide to their creators and to society.

This handbook was designed to be used as basic reference material and to meet an increasing demand for information expressed by entrepreneurs with an interest in intellectual production and its forms of protection, management and commercial use to make their ventures competitive in different market sectors. It addresses issues related

Art. 5 - All persons are equal before the law,
XXVII - the exclusive right of use, publication or reproduction of works rests upon their authors and is transmissible to their heirs for the time the law shall establish;
XXVIII - under the terms of the law, the following are ensured:
a) ...
b) the right to authors, interpreters and respective unions and associations to monitor the economic exploitation of the works which they create or in which they participate;
XXIX - the law shall ensure the authors of industrial inventions of a temporary privilege for their use, as well as protection of industrial creations, property of trademarks, names of companies and other distinctive signs, viewing the social interest and the technological and economic development of the country; **Federal Constitution of Brazil of 1988 (official translation).**

to the marketing of intellectual property in a systematized fashion, using a simple and straightforward language.

1.3 Who is it for?

This handbook is intended to be used by businesspeople, entrepreneurs, innovators, researchers, artists, inventors and all those with an interest in acquiring introductory knowledge on inherent aspects of business management involving protection and marketing of intellectual property assets.

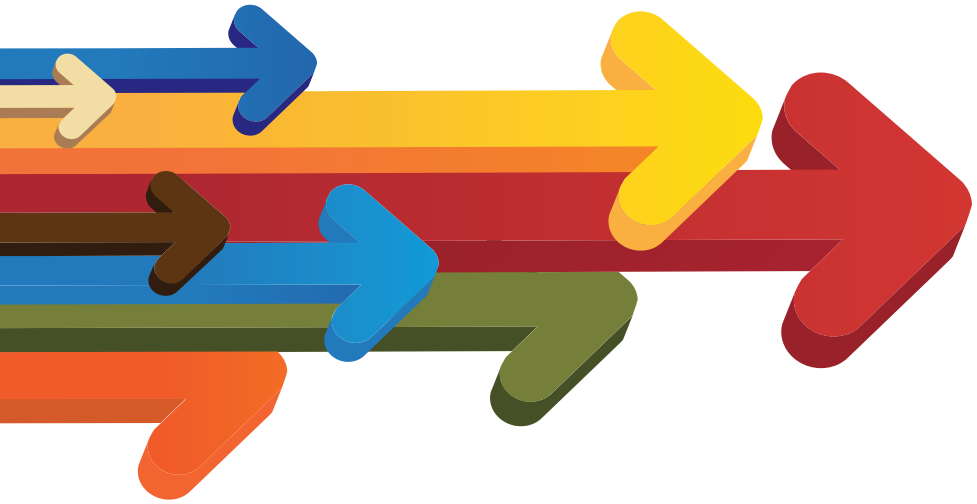
WIPO is a specialized agency of the United Nations Organization (UN) set up in 1967 with the mission of developing a balanced and accessible international intellectual property system designed to reward creativity, stimulate innovation and contribute to economic development and to safeguarding public interests.
The INPI is a Brazilian federal quasi-governmental agency established in 1970 and linked to the Ministry of Development, Industry and Foreign Trade that is in charge of processing all procedures related to the application for, granting and negotiation of industrial property in Brazil.

1.4 Focus

This publication is meant to be used as a source of strategic information by its target audience, which has expressed an interest in turning intellectual property into marketable products while ensuring the recognition of their rights and of those of others. Emphasis was given to topics described as most relevant by entrepreneurs, i.e. topics related to critical aspects of innovation, including protection- and marketing-related topics.

This guide isn't intended to replace the advice of the National Institute for Industrial Property (INPI) or of professional experts in this area. It is mainly based on relevant laws detailed in the ANNEX and on information provided by the World Intellectual Property Organization (WIPO), the INPI and the National Library Foundation (BNF) and on literature on the topic of innovation and intellectual property.

This publication was designed to be user-friendly and interactive, making it possible for its readers to easily browse through its content, search for and identify topics of their interest in a simple, easy and fast way, without necessarily having to read all its text sequentially.



PROTECTING INTELLECTUAL PROPERTY ASSETS

2

2.1 What intellectual property is

The convention of the World Intellectual Property Organization [WIPO] defines intellectual property as follows:

all rights related to literary, artistic and scientific works, performances of performing artists, phonograms, and broadcasts, inventions in all fields of human endeavor, scientific discoveries, industrial designs, trademarks, service marks, and commercial names and designations, protection against unfair competition, and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields.

Intellectual property falls under three main legal categories, as highlighted in Figure 1.

Figure 1 - Categories of intellectual property

An intellectual property right is an immaterial right resulting from human intellect and not from its workforce.

A copyright is focused on subjective interests, as it is basically derived from the authorship of intellectual works in the literary, scientific and artistic fields, such as: drawings, paintings, sculptures, books, conferences, scientific articles, music, films, photographs, software, among others, as regulated by Law no. 9,610/98. Copyrights involve a set of moral and economic rights of a creator of a literary, artistic or scientific work and they refer to all creations to which no requirements of absolute novelty and industrial application are applied.

Industrial property is more focused on business activity. It is applied to patents for inventions and industrial designs, trademarks, geographical indications, industrial secrets and repression of unfair competition, and it is regulated by Law no. 9,279/96.

An industrial property right consists of a set of rights and obligations related to intellectual assets involved in the activity of industrial enterprises or individuals. It ensures its holder exclusive rights related to:

- Manufacture;
- Marketing;
- Import;
- Use;
- Sale;
- Assignment.

KEY MILESTONES

1474: Year in which a letter patent was granted at the Republic of Venice;

1623: Year of passage of the Statute of Monopolies in England;

1790: Year in which the Patent Act was passed in the United States;

1791: Year in which the Chapelier Act was passed, revoking the privileges of corporations of trades and establishing the freedom of industry in France;

1809: Year in which a Judicial Writ was issued by D. João VI on invention privileges in Brazil;

1883: Year of signature of the Paris Convention for the Protection of Industrial Property (CUP);

1886: Year of signature of the Berne Convention for the Protection of Literary and Artistic Works;

1994: Year of signature of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) of the WTO.

Sui generis protection is applied to a range of items, from integrated circuit topography to cultivars, traditional knowledge and access to genetic heritage, with each type of protection being regulated by specific legislation.

2.2 Importance of intellectual property to a company

In the business world, works, knowledge, inventions, innovations and other expressions of human creativity are converted into private property and protected by law under the intellectual property system. As private property, they are marketed as intangible goods, which are referred to as intangible assets.

Disseminating intellectual property protection concepts and using instruments to ensure it are crucial for businesses and individuals to make sure that their creations, inventions, and artistic or literary works will have a financial return when they are marketed.

The Latin expression sui *generissis* used in the law to designate an object or situation that is the only of its kind.

In addition, in the context of the knowledge economy era, legally protected intellectual property has become an important asset for the competitiveness of enterprises wishing to optimize the value of these assets. However, for this objective to be achieved, an enterprise must know how to plan its business strategy and how to protect its current and future products, creating value for its innovative capacity. This process is very important for the development of nations at large, as its purpose is to:

- Promote international trade;
- Stimulate new production methods;
- Step up productivity;
- Generate wealth;
- Improve the quality of life;
- Foster creativity;
- Increase the possibilities of science and technology;
- Enrich the world of literature and of the arts.

Property right: this is the right of a natural or legal person to, within the limits of the law, own, use, enjoy and dispose of a tangible or intangible good, as well as to claim it from whoever holds it unfairly.

2.3 Mechanisms for protecting intellectual property assets

The right of ownership is extremely important in the business world, as it affords several competitive advantages to its holder. The ownership of goods of a material nature is a permanent right. The right to intellectual property, which is related to intangible assets, is in turn temporary, so that after a certain period of time enterprises can enjoy creations of the human spirit freely and free of charge.

Registering intellectual works as copyright is an optional decision. This procedure only presupposes the authorship of the work in question, as opposed to industrial property and sui generis protection, for which formal registration implies the granting of a right to the holder to use it with privileges.

Obtaining an intellectual property right

An extremely important aspect of the process of enterprises marketing intellectual property concerns the question of the constitution of ownership of the intellectual property to be legally protected, i.e. defining who is the actual owner of an intangible asset. Protecting intellectual property correctly is crucial to the successful commercial exploitation of a potentially innovative product, process or service. Thus, one must be very careful when

defining the instruments and the appropriate moment to seek legal protection. This decision should always be aligned with the company's business strategy.

Intellectual property and public domain

Cultural, technological or information goods - books, articles, musical works, inventions, utility models, industrial designs and others - whose economic rights have expired after a certain period of protection fall into public domain and can no longer be exclusively enjoyed by any individual or entity. These goods can then be freely used by everyone, as they became part of the cultural heritage of humanity.

Note that industrial property assets can fall into public domain before their protection term expires if the holder of the exclusive right to use them fails to pay (in Brazil, to the INPI), on the due dates, the required amounts to preserve it. Thus, enterprises must manage their intellectual property portfolio competently in order not to run the risk of prematurely losing their exclusive rights, which ensure them a differentiated market positioning.

Instruments for protecting intellectual property

The legal system for protecting intellectual property in Brazil provides for the fields shown in Figure 2, which will be dealt with individually below.

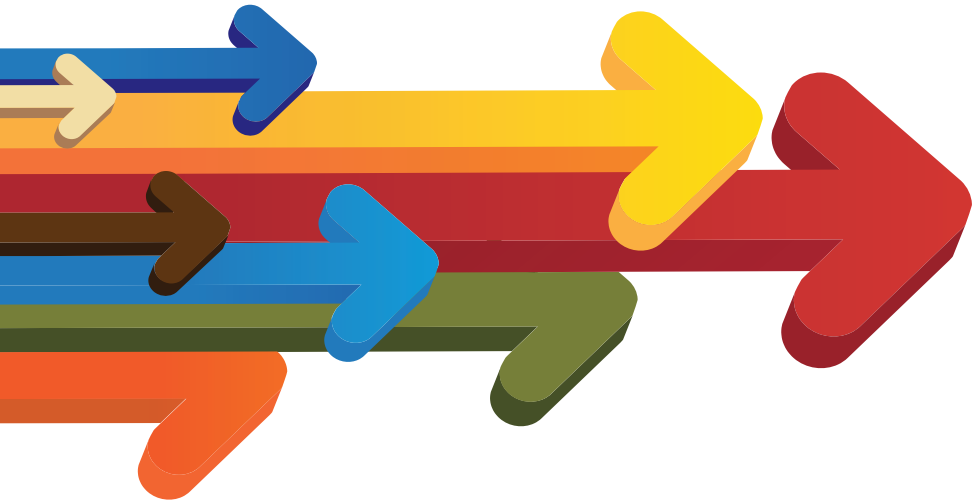
Intellectual Property	Copyright	Author's Right Related Rights Software
	Industrial Property	Trademark Patent Industrial Design Geographic Indication Industrial Secret & Repression of Unfair Competition
	Sui Generis Protection	Integrated Circuit Topography Cultivar Traditional Knowledge

Figure 2 - Types of intellectual property rights

As will be seen below, according to a company's business strategy, the same product can rely on several types of protection covering different aspects by using intellectual property instruments appropriately (see Figure 3). Due to its characteristic of identifying and differentiating products, a trademark is one of the most important and applicable protection mechanisms used in the business world. Using different options for protecting a product ensures an even stronger competitive edge, as the company can enjoy different types of exclusive rights on that good. By doing this, a company can prevent third parties from copying, manufacturing, using, offering for sale, selling, importing and exporting its product without its consent in all territories where it enjoys this protection.

Product "A"		
Trademark	Patent	Industrial Design
Product "B"		
Trademark	Patent	Business Secret
Product "C"		
Trademark	Patent	Circuit Topography
Product "D"		
Trademark	Software	Circuit Topography
Product "E"		
Trademark	Author's Rights	Related Rights

Figure 3 - Protection of products under different combinations of intellectual property rights Considerations on industrial property



INDUSTRIAL PROPERTY

3

3.1 Considerations on industrial property

In the light of industrial property protection rights, the main aspects involved in the fields highlighted in Figure 4 will be addressed.

Industrial Property	Trademark
	Patent
	Industrial Design
	Geographic Indication
	Industrial Secret & Repression of Unfair Competition

Figure 4 - Fields of industrial property protection rights

3.2 Patent protection

What is a patent?

A patent is a temporary property right granted by the State based on the Industrial Property Law to those who invent new products or processes or introduce improvements for industrial application.

It is the most commonly used instrument to protect technological innovation. It is crucially important, as the granting of this exclusive right ensures its holder the possibility of a return on the investment made in developing new products and industrial processes (Figure 5).

Figure 5 - Illustration of a patented product - can crusher

Only the holder of a patent can sell a product or apply a process that was patented and assign, for a fee or free of charge and on a permanent or temporary basis, the right to exploit his or her intellectual property. It is important to know that this entitlement is territorial. It is only valid within the country in which the protection was granted, i.e. a patent granted in Brazil only guarantees to its holder the right to protection within Brazil.

Many inventions result from considerable efforts and significant investment in R&D, but many incremental, simple and technically not expensive improvements can be legally protected by patents of great commercial value that are highly profitable for companies and their inventors. There are also complex innovative products, such as an automobile, that are constantly incorporating many inventions covered by numerous patents belonging to different holders into their manufacturing process.

What cannot be patented?
- anything contrary to morals, standards of respectability and public security, order and health
- discoveries, scientific theories, and mathematical methods;
- purely abstract concepts;
- commercial, accounting, financial, educational, advertising, raffling, and inspection schemes, plans, principles or methods;
- literary, architectural, artistic and scientific works, or any aesthetic creation;
- computer programs per se;
- presentation of information;
- rules of games;
- surgical techniques and methods, as well as therapeutic or diagnostic methods, for application to human or animal body; and
- all or part of natural living beings and biological materials found in nature, even if isolated therefrom, including the genome or germoplasm of any natural living being, and natural biological processes.

Who can be the holder of a patent?

A company, institution (legal person) or the inventor (individual) can apply for a patent with the competent agency in the country of interest. In Brazil, the institution in charge of granting patents is the INPI.

What can be patented?

Any invention whose subject matter is a new product or process, in all fields of technological application, provided that they meet the requirements of:

- novelty
  - being beyond the state of the art;
  - not being known and not having been disclosed;
  - not existing or being derived from nature;
- Inventive activity
  - not being obvious to one skilled in the area;
  - industrial application
  - being a product for consumption or a production process.

What types of patents are available?

Invention Patent (IP)

Refers to products or absolutely new and unique processes not derived from improvements in existing ones. Its maximum term is 20 years from the date of filing.

Invention is a concept derived from individuals exercising their creative capacity, leading to the solution to a specific technical problem within a given area of technological knowledge.

To be considered new, an invention or utility model must have some characteristics that are not known in the body of existing knowledge, referred to as state of the art. The state of the art comprises all knowledge accessible to the public before the date of filing of a patent application, by written or oral description, by use or in any other way, in Brazil and abroad.

Figure 6 - Illustration of an invention patent - barbed wire

Utility patent (UP)

Refers to improvements in existing products that improve their use or facilitate their production process. Its maximum term is 15 years from the date of filing.

Figure 7 - Illustration of a utility model - Pliers

An invention or utility model must involve an inventive activity that, in the opinion of a technical expert on the subject, is not obviously or evidently derived from what is already known. In the case of an invention, the inventive activity must be the result of more than a mere combination of known technical features. In the case of a utility model, foreseeable technical effects and obvious combinations are accepted, provided that the item to be patented shows a new form or arrangement that results in a functional improvement.

How to file a patent application

A patent application must be filed using a specific form provided by the patent office of the country in which protection is sought, which should contain the following information:

- Details of the applicant;
- Specification or disclosure;
- Claims;
- Drawings;
- Abstract;
- Proof of payment of the applicable fee

The specification of an invention patent must refer to a single invention or to a group of interrelated inventions comprising a single inventive concept. A utility patent, in turn, must refer to a single main utility model, which can include a plurality of distinct elements, provided that the technical and functional unity and bodily unity of the subject matter are preserved.

The specification section must contain the title of the application and point out the problem and the proposed solution, specifying the technical field to which it is intended. It must contain all the necessary details and information to allow a technical expert in the area to reproduce the object and it must point out the technical improvements introduced in the solution. It must mention the existence of prior applications (in Brazil or elsewhere) and provide information on objects or processes that are similar to the one for which the patent is being requested.

The wording of the claims constitutes the most commercially important element of the application document for the company. Its content defines the unique features over which the holder will enjoy an exclusive right if the patent is granted. They should be based on the specification and detail the technical features of the invention that are not found in existing products and processes.

Market-related factors that must justify the patenting decision:

- Is there a market for the invention? What are the alternatives available on the market and how do they compare to the invention?
- The invention is intended to improve or develop an existing product or process? It is consistent with the business strategy of the company?
- Are there potential investors willing to invest in the invention's development?
- In which countries/ markets is it necessary to protect the patent?
- What is the value of the invention to the company's business and to competitors? Is its protection commercially usable?
- Can the invention be easily subjected to reverse engineering?
- What is the probability of competitors inventing and patenting a similar invention?
- Is the expected revenue from the commercial exploitation of the invention consistent with the total costs of patenting?
- What is the extent of protection to be provided by one or more patents
- Will it be easy to identify violations of the rights conferred by the patent? Is there willingness to invest time and money to strengthen the invention's protection?

Figures and drawings such as charts, schemes, flowcharts and diagrams provide additional information without explanatory text that help one to understand the invention or utility model and must be referenced in the specification.

The abstract should provide a brief description of the application. It should not mention the merit or value of the invention or utility model.

The process involved in the granting of a patent is shown in Figure 8. The 18-month period from the filing of the application to its publication is referred to as period of confidentiality, which is determined by the Industrial Property Law.

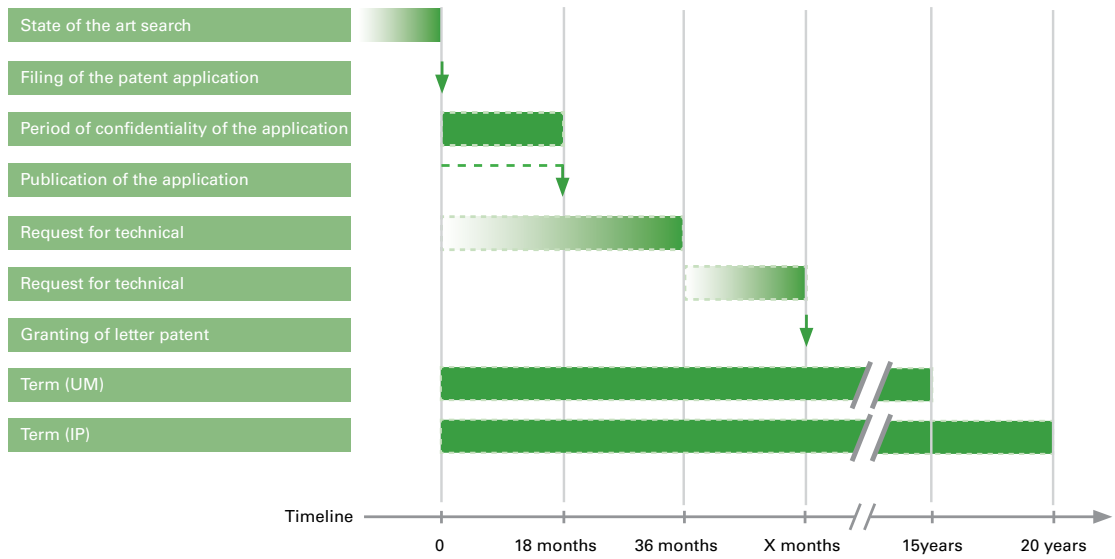


Figure 8 - Timeline of the process of obtaining a patent

What are the costs involved in patent protection?

Even if an invention is patentable, it will not always become a commercially viable technology or product. Thus, before a patent application is filed, a careful analysis of all pros and cons is necessary, as the process for obtaining and maintaining a patent is expensive.

Just like matters related to communication and marketing activities, accounting and legal affairs need to be discussed with professionals in the respective areas, intellectual property-related issues must also be discussed with professionals who understand the specifics of the topic. The experts in this area are referred to as intellectual property agents. It is always advisable for companies to invest in specialized advisory when preparing a patent application. Besides helping with the technical description, these professionals can contribute to the appropriate wording of the claims to expand the coverage of possible variations of the invention related to the same inventive concept. Therefore, whenever possible, companies should rely on experts to prepare and monitor their application. This will contribute to lend greater legal certainty to the various business operations involved in the venture derived from the right of property over their intangible assets. This means that the costs involved in patent protection are not limited to the fees for filing a patent application with the patent office. Figure 9 provides a schematic view of the structure of costs involved in protecting industrial property assets.

Filing Cost	Payment of costs at the Patent Office (in Brazil, the INPI)
Professional Advisory Costs	Payment for professional services for drafting and keeping track of the processing of a patent application
Translation Costs	Payments for professional services that are only applicable when protection is sought in other countries
Maintenance Costs	Payment of annual fees for preserving the right granted by the patent office (in Brazil, the INPI)

Figure 9 - Schematic view of the composition of the costs of a patent

What are the obligations of a holder of a patent?

- Paying the required annual fees to the patent office (in Brazil, the INPI);
- Exploiting the patent commercially:

  - Directly - the holder of the right manufactures the product or uses the protected process in his or her company;

  - Indirectly - the patent holder licenses the right to manufacture the product or use the process to others.

How does one file a patent application abroad?

As mentioned above, a patent is valid only in the territory in which it is granted, but there are international agreements signed by Brazil that facilitate the process of securing protection abroad.

The Union Convention of Paris (UCP) ensures the right of priority (referred to as unionist priority) to those who file patent applications in countries that signed the convention, affording them the opportunity to file a corresponding application in all other member countries within a period of 12 months without any losses arising from acts that might occur during this period. An attorney must be appointed to represent the applicant in each of the selected countries. The priority claim must be made at the time of filing the application with the selected patent office (in Brazil, the INPI).

The Patent Cooperation Treaty (PCT), which is managed by WIPO, allows for a patent to be requested in several countries simultaneously through a single international application by indicating the countries of interest. This application may be filed with the INPI in Brazil, with the competent patent office in any of the chosen countries or even with the WIPO office in Geneva, Switzerland. After the initial filing stage, WIPO publishes the application internationally.

In Brazil, individuals, micro enterprises, educational and research institutes, public agencies and not-for-profit organizations are entitled to a 60% discount on the fees involved.
The intellectual property agent that represents the company before the intellectual property office of a country should have the necessary legal and technical knowledge of the process involved.
The Brazilian Association of Intellectual Property Agents [ABAPI] has a list of these professionals in Brazil, which is available at: <www.abapi.org.br>.
On its website, the INPI also provides a list of intellectual property agents and authorized offices.

Unionist priority for patents: when a patent application is filed in one's own country, the holder is entitled to claim priority in other member countries of the Paris Convention and is granted a deadline of one year to initiate the process in these other countries, without prejudice to the principle of novelty, as the date of the first filing is considered the valid date.

Under the PCT, the INPI became the international authority for preliminary searches and examinations before the WIPO in 2008, when Portuguese also began to be considered one of the official languages.

The filing of an international application is processed in two stages:

- The international stage is that of the preparation of an international search report and of the rendering of an opinion of patentability and of a preliminary examination report. These documents are intended to support the technical examination of applications by national offices and to help those who filed them to decide whether they should submit the application in the national phase or not;
- During the national phase, the applicant has a deadline of 30 months to file the application with the competent office of each country of interest in its respective official language.

The Brazilian patent system is based on the first-to-file principle i.e. the first to file secures the right if the patent is granted. The United States and some other countries apply the first-to-invent principle and the patent right is granted to the first one who developed the invention. Therefore, to prove priority of invention in any possible litigation, applicants are recommended to keep dated notes and evidence of the invention's development process.

What is the importance of patents for business?

The financial impact on the right of commercial exploitation that a patent brings to a company cannot be denied. Commercial operations to license these assets ensure the circulation of hundreds of billions of dollars globally every year.

Patents are vital to ensure the market share of companies that wish to grow on a sustainable and competitive basis. Relying on patent protection, companies have more time to develop and refine their inventions, resulting in better products, processes and services for consumers. For small and medium enterprises (SMEs), an innovative product legally protected by intellectual property rights can offer a unique opportunity to grow in the market. A consistent portfolio of intellectual property assets can also increase the value of a company in the capital market and for mergers and acquisitions.

High-tech companies can generate significant revenues from licensing activities. IBM, for example, had revenues of over US$1.5 billion in recent years from the licensing of technologies that were not marketed by the company to end customers for strategic reasons.

Experts in the area suggest that knowledge contained in patent databases throughout the world comprise 80% of all the available scientific and technology knowledge, meaning that they are the richest and most useful source of information for innovative companies. This fact also reinforces the major social role played by patents in the field of technological development, since competing companies can seek out new business opportunities and monitor technological trends in the market for the future.

Analyzing information contained in patents is a very important activity for innovative companies. The advantages of using technological information contained in patent databases include:

- They are a major source of information on competing companies;
- The possibility of becoming aware of and studying trends in fields of similar and complementary technologies to develop a comprehensive future scenario;
- Identification of a new technology that could threaten a company's competitiveness;

In its 2009 annual report, WIPO estimated that the granting of patents globally has increased at a rate of 1.6% and that the total number of patents granted and valid worldwide amounted to 6.3 million, while the number of filed patents applications amounted to 4.2 million (2007 data).

Desde 2008, en el ámbito del PCT, el INPI se convirtió, ante la OMPI, en autoridad internacional de búsqueda y examen preliminar, así como el portugués pasó a ser considerado uno de los idiomas oficiales.

Patent breaking is the popular term erroneously used to refer to the compulsory licensing procedure provided for in the Industrial Property Law [art. 68, Law no. 9,279/96] in exceptional situations, which include cases of abuse of patent rights or of economic power confirmed by the law through an administrative or judicial decision, public interest or national emergency declared by the federal executive branch. Compulsory licensing is used temporarily and on a non-exclusive basis and the circumstances of each case are considered in the arbitration of remuneration, compulsorily taking into account the economic value of the license granted, while the patent holder does not lose the right of ownership.

- Source for studies on a technology's state of the art;
- Prospecting for new business opportunities through technology purchase, sale and licensing operations.

There are patent databases that can be accessed free of charge, as well as many IT systems and specialized services through which a company can access technological information. Most of them involve the use of search engines based on user-defined keywords.

Patent - summary table

- Letters Patent
- Invention or utility involving new products and/or processes with industrial applicability.
- Industrial Property Law (LPI), no. 9,279/1996
- Novelty
- Inventive activity*
- Industrial application*
- Exclusive right to produce, use, sell and export in the country where protection was granted.
- Invention patent: 20-year term from the date of filing of the application
- Utility model: 15-year term from the date of filing of the application
- INPI - National Institute for Industrial Property, available at: <www.inpi.gov.br>.
- Machinery, equipment, chemicals, pharmaceuticals, food compounds, genetic improvement processes.

* Requirements applied to utility models

3.3 Protection by trademark

What is a trademark?

A trademark is a distinctive, visually noticeable sign that identifies and distinguishes products and services from other similar products and services from various sources.Trademarks are becoming increasingly important economic assets for companies and institutions.

In Brazil, the registration of trademarks is governed by the Industrial Property Law (IPL) and the INPI is the agency in charge of granting them. It is valid for a 10-year term that can be extended indefinitely at the request of the holder for equal and successive periods. It should be stressed that the registration granted by the INPI is valid only in Brazil.

Trademarks are legally protected and identified by the symbol ®.

Patent databases that can be accessed free of charge:

- Database of the National Institute for Industrial Property (INPI), available at: <www.inpi.gov.br>, where one can access abstracts of patents filed in Brazil;
- Database of the European Patent Office - EPO, available at: <www.ep.espacenet.com>;
- Database of the U.S. Patent Office, available at: <www.patents.uspto.gov - USPTO>;
- Google Directory of Patents, available at: <www.google.com/patents>;
- World patent database, available at: <www.freepatentsonline.com>;
- Database of the Japanese Patent Office - JPO, available at: <www.ipdl.inpit.go.jp/homepg_e.ipdl>.

The following items cannot be registered as a trademark:

- any sign contrary to moral and good customs or that can offend the honor or image of individuals or infringes upon the freedom of conscience, belief, worship;
- flags, coats of arms, official stamps and emblems of countries and international organizations;
- isolated letters, numbers and dates that do not have sufficiently distinctive features;
- colors and their names, unless arranged or combined in a unique and distinctive way;
- a signal that induces a false indication of origin, source, nature, quality or utility of the product or service to which the trademark is applied;
- a technical term used in industry and in the fields of science and art that has a relationship with the product or service to be distinguished.

In Brazil, there is no definition of trade dress, which is a term used to define the set of visual characteristics of a product or service.

Who can be a holder of a trademark?

A trademark can only be requested by an individual or legal person engaged in a legal and actual activity consistent with the product or service that the trademark is meant to distinguish.

After the certificate of registration is issued, the holder has the exclusive right to use the trademark nationwide and can prevent competitors from using similar signs that could confuse consumers. Unauthorized reproduction of a trademark can be prevented through lawsuits.

The owner of a trademark can authorize other people to use it free of charge or not under licensing agreements. The ownership of the registration or of the application can be transferred to another person. Such transfer must also be formally requested to the INPI.

The holders of a trademark cannot prevent marketers or distributors from using, along with the trademark of their product or service, their own trademarks in their promotion and marketing activities and they cannot prevent accessory manufacturers from using the trademark to indicate the destination of a product. In addition, they have no right to prevent the trademark from being mentioned in a speech, scientific or literary work or in any other publication, provided that this is done without any commercial connotation and without prejudice to its distinctive character.

What can be registered as a trademark?

A trademark registration is intended to protect products and services. To be registered, a trademark must be distinctive, that is, it must be sufficiently different from others to distinguish - unambiguously - products or services from other similar ones. The only limitation imposed for a registration to be granted is that the trademark must serve to protect products and services derived from the activity of an enterprise. This limitation is meant to prevent trademarks from being registered by individuals and companies that only want to sell them, that is, that have no plans to use the trademarks in their professional activities.

In Brazil, the Industrial Property Law does not provide for protection of sound, olfactory, tactile, and gustatory trademarks and neither for trade dress.

With the advent of the Internet, domain names have become a very valuable asset for companies to be present in the digital world promoting and selling their products and services globally. Although they are usually associated with a brand made, domain names are not seen as trademarks and therefore cannot be registered with the INPI.

In Brazil, the Brazilian Internet Steering Committee (CGI) has set up working groups and coordinates several projects in areas of fundamental importance to the functioning and development of the Internet in the country. The CGI created a civil, non-profit organization called Center for Information and Coordination of Dot BR that, as part of its activities, registers .br domain names (available at <www.registro.br>).

What are the types of trademarks?

A trademark can be registered for a product or service.

Figure 10 - Illustration of a product trademark

Figure 11 - Illustration of a service trademark

Product or service trademarks fall under two categories: collective trademarks and certification trademarks.

A collective trademark identifies that a certain product or service was originated in any company involved in a collective arrangement, such as a cooperative.

Figure 12 - Illustration of a collective trademark

A certification trademark is used to indicate that the relevant products or services comply with certain standards or technical specifications, such as the quality of its material or methodology and energy consumption standards, among others.

En Brasil no existe definición legal para la expresión *trade dress*, que es un término usado para definir el conjunto de características visuales de un producto o servicio.

A highly reputed trademark is one that is protected in all fields of activity [Art. 125, Law 9,279/96], as it is widely known by consumers in different segments and markets. Example: Coca-Cola®.

A notorious trademark is one that, by virtue of its prestige, goes beyond the limits of its sectoral or geographical market (Art. 126, Law 9,279/96). It thus enjoys special protection, regardless of having been previously filed or registered in the country, but its protection is restricted to its field of activity. Example: SENAI®.

Figure 13 - Illustration of a certification trademark

How are trademarks classified?

According to their aesthetic content, trademarks fall under three categories:

- Nominative Trademark;
- Figurative Trademark;
- Mixed Trademark.

A trademark can consist only of words and combinations of letters and numbers, including acronyms and neologisms. This type of trademark is referred to as nominative trademark.

Figure 14 - Illustration of a nominative trademark

A trademark can also be made up of drawings, symbols, images, graphics and geometric shapes. This type of trademark is known as figurative trademark. In this case, it can also include isolated letters and numbers.

Figure 15 - Illustration of a figurative trademark

A trademark that combines nominative and figurative elements is referred to as a mixed trademark.

Figure 16 - Illustration of a mixed trademark

Brazilian law also permits the registration of three-dimensional trademarks, which can take the form of the product in question or of its packaging (provided that they are distinctive), which can also contain nominative and figurative elements.

Figure 17 - Illustration of a three-dimensional trademark

How is a trademark registered?

The main steps involved in the registration of a trademark are the following ones:

- Prior search;
- Filing of the application for registration;
- Publication and examination of the application;
- Issuing of the certificate of registration.

Prior search is not a compulsory requirement, but it is highly advisable to carry one out before filing an application for trademark registration. This procedure makes it possible for a company to check whether the desired trademark was already granted (in the desired category) to another person or entity or not.

The INPI has adopted an international classification of products and services for organizing trademark applications and registrations called Nice Classification. This classification can be used for prior search, as it is a mandatory piece of information to be included in the registration document.
More information is available at: <www.inpi.gov.br>.

In a prior search, one should look for identical and similar signs or variations in the chosen trademark (like different spellings and phonetic similarities) used to characterize both products and services as identical and products and services in related fields of activity that could confuse consumers in relation to the origin of such products or services.

Just like with a patent application (see item 3.2.5 of this publication), the filing company should rely on specialized professional advice to carry out a thorough search of already registered trademarks to avoid refusal of the registration application. The professional hired for this purpose can perform searches in the INPI and in many other databases, issue an opinion on the registrability of the trademark and, if necessary, draft the registration application, monitor its processing systematically for any orders (which require specific and legal knowledge) and respond to them within the set deadlines, so as to avoid irreversible refusal of the registration.

A trademark registration is granted to the first one to request it, except if the trademark was used in Brazil for at least six months. Based on the right of precedence, another person can file an opposition against the new application. The INPI analyzes the opposition and checks who has been using the trademark for a longer period and evidence submitted by the parties.

An application for trademark registration must refer to a single distinctive sign and must contain:

- The application itself;
- A copy of the trademark;
- An indication of the category of products or services under which the trademark is to be protected;
- A specification of the products or services;
- Proof of payment of applicable fees.

In Brazil, each application is limited to a single category. Therefore, if a trademark is requested for products or services falling under different categories, an application for each category will have to be filed.

The registration application can be filed directly with the INPI or through the Internet using a system called e-Marcas, which is available at: <www.inpi.org.br>.

An application is disseminated electronically in the Industrial Property Magazine (RPI), which is published weekly and is available at: <www.inpi.gov.br>.

A trademark registration application is examined by a professional examiner, who checks previous records and applications for identical or similar trademarks that could confuse consumers.

A certificate of registration is issued after an application is approved and published in the RPI and all applicable fees have been paid.

What is the difference between the registration of a business name and that of a trademark?

Many people believe that the trade name of a company can be automatically protected as a trademark upon the registration of the company and of its business name with the registrar of companies. This is a frequent erroneous understanding. One must understand the difference between business or trade names and trademarks. A trade name is the name of a company, whose protection is secured with the board of trade, which is a state-level entity linked to the National Trade Registration Department (DNRC, available at: <www.dnrc.gov.br>), and also to the Ministry of Development, Industry and Foreign Trade (MDIC). The corporate name of a company in Brazil often ends with Ltda., S/A, ME, S/S or similar abbreviations that indicate the type of its corporate constitution. Thus, for

example, the portfolio of trademarks of a company whose name is registered with the board of trade as Natura Cosméticos S/A involves the following: Natura®, Natura Ekos®, Natura Erva Doce®, among other products.

What are the costs involved in registering a trademark?

From a financial standpoint, the composition of the costs involved in registering and maintaining a trademark is the same as that involved in processing a patent application (Figure 9), i.e.:

- Filing cost;
- Costs of professional expert advice;
- Translation costs;
- Maintenance costs.

What are the obligations of a holder of a trademark?

Using the trademark in the products or services specified in the certificate for a term of five consecutive years from the date of granting.

A trademark can lose its registration and validity for lack of use, which is referred to as forfeiture.

How can a trademark be protected abroad?

The protection of trademarks is restricted to the country in which they were registered. For this reason, it is of utmost importance to file applications in countries to which the company intends to export trademarked products or services, grant manufacturing licenses or sell its products and services. What this means is that the strategy to protect this asset must be aligned with the company's business strategy for the markets (countries) in which it will be operating.

If the first filing is in another country and the company has plans to file the same application in Brazil, it must claim unionist priority to ensure a six-month deadline, without prejudice resulting from acts occurring during this period, to file the application with the INPI.

If a company wants to protect a trademark in member countries of the European Community, it can file an application for this purpose with the Office for Harmonization in the Internal Market (OHIM). A registration granted by the OHIM ensures protection in all countries of the European Community.

The Madrid Protocol is another instrument that facilitates obtaining and maintaining trademark registrations abroad. This Protocol is an international treaty to which Brazil is not a party yet. Through a management scheme centralized by WIPO, it allows for applications to be sent to any of the participating countries and for the main fees charged in each country for processing a single application to be paid.

The possibility of claiming unionist priority for trademarks is provided for in the UCP and also contemplated in Brazil' Industrial Property Law. An application for trademark registration filed in a country that has an agreement with Brazil, or with an international organization, that has the effect of a national filing is entitled to a right of priority for a six

What is the economic and business importance of a trademark?

From the viewpoint of business management, a trademark transcends marketing operations and is related to other key aspects of a business. These aspects include attracting and retaining talents, perceptions of analysts on the business, the company's relationship with vendors and their leverage and their media coverage.

A trademark symbolizes some features of the product manufacturer or service provider

Branding is the work of building and managing a trademark in the market. It is carried out through actions that position and disseminate this asset in the market beyond its economic nature. As a result, a trademark becomes part of the culture and begins to influence people's lives.

Branding es el trabajo de construcción y gestión de una marca ante el mercado. Su ejecución consiste en acciones que posicionan y divulgan este activo en el mercado más allá de su naturaleza económica. Así, la marca pasa a formar parte de la cultura e influencia la vida de las personas.

for consumers, such as their reputation, quality control, investment in research and development, product design quality and qualification of the professionals who provide the service. It allows consumers to associate these features to the products and services identified by the trademark.

Consumers who are satisfied with a certain product or service will buy or use it repeatedly. For this to be possible, they must be capable of differentiating products and services that are identical or similar to those offered by competitors. Thus, the key role played by a trademark in the business and advertising strategies of an enterprise is that of making it easier for consumers to identify and differentiate the product or service they desire.

Through a consistent branding strategy, a legally protected trademark that is carefully selected and developed in the market becomes an important asset for a company. For some of them, it can even become its most precious asset. In the 2009 Interbrand ranking of the most valuable brands in the world, Coca-Cola® was once again ranked first, valued at US$68,734 billion; IBM® was ranked second, valued at US$60,211 billion; and Microsoft® was ranked third, with assets associated with the trademark valued at US$56,647 billion. In the Latin American market, of the 10 most valuable brands in 2008, five are Brazilian brands, which together were valued at approximately US$ 26 billion (Itaú®, 1st; Bradesco®, 2nd; Banco do Brasil®, 3rd; Petrobras®, 7th; Unibanco®), 9th. This happens because large investments in communication lead consumers to associate a symbol with a company's reputation, image and set of qualities that they value. These customers are willing to pay more for a product that bears a brand they like. Thus, having a trademark that conveys a positive image and reputation in the market ensures an advantageous position to a company in relation to its competitors.

The advantages of registering a trademark include:

- It makes it possible for consumers to differentiate similar products;
- It makes it possible for companies to promote their portfolio of products and services;
- It's important for marketing purposes and the basis for establishing the image and reputation of a product line on the market;
- A trademark can be licensed and provide an alternative source of revenue through payment of royalties;
- It is a key element in franchise agreements;
- It can be a high-value commercial asset;
- It encourages entrepreneurs to invest in maintaining or improving the quality of their products;
- It can be useful for obtaining financing.

Trademark - summary table

Title granted

- Trademark Registration Certificate

Object of protection

- Distinctive signs of a product, company or service

Applicable legislation

- Industrial Property Law (LPI), n° 9,279/1996

Requirements

- Compatibility of the brand of the products and services with their respective fields of production or marketing of the enterprise or organization.

Right ensured to the holder

- Exclusive use of the trademark in a specific field of activity defined nationwide in the country where protection was granted.

Term

- 10 years from the date of issue of the registration certificate, which can be renewed for equal periods indefinitely.

Where to apply for a trademark in Brazil

- INPI - National Institute for Industrial Property, available at: <www.inpi.gov.br>.

Examples

- Names of products, services, companies, logos.

3.4 Protection for industrial design

What is an industrial design?

It is a type of protection of industrial property related to the design of the ornamental plastic form of an object or an ornamental arrangement of lines and colors that can be applied to a product, resulting in a new and original visual in its external configuration. It can have three-dimensional features, such as the shape or surface of an object, or two-dimensional features, such as patterns, lines or colors. The design must be a model that can be reproduced by industrial means. In Brazil, the INPI is the agency that grants the registration, with a term of up to 25 years.

Industrial designs are important for a wide variety of products in different industrial segments, such as in the automotive, furniture, electronics, clothing and footwear industries, among others.

The term "industrial design" has been used synonymously with the term design. For enterprises, design usually includes the development of functional and aesthetic features of a product, taking into account aspects such as marketing, production costs, ease of transportation, storage, repairing and recycling. It is worth noting, however, that industrial design, as an industrial property right category, refers only to the ornamental or aesthetic nature of a finished product. It refers to the external form of a product and is distinct from the technical or functional aspects that it can provide, even if they imply innovations.

Industrial designs are also present in the creation of packaging, containers and product presentation. These elements, along with the branding strategy of an enterprise, ensure major differentials by creating a desirable visual impact for product identification at the point of sale (Figure 18).

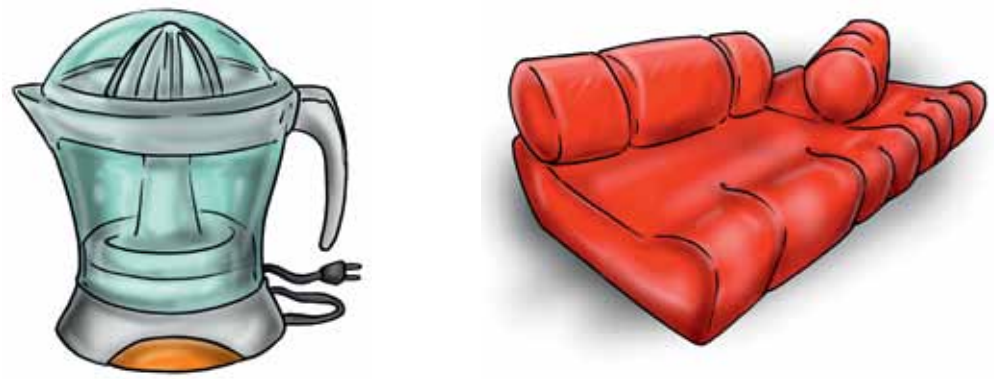


Figure 18 - Illustration of products with industrial design

An industrial design is considered new when it is not comprised by the state of the art, meaning that no other existing identical or very similar design is known by use or by any other means before the date of filing in Brazil or abroad. It is considered original when it shows a distinctive visual configuration in relation to other previous objects.

What distinguishes an industrial design from an artistic design?

An industrial design refers to the design of a product whose manufacturing can be replicated, while artistic design is an aesthetic expression that cannot be applied to industrial purposes.

What is protected by industrial design?

Industrial design registration protects the external configuration of an object and not of its functioning. This protection is valid only within the territorial limits of the granting country (principle of territoriality of the Paris Convention). Therefore, a company must apply for protection in each country to which it has plans to export a design or grant a manufacturing or sale license.

To protect an industrial design through a registration system, it is crucial for a company to keep the design strictly confidential before application. Therefore, if it needs to show the design to others before filing, it should include confidentiality clauses in written contracts to clearly indicate that the design is confidential.

What can be registered as industrial design?

As a general rule, a design has to fulfill the following conditions to be registered:

- Novelty;
- Originality;
- Industrial use or application.

How to register an industrial design

Before filing an application for registration, a company should perform a search in a design database to determine whether the industrial design in question is new and unique.

A prior search is not mandatory, but it is highly advisable to perform one before filing an application for industrial design registration. However, it should be noted that the existence of a previous application will not be checked during the examination of a registra-

tion application. A company can be granted a registration even if a previous application was filed by third parties for a similar design. This situation can lead to the subsequent annulment of the registration in case of litigation. This is why it's so important to perform a prior search.

According to the provisions of the Industrial Property Law, an industrial design application must contain:

- The application itself;
- Specification, if applicable;
- Claims, if applicable;
- Drawings or photographs;
- Field of application of the object;
- Proof of payment of the applicable fees.

Upon filing an application in Brazil, a company can, according to its business strategy, request the INPI to keep the application confidential for a period of 180 days from the date of filing, after which it will be published in the Intellectual Property Magazine (RPI) and the registration will be granted simultaneously, with the respective certificate being issued.

Again, hiring an expert professional to systematically monitor the processing of the application and orders and to draw up responses as required within the set deadlines is recommended. This procedure is intended to avoid denial of an application for industrial design registration.

What are the costs involved in applying for protection for an industrial design?

The cost structure involved in applying for protection for an industrial design is equivalent to the one mentioned in the section on patents (Figure 9).

What are the obligations of a holder of an industrial design right?

In order to keep an industrial design protected, the holder of the right on it must pay the applicable five-year fees regularly.

What is the economic importance of industrial design for companies?

As it becomes increasingly competitive, the market is generating an excessive number of similar products with the same technology, the same price, the same performance and the same characteristics. As a result, technological differences between similar products made by different manufacturers tend to disappear. In today's competitive environment, industrial design has become an important asset for modern enterprises to differentiate their products from those manufactured by other companies.

Innovative companies want their products to enjoy a good image among consumers. Therefore, they invest time and money in the design of these products with the aim of making them more attractive in the market. This effort can ensure the following competitive advantages to these organizations:

The International Classification of Industrial Designs, known as the Locarno Classification, which contains more than 6,000 indications of differentiated items, is an important tool to access desired information. In Brazil, these data can be found on the INPI's website (available at: www.inpi.gov.br>).

The application for industrial design registration must refer to a single object, with plurality of variations being permitted as long as they are intended for the same purpose and keep the same predominant distinguishing feature among them, with each application being limited to 20 variations at most. Applications containing configurative variants must necessarily include a specification and a set of claims.

- Development of a visual appeal for each specific market segment. Example: watches for different age groups;
- Creation of a niche in the market to differentiate their products from those made by competitors. Example: luxury and economy cars;
- Strengthening of brands. Designs are also often exploited in combination with the trademarks of a company to enhance their distinctive character. The packaging of Coca-Cola® is a classic example of success.

Decisions related to "how, when and where" to protect designs have a major effect on other business management areas. Therefore, it's crucial to analyze, in the light of the company's overall strategy, these issues related to the protection of industrial designs, which may involve:

- The choice between creating the design in-house or outsourcing the service;
- Determining the appropriate time for using a new design for the first time through advertising, marketing or its presentation to the public during an exhibition;
- Selecting potential export markets;
- Deciding when and how to license the design for commercial exploitation by other companies.

O desenho industrial é considerado novo quando não está compreendido no estado da técnica, que quer dizer que nenhum desenho idêntico ou muito similar é conhecido como já existente, por uso ou qualquer outro meio, antes da data de depósito do pedido, no Brasil ou no exterior.

Ele é considerado original quando dele resulta uma configuração visual distintiva, em relação a outros objetos anteriores.

Industrial design - summary table

Protection granted

- Industrial Design Registration Certificate

Object of protection

- Protecting the aesthetic appearance of a product.

Applicable laws

- Industrial Property Law, no. 9,279/1996

Requirements

- Being a new creation, presented in a clear and detailed way, with industrial application.

Uma ferramenta importante para acessar a informação desejada é a Classificação Internacional de Desenhos Industriais, conhecida como a Classificação de Locarno, que contém mais de seis mil indicações de artigos diferenciados. No Brasil esses dados podem ser encontrados no *site* do INPI (disponível em: www.inpi.gov.br>).

Right granted to the holder

- Exclusive right on the design throughout the national territory and third parties prohibited from producing, offering, importing, exporting or selling it in the country in which protection was granted.

Term

- 10 years from the date of filing, renewable for three successive periods of 5 years (for 25 years at most).

Where to apply in Brazil

- INPI - National Institute for Industrial Property, available at: <www.inpi.gov.br>.

Examples

- Furniture items, packaging, vehicles, shoes, stamping.

3.5 Protection by geographical indication

What is a geographical indication?

It is the name given to a type of industrial property protection that refers to products from a specific geographic area (country, city, region or locality in their territory) that became known for possessing qualities or a reputation related to their extraction, production or manufacturing methods. It also refers to the provision of certain services.

What are the types of geographical indication?

Geographical indications (GIs) are classified as follows:

- Designation of origin;
- Indication of origin.

An indication of origin (IO) is the geographical name of a country, city, region or locality in their territory that became known as a center of extraction, production or manufacture of a product or for the provision of a certain service, but it does not refer to specific natural features of those locations (climate, geography, etc.) or to human features involved in producing the product. Some examples of IO in Brazil:

- "Vale dos Vinhedos" for red, white and sparkling wines;
- "Paraty" for sugarcane rum (*cachaça*) and typical bluish blended spirits;
- "Região do cerrado mineiro" for coffee;
- "Pampa gaúcho da campanha meridional" region for beef and derivatives;
- "Vale dos Sinos" for finished leather;
- "Vale do submédio São Francisco" for table grapes and mangoes.

Who can apply for a geographical indication?

The representative body of the community involved in the production of the good or provision of the service in question can apply for protection. When there is no such plurality of entities, a single producer or service provider operating in the region can apply for geographical indication directly.

What can be protected by geographical indication?

Both the name of the geographical area and the product or service produced in it are eligible for protection under this type of industrial property right. Products protected by geographical indication can be identified by seals of origin on their packaging (Figure 19).

La solicitud de registro de diseño industrial tendrá que referirse a un único objeto, permitida la pluralidad de variaciones siempre y cuando se destinen al mismo propósito y mantengan entre sí la misma característica distintiva preponderante, limitando cada pedido al máximo de 20 variaciones. Los pedidos que contengan variantes de configuración deben necesariamente incluir el informe descriptivo y el cuadro reivindicatorio.

Figure 19 - Illustration of the Vale dos Vinhedos geographical indication seal

How can one apply for geographical indication?

According to the conditions set out in the Industrial Property Law, applications for geographical indication must contain:

- Details of the applicant;
- Type of the intended geographical indication;
- Name of the geographical area;
- Nature of the object of protection (product or service);
- Delimitation of the geographical area;
- Object of the product or service produced in the delimited area;
- Proof of payment of applicable fees.

In addition to the documents and information mentioned above, the application must provide specific information and evidence according to the kind of geographical indication applied for, namely:

For designation of origin (DO):

- Description of the qualities and characteristics of the product or service that can be exclusively or essentially attributed to its geographical environment, including natural and human factors;
- Description of the process or method through which the product or service is obtained, which should be local and constant.

For indication of origin (IO):

- Evidence that the location gained renown for the extraction, production or manufacture of a product or service. For this purpose, newspaper and magazine stories, scientific articles, books, songs and other media can be used.

What are the economic advantages of geographical indications?

Geographical indications are perceived by consumers as benchmarks related to the origin and quality of products. It is a type of protection that is used to promote products and services worldwide, mainly in Europe. As mentioned above, many of them have gained high reputation.

In Brazil, the protection of geographical indications is still little known in business circles. However, as mentioned above, some communities such as the Association of Producers of Fine Wine of Vale dos Vinhedos (Aprovale) in the state of Rio Grande do Sul and the Council of Associations of Coffee Growers of the Cerrado (CACCER) in the state of Minas Gerais were granted the registration. This registration increased the value of their products significantly and, as a result, their performance on the market.

Geographical indication - summary table

Protection granted

- Certificate of Geographical Indication Registration

Object of protection

- Identifying, by use, a product from a specific region or country.

Applicable laws

- Industrial Property Law (LPI), no. 9,279/1996

Requirements

- Proof of the origin and characteristics of the product

Right granted to the holder

- Guarantee of origin

Term

- Indefinite. Doesn't expire by use.

Where to apply in Brazil

- INPI - National Institute for Industrial Property, available at: <www.inpi.gov.br>.

Examples

- Wine, cheese, crystals, coffee, fruits, services.

It is considered a crime to falsely attach a Geographical Indication to products or services whose origin is not the one indicated, harming their legitimate producers and consumers. They wouldn't be buying a genuine product with the expected specific qualities and characteristics.
False use of geographical indications by unauthorized parties can occur in many different forms of communications with consumers, even if accompanied by expressions such as "kind", "type", "system", "similar", "substitute", "identical" or the like.

3.6 Industrial secret and protection against unfair competition

What is unfair competition?

It should be highlighted, that disseminating, using or exploiting knowledge, information or data that are public or apparent to one skilled in the art are not considered crimes under the Industrial Property Law.

It is a crime provided for in the Industrial Property Law, which includes the act of one who discloses, exploits or uses, without authorization or by unlawful means, confidential information or data (trade secret) for industrial or commercial purposes or in services. Unfair competition also includes access to information through a contractual or employment relationship, even after the end of the contract.

Obtaining sensitive information by fraudulent means (industrial espionage) or by breaching an agreement [non-disclosure agreement] constitutes an act of unfair competition.

Trade secrets can include lists of clients, business plans, drawings, internal price and discount policies, recipes and formulas, special processes, methods, techniques, R&D results, etc.

A patent and a trade secret can complement each other, since many inventions are kept secret until a company decides to file a patent application to protect it.

What is a trade secret?

Natural or legal persons have the possibility of preserving the confidential nature of information and preventing information that is legally under their control from being disclosed, acquired or used by unauthorized third parties without their consent, provided that such information:

- Is secret in the sense that it is not generally known or readily accessible to persons in circles that usually deal with the kind of information in question;
- Has a commercial value for being secret;
- Has been the subject matter of reasonable measures, under the circumstances, by the person legally in control of the information, to keep it secret.

A factory or industrial secret is widely used in sectors marked by intense technological research and development activities, such as in the information and communication, petrochemical, pharmaceutical, beverage, food and cosmetics industries. However, enterprises that manufacture traditional products also use trade secrets to remain competitive in their markets (Figure 20).

Figure 20 - Illustration of a product protected by trade secret - Soft drink formula

What are the advantages of trade secret protection?

Using the commercial strategy of protecting intangible assets involving trade secrets ensures exclusive rights on them to a company, but not a property right on that intellectual good. Some advantages of using industrial secrets as mechanisms of protection include:

- No costs are involved for registering them;
- There is no need to disclose their technology to the public, as is done with a patent;
- The duration of the monopoly is unlimited (for as long as the secret exists);
- The effect is immediate.

What is know-how?

Know-how is a manufacturing art. It involves a combination of experiences, knowledge and skills to produce a good. Know-how is made up of:

The technical skills of a professional, worker or craftsperson that are untransferable and inseparable from the person who has them.

The portion of an art that a technical professional teaches to a learner, which through his or her personal assistance can be passed on under a technology transfer contract.

The essence of know-how lies in technical knowledge added to knowledge comprised in the state of the art.

What is the economic importance of a trade secret and of know-how?

Virtually all enterprises keep confidential information about their business. Thus, within this context, the business world can be divided into two main groups:

- High-tech companies;
- Traditional companies.

Companies operating in the automobile and electronics industries and even in the financial sector, for example, depend on the constant advances in technology and production processes usually observed in these areas. These corporations keep their secrets under lock and key. Usually, these secrets consist of crucial information about a new project that once marketed will give the company an advantage over the competition as a result of allowing it to enter the market or to compete in it on favorable terms. If competitors get hold of such information, a company might be forced to launch a product before the scheduled date, preventing it from securing a desired market leadership position or making it difficult for it to so. With such competition from other companies, price becomes the only differential of a product. For technology-intensive companies, confidentiality is focused on production processes, marketing strategies and innovative design development. Since everything is quickly imitated in these sectors, companies operating in them must make every effort to keep their secrets and be a pioneer in launching their products, so as to increase the chances of having the expected return on their investments.

Paradoxically, companies that market traditional products face the same challenges as those faced by technology-intensive ones to keep their industrial secrets. This group of companies, which hold keep their formulas secret for decades, continue to compete in the market precisely because of their ability to offer classic products prepared according to traditional and original formulas.

Contracts involving know-how can be more important economically important for a company than a patent license. When know-how is transferred, in addition to creating a new industrial production capacity, its holder also develops a concession relationship in which the supplier becomes a vital link in controlling the productive or competitive capacity of the contracted company. Besides, the duration of a contract of this kind can be longer than the term of a patent, which in some cases can represent a huge advantage for the company that holds the know-how.

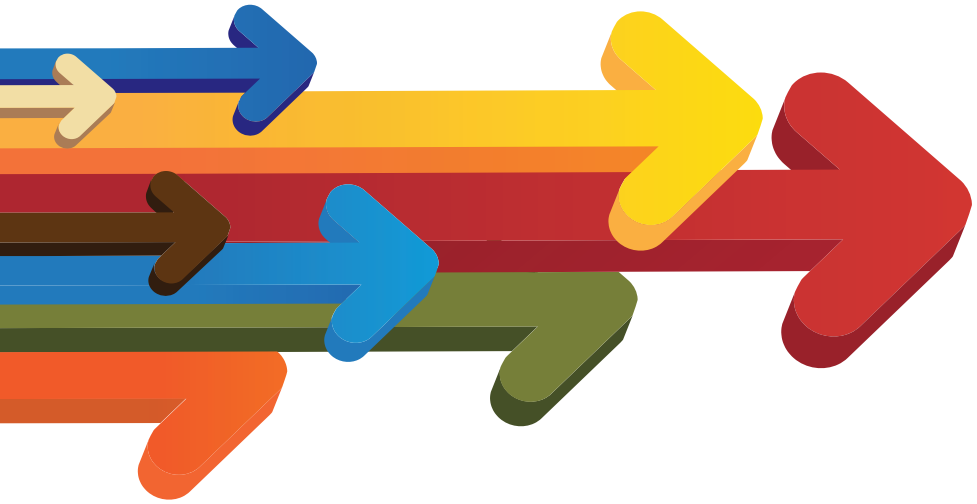
The value of know-how lies mainly in its inaccessibility: its valuation takes into account the business opportunity resulting from having access to it. Know-how is not an undecipherable formula, but a production model. The implementation of a know-how contract involves the reproduction, within certain limits, of a specific production structure existing in the offering company by the receiving company.

Some disadvantages of this form of protection are the following ones:

- The secret can be discovered by others by using reverse engineering;
- The secret can be stolen;
- It requires confidentiality agreements that are often costly with those who really need to know the secret to manufacture something.

Studies carried out in the US show that in 80% of all cases of leakage of sensitive information from companies, the information had been leaked by their employees or former employees.

Coca-Cola, Häagen-Dazs ice creams, Nescafe, the perfume Chanel No. 5, Johnnie Walker whisky, and the formula of the soft drink Guarana Antarctica are examples of valuable trade secrets.



COPYRIGHT 4

4.1 Copyright

Copyrights involve the main aspects that will be addressed below in the fields highlighted in Figure 21.

Copyright	Author's Right
	Related Rights
	Computer Program

Figure 21 - Fields of copyright protection in Brazil

What is a copyright?

It is a right basically derived from the authorship of intellectual works in the literary, scientific and artistic fields, such as: drawings, paintings, sculptures, books, conferences, scientific articles, newspaper stories, songs, films, photographs, software, among others.

The Berne Convention of 1886, which is the international framework for the protection of literary and artistic works, provides for a criterion of reciprocity between its signatory countries for the purpose of ensuring the recognition of the authorship of works created by nationals of any member country or those who first published their work in one of the signatory countries. Thus, in addition to being protected in a national territory, a published work is simultaneously protected in the territories of all signatory countries of the Berne Convention, including Brazil. The definition of what a publication is varies according to the nature of the work and it assumes that it was made available to the public.

Copyright in Brazil is regulated by Law no. 9,619/98. This law protects author's rights, related rights and computer programs (Figure 21).

It should be clarified that a copyright does not protect ideas in isolation, but rather and only the form of expression of an intellectual work. This means is that the form of a literary or scientific work is the written text; of the oral work, the word; of the musical work, the tonality; and of the figurative work of art, the design, the color and the volume, etc. Therefore, to be copyrighted, a work must necessarily have a tangible medium.

What are the benefits of copyrights for society?

People are exposed to culture on a daily basis without even being aware of where it comes from. People read newspapers, magazines, books, listen to music and radio programs, study with textbooks and scientific articles, use computer programs, watch television, go to movies, theater, concerts, shows and visit art galleries. All of these products of creativity are designed to benefit society, enrich culture and contribute to the development of human beings. Therefore, these intellectual assets are created for education and recreational purposes, improving the quality of life for all.

Creative works are not only meant to be enjoyed individually. On a broader scale, as a set they constitute the cultural heritage of a people and are part of the identity of a nation. Each person has the right to be proud of a great actor, musician, scientist, writer, journalist, painter, and of their successful works inside and outside his or her country. A strong cultural heritage can also contribute to tourism in a region through music, movie and

dance festivals, book and art exhibitions and other attractions made possible by human creativity.

The Copyright Act allows the author of a work to receive credit for it and to be remunerated for his or her creativity. Protection of these rights provides the foundation for authors to continue to create their works and, together with the entire production chain, receive fair financial reward for them. This virtuous cycle promotes human creativity and generates wealth for society.

In general, the economic contribution of the so-called cultural industry to a country's growth and development is considerable. The impact of the value added by the cultural industry is estimated at 3-6% of a nation's gross domestic product (GDP). This segment is growing faster than the general rate of the economy, apart from creating an increasing number of new jobs.

What is the economic importance of copyright?

The importance of copyrights can be confirmed by data provided by the UN, which estimates the global financial turnover of cultural products at US$1.3 trillion or 7% of the world GDP. Between 1980 and 1998 alone, this figure leaped from US$95 billion to US$380 billion. Creative industries have been growing more than other sectors of the world economy and they are likely to grow at an average rate of about 10% a year in the coming decades. However, this is a potential mainly restricted to developed nations, as about four-fifths of the economic flow of cultural goods and services is represented by little more than ten countries.

Today, cultural activities constitute one of the most dynamic sectors of the world economy, and they have significant and increasing impacts on income and employment generation and on the formation of human capital in enterprises. It is the fastest growing sector in many countries and the one that generates more jobs and pays the highest salaries, exceeding more traditional sectors of the economy. In addition, because they are based on creativity, ideas, concepts and values and generate intellectual property, cultural goods and services are at the epicenter of the "knowledge economy" and are thus one of the most attractive segments of today's economy.

According to the Report on Copyright Industries in the US Economy (IIPA, 2006), companies primarily responsible for the creation, production, distribution and exhibition of products that include: software, feature films, TV programs and video games, books and music (referred to as "core" industries in the copyright area) continue to grow at a fast pace in the US economy. The report shows that the creation of knowledge-based, intellectual property-intensive goods and services plays a key role in the economic growth of that country.

Between 2004 and 2007, the annual growth rate of the copyright industry was more than twice that of the growth of the US economy as a whole. More than any other, this industrial sector has been contributing positively to the real growth rates observed in the United States: in 2006 and 2007, the so-called core copyright industry contributed 22.74% to the real growth registered in the US economy during that period. Taking into account the production chain of the copyright industry in the same 2006-2007 period, the sector

contributed an amazing 43.06% to the total growth of the US economy. In 2007, the value added of the core copyright industry was calculated at 6.44% of the US GDP (US$889.1 billion), while that of the entire production chain was calculated at 11.05%. This figure is equivalent to the generation of intellectual property wealth protected by copyrights, in the order US$1.52 trillion. In that report, the statistics also show that the wages of employees of the core copyright industry are 40% higher than those of the average American worker. All these figures show that the industry based on products protected by copyrights continues to expand significantly. From the point of view of foreign trade, the US copyright industry continues to add to and expand the international market. Between 2006 and 2007, the sector's export rate increased by 8%, from US$116 billion to US$126 billion.

Although Brazilians are seen as highly creative people, their lack of awareness of the intellectual property system, in this specific case of the copyright protection system, prevents their creations from being adequately appropriated and transformed into riches in the expected proportion to contribute to Brazil's development. Brazil is still a knowledge importer.

In developing countries, including Brazil, initiatives in this area are still quite shy. The cultural sector itself has not yet realized the importance of the creative economy. Culture is rarely seen as a priority area by governments and the private sector. Entrepreneurs of the sector face several obstacles to access investments to leverage their business.

The lack of reliable data on the impact of culture on Brazil's development process is a major problem. A group of technicians from the Federal University of Bahia (UFBA) and from state and municipal departments is being set up to calculate Brazil's cultural GDP. The latest statistics available refer to 1995, and they indicated that this GDP accounted for 1% of the national GDP.

What characterizes the reproduction of a work?

Reproduction is making one or more copies of a literary, artistic or scientific work. When a work is wholly or partially copied without the permission of the copyright holder or of the holder of its copying rights or in disregard of any legal provision, a crime known as counterfeiting is committed. Counterfeiting is a crime commonly known as piracy.

In 2008, the software industry alone lost US$48 billion to the illegal market worldwide, with an average piracy of 38%. The software piracy index in Brazil amounted to 59% in 2007, according to the 5th annual Global Software Piracy Study carried out in 102 countries, published by the Business Software Alliance (available at: <www.bsa.org>). The entertainment industry, in turn, lost an estimated US$25 billion for movies and US$4.5 billion for music in downloads and illegal sales.

The following items cannot be protected by copyright:

- ideas, normative procedures, systems, methods, projects or mathematical concepts;
- schemes, plans or rules for performing mental acts, playing games or conducting business;
- blank forms and their instructions;
- texts of treaties or conventions, laws, decrees, regulations, judicial decisions and other official acts;
- information for common use, such as calendars, diaries, registers or legends;
- isolated names and titles;
- industrial or commercial utilization of ideas contained in works.

Plagiarism is the act of signing or presenting an intellectual work of any kind (text, music, pictorial work, photography, audiovisual work, etc.) containing parts of a work that belongs to someone else without giving credit to the original author. In an act of plagiarism, a plagiarist misappropriates the intellectual work of another person, assuming the authorship thereof.

Apenas en el sector de Software, en 2008, mundialmente, la industria perdió 48 mil millones de dólares para el mercado ilegal, con promedio de piratería del 38%. El índice de piratería de *Software* en Brasil llegó al 59%, en 2007, señala el 5° Estudio Anual Mundial de Piratería de Software en 102 países, divulgado por la Business Software Alliance (disponible en: <www.bsa.org>). La industria del entretenimiento estima pérdidas del orden de 25 mil millones de dólares para películas y 4,5 mil millones para músicas, entre downloads y ventas ilegales.

4.2 Protection of author's rights

This is the copyright field that protects authors and their creations in connection with intellectual works in literature, art or science, as expressed by any means or in any medium, either tangible or intangible, already known or invented in the future.

As illustrated in Figure 22, an author's right is divided into two types of rights: moral and patrimonial right.

Author's Rights		
Moral Right		Patrimonial Right

Figure 22 - Author's rights on his or her work

Some disadvantages of this form of protection:
- The secret can be discovered by others through reverse engineering;
- The secret can be stolen;
- It requires confidentiality agreements that are often costly with those who really need to know the secret to manufacture something.

Moral right refers to a right of a personal nature of an author (as a natural person) and for this reason it is unassignable and nontransferable. Among others, a moral right ensures authors the prerogative to:

- Claim, at any time, the authorship of a work;
- Have their name, pseudonym or conventional sign indicated or announced as the author's when using their work;
- Keep their work unpublished;
- Ensure the integrity of their work, i.e. reject changes in their work or their use in contexts that can harm their reputation or honor.
- When an author dies, these rights are transferred to their successors.

Patrimonial right refers to the part of the copyright right that gives authors of literary, artistic or scientific works the exclusive right to use, enjoy and dispose of their creations and to copy, edit, translate, adapt and distribute their works as they please. Patrimonial right also allows authors to use their works for economic purposes. That is, subject to prior written consent from the author or from his or her successors, this right can be negotiated and transferred to a legal entity or another natural person, who can become its holder. From a business standpoint, this is the most important part of a copyright. Patrimonial right allows its holders to engage in a business activity and thus to generate wealth and create value, ensuring a financial return for the author and the entire production chain of the arts, science and literature industries by marketing works of this nature.

El plagio es el acto de firmar o presentar una obra intelectual de cualquier naturaleza (texto, música, obra pictórica, fotografía, obra audiovisual, etc) conteniendo partes de una obra que pertenezca a otra persona sin atribuirlos al autor original. En el acto de plagio, el plagiador se apropia indebidamente de la obra intelectual de otra persona, asumiendo la autoría de la misma.

It should be observed that, in the realm of science, protection is only ensured to the literary or artistic form, without covering its scientific or technical content. Thus, a company can extract the technical content of a scientific publication, turn it into a product or manufacturing process and patent it without having to pay royalties for it. That's why scientists and research institutions should make an effort to gain knowledge about the potential economic importance of intellectual property they are developing to prevent their projects with potential for commercial application from being improperly disclosed in scientific circles without a strategy to exploit them in the future.

Holders of patrimonial rights can authorize or prohibit the following acts in relation to their work:

- Partial or full reproduction of their works in various forms, such as in a hard-copy publication or recording in magnetic or digital media;
- Editing, adaptation, musical arrangement and any other transformations, such as the conversion of a novel or of a play into a screenplay;
- Translation into any language;
- Distribution by e.g. sale of copies of their work to the public;
- Interpretation and public performance, such as musical interpretation during a concert or a play;
- Broadcasting and communication to the public via radio, television, cable or satellite;
- Inclusion in a database, storage in a computer, microfilming and other similar forms of storage.

According to WIPO (200-?c), there are international agreements that ensure copyright holders adequate and effective protection when their works are disseminated through new technologies and communication systems such as the Internet.

The symbol ©, which means "copyright" (literally, the right to make copies), or texts such as "All rights reserved" indicate that the author wants to have his or her rights on a work he or she created protected. Figure 23 provides an example of a work protected by copyright.

Figure 23 - Illustration of a work protected by copyright - Book

The holder of patrimonial rights on a work can waive the right of reproduction in favor of end users. In this case, the publication will make a mention such as: "Any part of this publication may be copied, provided that the source is mentioned."

How is an author's right protected?

A work enjoys protection by author's right from the moment it is created, regardless of any registration or formality. Although it is optional, registration facilitates, for example, the settling of disputes over ownership or authorship, financial transactions, assignments, licenses and transfers of rights. In Brazil, an author can register his or her work in the institutions listed in Table 1.

Algunas desventajas de esta forma de protección:
- El secreto puede ser descubierto por otros mediante la utilización de la ingeniería reversa;
- El secreto puede ser robado;
- Necesidad de hacer acuerdos de confidencialidad, muchas veces onerosos, con los que realmente necesitan conocerlo para fabricar.

Table 1 - Institutions in charge of registering author's rights in Brazil

Creations	Institutions in charge of registration
Books and texts	National Library Foundation, available at: <www.bn.br>.
Movies	National Cinema Agency, available at: <www.ancine.gov.br>.
Artistic works	School of Fine Arts, available at: <www.eba.ufrj.br>.
Sheet music	School of Music Available at: <www.musica.ufrj.br>. National Library Foundation, available at: <www.bn.br>.
Architectural plans/ projects	Regional Council of Engineering and Architecture (CREA) Available at: <www.confea.org.br>.
Computer programs	National Institute for Industrial Property, available at: <www.inpi.gov.br>.

What is the term and scope of an author's right?

In Brazil, author's rights have a temporal limitation: they remain valid during an author's life and after his or her death they are transferred to his or her successors and remain in force for 70 years from the year following his or her death. After this term, a work falls under public domain, and the State becomes responsible for protecting its integrity and authorship.

According to the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), signed by Brazil, an author is protected by copyright in all countries that signed the agreement.

When can a work be used without its author's permission?

Examples of acts that do not constitute violation of copyright:

- Reproduction in one copy of short extracts from a work for the private use of the copier, provided that this is done without gainful intent;
- Quotation in any work for purposes of study, provided that the author is named and the source of the quotation is given;
- Stage and musical performance, where carried out in the family circle or for exclusively teaching purposes in educational establishments, and where devoid of any profit-making purpose;
- Reproduction in any work of short extracts from existing works, regardless of their nature, or of the whole work in the case of a work of three-dimensional art, on condition that the reproduction is not in itself the main subject matter of the new work.

Is an author's right the same as a copyright?

Author's rights are not necessarily the same as copyrights. In the Anglo-Saxon system, a copyright is not the same as an author's right (of Roman-Germanic origin). Copyright is associated with the right to reproduce or copy a work. The subject matter of a copyright

is the work and the prerogative of the patrimonial right to copy it, with emphasis on economic aspects, on the patrimonial exploitation of works based on the right to reproduce them. Author's rights, in turn, are basically intended to protect the creators of works, who can exercise their patrimonial rights on them, authorizing or prohibiting their reproduction, as well as making them available to the public in the form, location, and time that they wish, for a fee or free of charge.

What is the status of copyrights in the digital age?

Currently, a large amount of works protected by author's rights are being made available globally on the Internet. Information and communication technology has afforded great benefits in terms of accessibility to knowledge produced by human beings while imposing new challenges to holders of author's rights in relation to management issues and return on investment.

Thus, in parallel to increasing dissemination opportunities offered to holders of author's rights, the Internet and the advent of multimedia production are affecting the conditions for protecting and managing author's rights and related rights, as well as the reproduction of the contents of their works.

In the online world, the management of author's rights has taken on a new dimension, since there are devices that allow for massive data storage and instant delivery of material. These contents are now digitized, compressed, uploaded and downloaded, copied and distributed to anyone in the world via the Internet. The possibilities for reproducing books, movies and music in cyberspace are infinite, thus challenging the holders of author's rights to create and propose new business and management models that are attractive to users and generate benefits for all the parties involved. Entrepreneurs and experts in the field of intellectual property are already discussing the need to modernize the copyright law in the light of this new technological and social paradigm.

International treaties have been established by WIPO that provide for obligations related to technological protection measures and rights to manage information in digital environments. These treaties were designed to ensure that the holders of author's rights will be protected when their works are disseminated on the Internet. Obviously, the greatest challenge lies in the capacity to enforce those rights in a global market.

Does copyright cover image rights?

Misunderstandings as to whether copyright comprises image rights are common. In Brazil, these are distinct rights, with the former being protected as intellectual property (Copyright Law) and the latter (image right) being protected as expressly provided for in the new Civil Code, in its chapter II (personality rights), article 20, transcribed below (official translation):

> Except as permitted or necessary to the administration of justice or the maintenance of public order, the disclosure of writings, transmission of the word, or the publication, display or use of the image of a person may be prohibited in response to his or her demand and without prejudice to compensation if a damage is caused to honor, good reputation or respectability, or if there was commercial use.

Therefore, the image right is clearly protected by law, except for information purposes and provided that no damage is caused to the honor or dignity of the individual concerned.

Every human being has rights over his or her image. This right allows for the use of an image to be controlled for the purpose of ensuring the faithful representation of its physical aspects (photography, painted portraits, pictures, etc.) and the benefit of the representation of its individual and distinguishable, concrete or abstract appearance.

Thus, the right over one's image, as an unwaivable attribute of an individual, is not confused with the author's right of a photographer or intellectual creator of a representation (either concrete or abstract) of an individual's image. Therefore, the right of the creator of the image refers to its authorship, while the right of a portrayed individual refers to the use of his or her image, and these are two distinct rights exercized by different people and with a separate legal existence.

The image of an individual can be basically used in two ways: in an authorized and in an unauthorized way. Consented use can occur in three forms:

- Free of charge, by tacit consent;
- Free of charge, by express consent;
- For a fee, by consent conditional on a financial compensation.

Author's Rights - summary table

Title

- Registration of an Author's Right

Object of the protection

- Literary, artistic, scientific creations.

Requirements

- Creations of the human spirit in the context of literary, artistic and scientific works.

Applicable Law

- Copyright Act, no. 9,610/1998.

Protected right

- Moral right: inviolability of the work;
- Patrimonial right: economic exploitation through publication, reproduction, execution, translation and any other dissemination method;
- Protection in all signatory countries of the Berne Convention.

Term

- From the date of creation of the work until 70 years after the year following the death of its author

Where to apply for protection in Brazil

- Literary, musical and artistic works: National Library Foundation, available at: <www.fbn.br>.
- Plans/projects: Confea - Federal Council of Engineering and Architecture, available at: <www.confea.org.br>.

Observation

- Registration is not mandatory

Examples

- Books, articles, lyrics, paintings, sculptures, architectural projects.

4.3 Protection of related rights

Related rights refer to protection for performers, phonogram producers and broadcasting companies as a result of interpretation, execution, recording or broadcasting of their interpretations and executions (Figure 24).

This protection does not affect the guarantees ensured to authors of literary, artistic or scientific works. Author's rights and related rights protect different people. For example, in the case of a song, the author's right protects the composer of the music and the creator of the lyrics; related rights, in turn, are applied to the musicians and the singer who interpret the song, to the producer of the recording (also called phonogram) in which the song is included and to the broadcasting companies that broadcast the song in question.

Figure 24 - Illustration of a work protected by related rights - Play

What rights are ensured to holders of related rights?

- Holders of related rights have the exclusive right to authorize or prohibit:
- Performers and executors from fixing, reproducing by means of broadcasting or publicly executing their interpretations;
- Phonogram producers from reproducing, distributing through sale or rental of copies and communicating their interpretations to the public by executing them publicly or broadcasting them;
- Broadcasters from retransmitting, fixing and reproducing them in their broadcasts.

What is the term of related rights?

Seventy years from January 1 of the year following fixing, for phonograms; following transmission for broadcasts of broadcasting companies; following public execution and representation, for the remaining cases.

Related rights are subject to the same exceptions applied to author's rights, and free use of interpretations, executions, phonograms or broadcasts by broadcasters are allowed for certain specific purposes, such as in quotations and news reports.

How are author's rights and related rights exploited commercially?

Many authors and performing artists have no knowledge or the capacity to manage their rights, as producing, disseminating and distributing works of art to the public at large is a business activity that requires considerable financial investment and professional skills in terms of business management, communication and marketing, in addition to specialized legal knowledge. Authors and creators, as well as performing artists, usually transfer their patrimonial rights to companies, associations or professional organizations through contracts in exchange for a financial compensation. This can occur in different ways, such as in the form of fixed amounts or royalties based on a percentage of the revenues generated by the work. These royalties are payable when the work is used by broadcasting companies, nightclubs, restaurants, libraries, universities and schools in all signatory countries of the TRIPS agreement.

According to the Brazilian IRS (*Receita Federal*), royalties are the "amounts paid [...] for exploiting patents, models, industrial designs, trademarks or advertisement; remuneration for technical services and technical, administrative and similar assistance; copyrights, including in cases of purchase of computer programs (software) [...] except cinematographic films."

The impossibility of each author and performing artist to control the use of his or her work in his or her country and abroad forces them join forces in associations to manage their rights. Author's and related rights are usually managed by associations representing the interests of holders of rights over commercially exploited works. Organizations responsible for the collective management of these intangible assets emerged as a result of the need to organize authorizations, control, storage and distribution of financial gains through payment of royalties to the holders of author's rights over fixed, broadcast or executed works.

ECAD is a private association of authors and composers established by Federal Law No. 5,988/73 and preserved by the current Brazilian Copyright Law - 9,610/98. More information is available at: <www.ecad.org.br>

In Brazil, the Central Collection and Distribution Office (*Escritório Central de Arrecadação e Distribuição* - ECAD) is the institution in charge of collecting and distributing copyrights on musical works. Currently, it is managed by ten music associations and takes care of the administrative and financial management of copyrights on public execution of domestic and foreign musical works. As a result of its work, Brazil is seen as one of the most advanced countries in the distribution of copyrights in this area.

These associations are responsible for controlling and sending to ECAD personal data about each member and their respective repertoires to feed its database and make it possible for amounts collected from several users of music to be distributed to them.

In the field of cinematographic works, the Motion Picture Association (MPA) is the association that represents the six main movie studios in the United States. The MPA supports the interests of its affiliated companies in each distribution sector - theater, television, pay TV, digital home entertainment and new technologies - with a focus on improving market access and protecting intellectual property rights.

The Motion Picture Association (MPA) conducts an intensive global campaign against piracy. The Motion Picture Association - Latin America (MPA-AL) has a regional office in São Paulo, Brazil. More information is available at: <www.mpaal.org.br>

Related rights - Summary Table

Title

- Registration of Related Rights

Object of protection

- The rights of performers, phonogram producers and broadcasters.

Applicable Law

- Copyright Act, nº. 9,610/1998

Protected right

- Moral right: inviolability of the work and name or pseudonym linked to a work;
- Patrimonial right: authorizing or prohibiting the fixation, reproduction, broadcasting and publication of performances or executions of a work;
- Protection in all signatory countries of the Berne Convention.

Term

- Up to 70 years after fixation, broadcasting or public execution of a work.
- Where to apply for protection in Brazil
- Literary, musical and artistic works: National Library Foundation, available at: <www.fbn.br>;
- Artistic works: School of Fine Arts, available at: <www.eba.ufrj.br>;
- Movies: National Cinema Agency, available at: <www.ancine.gov.br>;
- Sheet music: School of Music, available at: <www.musica.ufrj.br>

National Library Foundation

Available at: <www.fbn.br>.

Note

- It doesn't affect rights ensured to authors of literary, artistic or scientific works.
- Registration is not mandatory

Examples

- Plays, movies, shows, concerts, soap operas, radio and TV programs.

4.4 Protection of computer programs

How can the author of a computer program be protected?

The protection available for the intellectual property of computer programs is the same as that applied to literary works under the law on copyright and related rights (Copyright Act). Besides this law, there is specific legislation dealing with this matter: Law no. 9,609, of February 19, 1998, known as the Software Act.

Legal provisions on moral rights are not applied to computer programs, but their authors have the right to claim authorship of such programs at any time and to oppose unauthorized changes to them when they involve distortion, mutilation or other modification of the computer program that can harm their honor or reputation.

Are all computer programs protected by copyright?

In Brazil, information about the types of computer programs protected by copyright and the fields of application of computer programs can be found on the website of the INPI (available at: <www.inpi.gov.br>).

A program that can be protected under the Copyright Act is one consisting of an organized set of necessary instructions for the operation of automatic data-processing machines, devices, instruments or peripherals, namely, a program that makes a computer or its peripherals operate in a specific way and for a specific purpose, such as a 3D drawing program, a word processor or an operating system (Figure 25).

Figure 25 - Illustration of a product protected by the Software Act

Is the registration of a computer program necessary for protecting it?

Computer programs are protected by copyright and, as such, their registration is optional. However, because they constitute an important asset that leads to intense licensing activity, particularly for companies operating in the information technology and communication (ICT) industry, they are usually registered with the competent agencies. It is noteworthy, however, that both individuals and entities can request software registration. In Brazil, the National Institute for Industrial Property (INPI) is the agency in charge of registering software and, in the event of a dispute, the registration is a form of proof of authorship.

What is the term and scope of the protection available for computer programs?

The term is 50 years from January 1 of the year following that of its publication or, in the absence thereof, from the date of their creation. The term is valid internationally; thus,

computer programs registered with the INPI don't need not be registered in other countries, provided that equivalent rights are granted to foreign holders. Similarly, programs owned by foreigners don't need to be registered in Brazil, except if the rights on them are transferred (licensed) to provide a guarantee for the parties involved.

The Brazilian Industrial Property Law does not provide for software patenting. However, patents are granted for equipment with embedded software. In this case, the examination takes into account the product itself and not what makes it work.

As with a copyright, authors of software can transfer their patrimonial rights on the program to others; this transfer must be made through a contract in writing and registered with the INPI.

A software can be embedded in a microprocessor, becoming part of a system that performs a specific and predefined set of tasks dedicated to the device controlled by it.

Does copyright apply to free software?

Commercial developers of software use a license to limit the scope of use and transfer of their products, and to prevent access to their source code, except as permitted by law. Open source software (OSS) is a kind of software whose source code its developers allow users to access and thus read, change, build and distribute new versions incorporating their changes. But OSS also has the following characteristics:

It is referred to as free because its users have the right to access its source code, not because it is distributed free of charge. OSS can be distributed for a fee, i.e. by charging for using it;

OSS involves a specific form author's right. Development of open-source software is based on the exclusive right of distribution by the copyright holder. Under the OSS model, the rights to copy, modify and redistribute are granted to users, subject to the conditions applicable to such licenses. Therefore, OSS developers grant licenses permitted by copyright, preserving their right on the software. OSS is not the same as public domain.

The benefits that free software can offer include: access to its source code, community-based development, building of local capacities and skills, freedom to market, lower costs, comprehensive rights and the possibility of customization to local conditions.

Un *Software* puede ser embarcado o embutido en un microprocesador, componiendo un sistema que realiza un conjunto de tareas específicas y predefinidas, dedicado a al dispositivo que él controla.

What are the most common types of software piracy?

Unauthorized forms of computer programs, known as piracy, are shown in Table 2.

Um *Software* pode ser embarcado ou embutido em um microprocessador, compondo um sistema que realiza um conjunto de tarefas específicas e predefinidas, dedicada ao dispositivo que ele controla.

Table 2 - Characteristics of known types of software piracy

Type	Feature
Pirated copy	Occurs when copies made within an organization for use by its employees.
Pre-installed pirated copies	Occurs when unauthorized software copies are installed in a computer by a retailer.
Forgery	Occurs when software duplications are made for illegal marketing.
Bulletin Board Software (BBS)	Occurs when protected software is loaded by users via modem.
Software rental	Occurs when software is illegally "rented" to users, who usually make a copy of it for themselves.

Computer program - Summary table

Title

- Registration of Computer Programs

Object of protection

- Computer programs (software)

Requirements

- Proof of authorship by submitting the documents of a program.

Applicable Law

- Copyright Act, no. 9,610/1998
- Software Act , no. 9,609/1998

Protected right

- Exclusive right to produce, use and market a program;
- Protection in all signatory countries of the Berne Convention.

Term

- 50 years from the year following the date of creation or publication of software.

Where to apply for protection in Brazil

- INPI - National Institute for Industrial Property

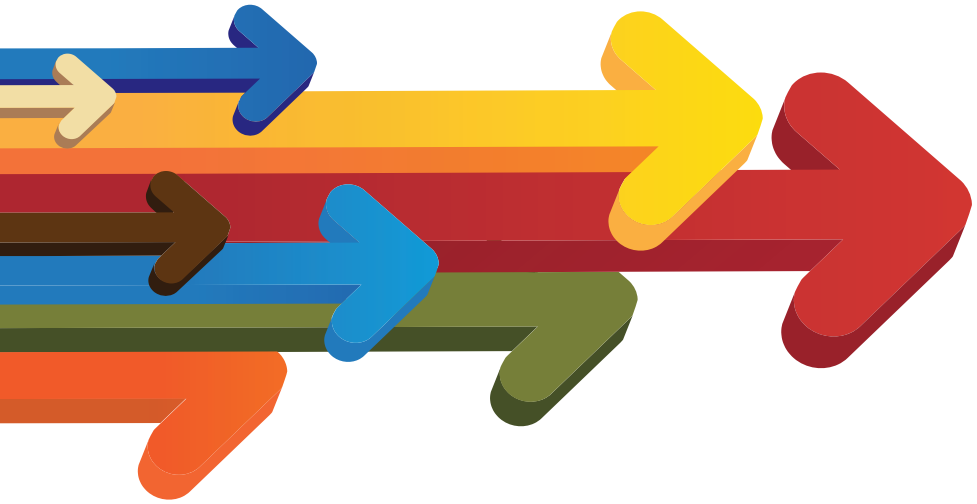
Available at: <www.inpi.gov.br>.

Note

- Registration is not mandatory

Examples

- Drawing softwares, word processors, operating systems.



SUI GENERIS PROTECTION

5

5.1 Protection of integrated circuit topography

What is an integrated circuit topography?

Integrated circuits are also known as chips. The topography of integrated circuits involves an organized set of interconnections, transistors and resistors arranged in three-dimensional layers on a piece of semiconductor material. In those layers, each image represents, in whole or in part, the geometrical layout or surface arrangements of an integrated circuit at any stage of its design or manufacture. Among other purposes, these integrated circuits are used in computer memories or processors and are designed to perform electronic functions in a piece of equipment (Figure 26).

In Brazil, Law no. 11,484 of 2007 provides for the protection of integrated circuit topography, among other things. Because it is a specific type of protection in the realm of intellectual property, it is referred to as sui generis protection.

Figure 26 - Illustration of an integrated circuit card

Who can apply for protection for integrated circuit topography?

Protection for integrated circuit topography can be granted to Brazilians and foreigners domiciled in Brazil. The term of this protection is 10 years from the date of filing or from that of the first exploitation, whichever occurred first. Depending on a company's strategy, the application can be kept confidential for a period of six months from the date of filing, after which it is processed. In Brazil, the application must be filed with the INPI according to the legal conditions established by the agency.

Under the law, it is assumed that the applicant for protection is the creator of the integrated circuit topography. However, it should be noted that, unless agreed otherwise, the rights to integrated circuit topographies belong exclusively to the employer or service contracting party when the creative activity is derived from the very nature of the employment or service provision contract or when it involves the use of resources, information technology, industrial or business secrets, materials, facilities or equipment of the employer or service contracting party.

What can be protected in the topography of an integrated circuit?

This protection applies only to a topography that is unique, resulting from the intellectual effort of its creator or creators and is not common or usual for technicians, specialists and manufacturers of integrated circuits at the time of its creation.

Protection is allowed for a topography resulting from the combination of common elements and interconnections, or that incorporates, with due authorization, a topography of third parties, provided that the result is unique.

Protection is not available for concepts, processes, systems or techniques on which the topography is based or for any information stored as a result of using such protection.

How to apply for protection of integrated circuit topography?

Each application for registration must refer to a single integrated circuit topography only. It must be filed using the unique form of the INPI, with the following additional documents:

- Description of the topography and its function;
- Drawings/photographs of the topography (in a predefined format);
- Integrated circuit related to the topography for which protection is being requested;
- Declaration of previous exploitation, if any;
- Document confirming the ownership or assignment of the topography;
- Authorization from the owner of an original protected topography;
- Sworn public translation of documents in foreign languages, if applicable;
- Proof of payment of the applicable fee;
- Power of attorney, if applicable.

What are the advantages of protecting an integrated circuit topography?

The registration of an integrated circuit topography gives its holder the exclusive right to exploit it commercially, and third parties are not allowed do the following without the consent of the holder of this right:

- Reproduce the topography in whole or in part by any means, including incorporating it into an integrated circuit;
- Import, sell or distribute by other means, for commercial purposes, a protected topography or an integrated circuit that incorporates a protected topography;
- Import, sell or distribute by other means, for commercial purposes, a product incorporating an integrated circuit with a protected topography embedded in it.
- Rights on the topography of an integrated circuit can be assigned or licensed under contract for commercial exploitation purposes upon formal communication to the INPI.

What are the costs involved?

The costs involved in applying for protection for an integrated circuit topography are basically the following ones:

- Specialized professional advice;
- Translation, if applicable;
- Payment of a fee.

What is the economic importance of an integrated circuit topography?

Today's technological world is characterized by the use of computers, the Internet, satellite navigation, wireless telephony, new forms of entertainment and hundreds of other applications. In this world, there is a market with a turnover of hundreds of billions of dollars annually. In this cyber-digital era, semiconductor factories are the place where the capacity to transcend time, distances and material limitations for data storage is found. This entrepreneurial space is the point of contact between the physical world and the electronic world. Silicon (the basic component of sand) is transformed into integrated circuits, the hardware that moves the cyber world. The amount of knowledge required to boost this industry segment involves the incorporation of frontier technologies into the fields of optics, chemistry, metrology and mechanics, among others.

The challenge ahead is the increasing expansion of the semiconductor market. The electronics industry is under constant pressure to produce cheaper, smaller and more powerful components that can reach consumers faster. Thus, the sector requires large capital investments - both financial and intellectual.

Given the technological complexity and intensity involved in designing and manufacturing integrated circuits, knowing how to use the intellectual property system efficiently is essential to ensure companies the ownership of rights in their business transactions, thus contributing to preserving their competitive edge.

Law no. 11,484/2007 provides for incentives for manufacturers of digital TV equipment and electronic semiconductor components and for means to protect the intellectual property of topographies of integrated circuits through the Technological Development Support for the Semiconductor Industry Program - PADIS - and the Program in Support of the Technological Development of the Digital TV Equipment Industry - PATVD.

Integrated circuit topography - Summary table

Title granted

- Certificate of Registration of Protection for an Integrated Circuit

Object of protection

- Three-dimensional configuration of layers on a piece of semiconductor material designed to perform electronic functions on a piece of equipment.

Applicable Law

- Law no. 11,484/2007

Requirements

- Original topography, which is not common or usual for technicians, specialists and manufacturers of integrated circuits at the time of its creation.

Right granted to the holder

- Exclusive right to exploit the topography in the country in which it was registered.

Term

- 10 years from the date of filing or from that of the the first exploitation, whichever occurs first.

Where to apply for protection in Brazil

- INPI - National Institute for Industrial Property

Available at: <www.inpi.gov.br>.

Examples

- Microprocessors, memories.

5.2 Protection of cultivars

Cultivar is the name given to a new plant variety with specific characteristics resulting from research in agronomy and life sciences (genetics, biotechnology, botany and ecology), not existing in nature. To enjoy this form of protection, human intervention is required to change the characteristics of a plant into a new variety of its species, not found in the environment. Examples of cultivars can be seen in Figure 27.

Figure 27 - Illustration of cultivars of colored cotton

How can a cultivar be protected?

Protection of new varieties of plants is another aspect of intellectual property rights referred to as sui generis protection, which is intended to recognize the research activities of creators of new plant varieties to grant them an exclusive right to market them for a fixed term.

As technology progresses and more investment is made in agricultural research both by private and public institutions, new crop varieties and seeds with improved properties are being developed. As a result, the need arose for regulations designed to ensure a return on capital invested for this purpose to breeders/creators of new varieties.

In Brazil, according to Law no. 9,456 of April 25, 1997, known as the Plant Variety Protection Act, to be protected a plant variety must:

- Be new, meaning that it must not have been commercially exploited abroad in the last four years and in Brazil in the last year;
- Be distinctive, meaning that it must be clearly distinguishable from any other variety whose existence is recognized;
- Be homogeneous, meaning that all plants of a variety must be equal or very similar, except for predictable variations, taking into account the unique features of their multiplication or reproduction;
- Be stable, meaning that the relevant characteristics of a variety must not change after successive reproductions or multiplications;
- Have an appropriate denomination, meaning that it must have a name to designate it.

Who grants protection to cultivars?

In Brazil, such protection is formalized by a Certificate of Plant Variety Protection issued by the National Service for Plant Variety Protection (SNPC) of the Ministry of Agriculture and Food Supply (MAPA) upon payment of applicable fees and an annuity.

The organization that oversees the protection of new plant varieties worldwide is the International Union for the Protection of New Varieties of Plants (UPOV), an organization linked to WIPO that disciplines plant variety protection in 66 countries, including Brazil, under a convention.

Besides the plant variety protection registration, a National Registration for Plant Variety Marketing (RNC) might also be required for inclusion in the register of cultivars for production and marketing of seeds and seedlings certified and inspected nationwide. This registration is meant to protect farmers from indiscriminate sale of seeds and seedlings of untested cultivars.

Why should cultivars be protected?

The establishment of an effective system for protecting cultivars is aimed at stimulating the development of new plant varieties for the benefit of society.

According to WIPO (200-?a), the process of creating new plant varieties requires substantial investments in terms of skills, labor, material and financial resources, and time. The possibility of having certain exclusive rights on a plant variety affords successful breeders (creators of new plant variety) a positive opportunity to recover their costs and build up necessary reserves for future investments. Without ensuring such rights to the creators of plant varieties, it is more difficult for them to achieve these objectives, as there would be nothing to prevent others from multiplying seeds or other propagating material and selling varieties on a commercial scale without any compensation to their creators.

Establishing exclusive rights is an incentive for breeders to develop new plant varieties for agriculture, horticulture and forestry.

What right is granted to the holder of a cultivar protection certificate?

This protection ensures the holder the right to reproduce a cultivar for commercial purposes in the Brazilian territory, while forbidding third parties from producing it commercially and from selling materials (seed or plant part) for reproducing or multiplying it without the breeder's permission during the protection term. For granting authorization, breeders may require the payment of royalties that will be embedded in the composition of the price of the seeds to be acquired by farmers.

If a breeder cannot exercise his or her rights on material for reproducing or multiplying a variety and it is multiplied or propagated without his or her permission, he or she can exercise these rights in the form of financial participation in a farmer's harvest.

More information about the process of obtaining a Cultivar Protection Certificate is available at: <www.agricultura.gov.br>.

When can a cultivar be used without permission?

It should be noted that the creator's permission is not necessary for acts:

a) Without commercial purposes;

b) On a trial basis;

c) Aimed at creating and exploiting other varieties.

The Cultivar Protection Act allows farmers to use the product of their harvest for multiplication or reproduction purposes (for example, to set apart a portion of a harvested product to use as seed in the following season and within their farm).

What is the term of rights on cultivars?

The law provides for protection of cultivars throughout the Brazilian territory for a period of 15 years. For vines, fruit trees, forest trees and ornamental trees, the term is 18 years. After the term of protection has expired, a cultivar falls under public domain and no other right can prevent it from being used freely.

What is the scope of the protection of cultivars?

As a result of its accession to the UPOV, an automatic reciprocity mechanism was established between Brazil and the other member countries. Based on this fact, all signatory countries of the UPOV are under the obligation to protect Brazilian cultivars and, in return, Brazil also has the duty to protect cultivars from these countries, facilitating the exchange of new material generated by research in Brazil and abroad.

What are the legal penalties for violations of rights to cultivars?

Compensation, in amounts to be determined in a specific regulation, and confiscation of the material, as well as payment of a fine equivalent to 20% of the market value of the seized material and prosecution for the crime of violating the rights of a breeder.

Cultivars - Summary Table

Ownership title

- Cultivar Protection Certificate

Object of protection

- Material for the vegetative reproduction or propagation of the whole plant;
- The component lines of hybrids.

Applicable laws

- Law no. 9,456/1997

Requirements

- It must be a variety of any genus or species that is different from other known cultivars.

Right Ensured

- The right to produce, sell and market a cultivar in the country in which it was registered.

Term

- 18 years from the date of granting of the registration certificate for vines and fruit, forest and ornamental trees.
- 15 years from the date of granting of the registration certificate for other plants.

Where to apply in Brazil

- SNPC - National Service for Plant Variety Protection

Available at: <www.agricultura.gov.br>.

Examples

- Corn, soybeans, cotton, sunflower.

5.3 Protection of traditional knowledge

What is traditional knowledge in the realm of intellectual property?

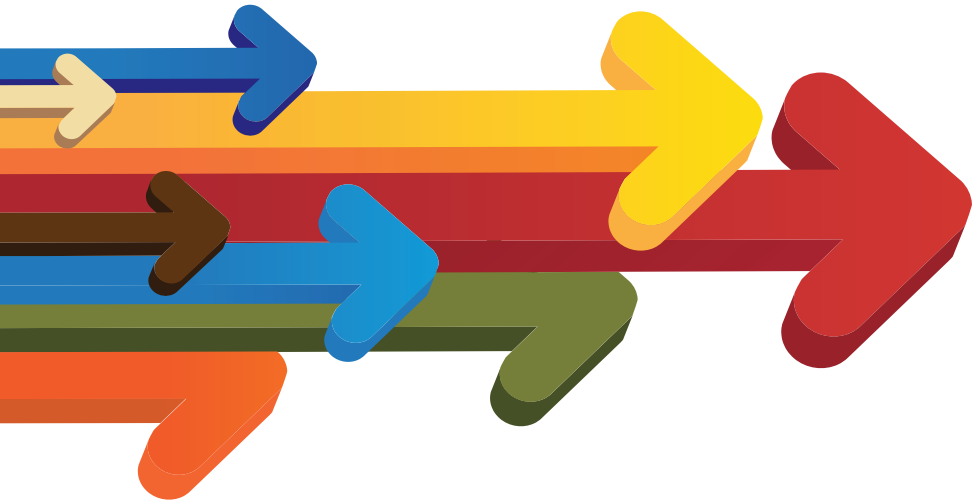
Traditional knowledge refers to empirical knowledge, practices, beliefs and customs passed from parents to children in indigenous communities or in communities in certain locations (e.g. riverine communities) on the use of plants (see Figure 28), microorganisms or animals that are sources of genetic information. Therefore, access to it is controlled in the national territory to prevent undue use in research and development of new products through bioprospecting for industrial application and commercial exploitation.

Figure 28 - Illustration of a vegetable product obtained from traditional knowledge

The ownership of traditional knowledge is usually held collectively and the holders of such knowledge have been exploring ways to safeguard their interests under the intellectual property system to protect themselves against misappropriation of their knowledge for economic purposes, as improvements in old technologies often generate valuable new products.

According to WIPO (200-?c), traditional knowledge, which is the term used to refer to innovations and creations based on tradition, was virtually ignored by the intellectual property system until very recently. However, the economic value of the rich collection of specific knowledge about the natural environment and how it could be expanded is now increasingly recognized. Thus, native communities should be seen as beneficiaries of gains derived from development fostered by them.

In Brazil, Decree no. 4,946 of 2003 regulates access to genetic resources and associated traditional knowledge.



BUSINESS WITH INTELLECTUAL PROPERTY ASSETS

6

6.1 Managing intellectual property assets

Formally acquiring the right to own an intellectual property asset is not enough to ensure the success of any venture. Patent or trademark rights are not that valuable for a company unless they are properly exploited in the business world. Moreover, a significant portion of intellectual property assets might not require formal registration but rather specific protective measures to ensure the differential of a company in relation to its competitors. An example is this fact is use of confidentiality agreements and trade secrets.

Companies wishing to take as much advantage as possible of their know-how and of products derived from their creativity need to develop a strategy for their business that is integrated into their general planning. For this purpose, they must take intellectual property issues into consideration when preparing a business and marketing plan.

Some basic procedures for ensuring the sound management of intangibles involving the intellectual property rights of a company include:

- Searching trademark databases to avoid using third-party trademarks before launching products and services. If a trademark is intended for the international market, foreign databases should also be searched;
- Companies should carry out a technical and commercial viability analysis for patentable inventions as expeditiously as possible, and if the cost-benefit ratio is seen to be favorable, file for patents with the intellectual property offices of the countries (markets) in which such protection is desired (in Brazil, the INPI);
- Making sure that patentable inventions are not disclosed or published before their respective patent application is filed. Early release of strategic information about an invention can jeopardize the possibility of a patent being granted (it annuls the criterion of novelty);
- Making sure that trade secrets are kept within the company. In cases of negotiations with third parties, companies should make sure that confidentiality agreements are signed before the object of the secret is disclosed;
- Making sure that intellectual property assets (mainly trademarks and patents) are protected and will remain protected in countries in which such products and services will be marketed (this is important for exporters);
- Using databases of patents and trademarks to assist in the development of the company's business and technological strategy (important tool for competitive intelligence);
- When projects are developed with other companies, universities or research centers, it is important to clearly define (if possible in a documented form in the collaboration agreement) who will be the holder of the right to the intellectual property to be created and its respective royalty arrangement.
- The market should be monitored periodically to check whether the company's intellectual property, which is legally protected, is not being violated, and whether the company is not violating the rights of others. Disputes are expensive and can affect the smooth running of a business.

More and more companies are placing intellectual property at the core of their planning and management. They are migrating from the traditional view of legal protection to a multidisciplinary dimension and are relying on other skills such as strategic planning, evaluation and valuation of their portfolios of intangible assets, economic-financial analyses, partnerships, negotiations and contracts involving transfer of technology.

6.2 Strategies for protecting intellectual property

A simple product or service can be protected by various forms of intellectual property rights covering different aspects of that product or service. Companies should consider the best protection options and make sure that their rights are legally ensured in the countries in which they operate, in the right time and conditions, before disseminating and marketing a product or service.

They should know that creating and maintaining a portfolio of legally protected intellectual property assets require investments, especially in the case of patents. Therefore, they should assess the cost-benefit ratio on a case-by-case basis from the standpoint of opportunity versus available budget, as investing in protection should not be considered an end in itself.

6.3 Business options with intellectual property assets

Intellectual property assets can be negotiated and marketed in various ways. Companies can:

- Enter into licensing or franchise agreements;
- Sell the asset to another company;
- Create spin-outs and joint ventures;
- Enter into cross-licensing agreements to have access to the technology of a partner;
- Use their intellectual property asset to attract investments.

Moreover, in merger or acquisition operations, a well-structured portfolio of intellectual property assts can increase the market value of a company. It is important to know the options and assess opportunities individually to ensure the best outcome possible for the business.

6.4 Monitoring the creation of intellectual property assets

Ongoing searches in databases of patents, trademarks and industrial designs make it possible for a company to remain abreast of recent technological developments and to know the availability of technologies of interest, identify partners or suppliers for licensing purposes, detect new business opportunities, monitor the activities of competitors, identify possible violators of their right to a legally protected intellectual property asset and check whether the company is violating rights of third parties. This is a very important activity for innovative companies.

6.5 Watch on intellectual property assets

To avoid damages, a company should also manage the protection of its intellectual property assets through periodic evaluations aimed at identifying potential unfair competitors. Defining the best mechanisms to ensure compliance with the law by others reduces or limits the number of violations of a right to a protected intellectual property asset, ensuring the benefits afforded by the intangible asset to the company and society at large. Piracy and counterfeiting of products is a matter of great concern in several business segments.

6.6 Common mistakes involving intellectual property

Creative activity, especially in the technological field, must be based on the principle of purposive objectivity. An idea, product or process should be developed in a contextualized fashion, with the entrepreneurs involved seeking to minimize any potential risks of commercial failure. For this purpose, a company should make an effort to remain abreast of all the knowledge available about the object of its work.

Prior search for technological information or the state of the art is carried out in databases and specialized publications, of which databases of patents and industrial designs are an example.

Organizations and people with an innovative profile are very enthusiastic usually. However, having prior knowledge and developing a strategic business vision are prerequisites for a new product, process or service to be successful on the market, bringing financial returns to the company and benefits to society.

When a company wishes to innovate, it should try and answer the following questions before anything else:

- Is the idea truly original and does it have commercial potential?
- How will the product or service be produced and sold?
- What is the best option to ensure return on investment?

Professionals who don't have a business vision are rarely successful in marketing their creations. The most common causes that lead these people to invest time, money and talent without any return include:

Lack of originality of the idea:

The idea of a product, process or service that is not original has little chance of being commercially successful. This usually occurs due to lack of knowledge of the state of the art or inadequate market research;

Despite being original, the idea does not find acceptance:

Unawareness of market trends is the cause of non-acceptance, which happens when an idea, despite being unique, does not meet a real consumer need;

The idea is good, but not enough:

Products, processes and services are designed to solve problems. Lack of a comprehensive analysis of a problem can lead to an idea that does not constitute the best solution;

The idea is too complicated:

The new product or process can be more complex than that available in the market. The best idea is the one that makes life easier rather than more complicated;

The creator of the idea only has partial knowledge of a problem:

Turning an idea into a product entails a complex process that involves development and

From the point of view of the creators of such assets, the business world is full of contradictions.

While the market appears to be constantly in search of innovative products, it is extremely difficult to launch genuinely new products in this environment. The truth is that most "new products" evolve from continuous improvements in existing ones or simply constitute the same idea readapted to a new concept of consumption.

marketing stages. Technical knowledge is not sufficient in itself for this purpose to be achieved;

The creator of the idea lacks a business vision:

A product can only be successful in the market if a business strategy is attached to it. Ignoring this prerequisite leads to the development of products that are not commercially viable or attractive;

The creator of the idea doesn't know how to sell it:

An idea can meet or generate demand. The creator of the idea should be able to sell it as a business opportunity. The lack of this ability leads to failure.

6.7 Evaluating the commercial potential of a new product

A new product can only be successfully marketed if:

- There is a consumer market for it;
- It meets a need or desire for consumption;
- Its production is economically feasible;
- It is sold at the right price in the intended market;
- Appropriate distribution channels exist and are actually used.

If these minimal conditions are not met, the chances of a successful marketing will be minimal. One of the most important issues that a company needs to focus on when considering the appropriateness of developing a new product or not is its commercial potential. Thus, market evaluation is a key activity for the economic growth of a company and it should be performed not only with the aim of launching an innovative product, but as an ongoing activity designed to ensure the competitiveness of that product in the market.

The idea of new product can originate from:

- A market opportunity
- A product that creates a new market

New discoveries generate products for a market that does not exist yet. Products with this feature (radical innovation) face greater marketing risks.

6.8 Evaluating the market for a new product

Obtaining prior information about the commercial potential and feasibility of a product helps to minimize business risks of investment and makes it possible for a company to identify potential partners and investors to develop strategic partnerships around the business in question.

For this purpose, several questions must be answered before a product is developed, protected by intellectual property instruments and brought to market.

It is important for a company that all relevant information to support a decision to develop a new idea is systematized, analyzed and recorded to provide elements for a strategy for negotiating or drawing up a business plan.

Product Evaluation:

- What is the product?
- What are the characteristics that make it unique or innovative?
- What makes the product better than that of competitors?
- Is the product ready or is it still necessary to develop it?
- What is its lifetime on the market?

Competition Evaluation:

- What are the competing products and companies?
- What are the differentials of existing products and competitors?
- What are the niche markets in which the competitors are active?
- What is the strategic positioning of the protected product in relation to the competition?

Market Evaluation

- Who are the potential consumers of the product?
- What is the size and segment of this market?
- What are the main trends in this market?
- What factors interfere the most in this market?
- What is the product worth in the market?
- Where is the market located?
- Investment Evaluation
- What is the cost of the product?
- What are the available investment sources?
- What strategies will be adopted for fundraising?
- What is the expected return?
- What is the projected profitability?

How to answer these questions?The task certainly requires complex knowledge. However, a wide range of information can be found free of charge or at a low cost in sources such as patent databases, newspapers, magazines, catalogs, interviews, visits, the Internet, statistical reports, etc.

When more detailed information is required, it may be necessary to identify and hire companies or professionals with recognized expertise to provide consulting services or expert advice such as market research, technological impact assessments, patentability or other forms of protection, marketing strategies and logistics, identification of suppliers, etc.

6.9 Risk analysis in developing a new product

Innovation activity in enterprises is the result of ongoing appropriation of knowledge to add value to their operations. High-ranking directors are the ones who decide to implement - or not - new ideas that can have an impact on the competitiveness of their organizations.

For a company to develop a new product, process or service, there must be synergy between its high-ranking directors and staff to ensure the required complementarity and convergence of efforts to secure the necessary financial, human and material resources and knowledge.

It can take years or decades for a new idea to become a feasible technology and compete successfully in the market (Figure 29). Therefore, the business risk of developing a new product is very high. However, if a proper market analysis is made, this risk can be more appropriately defined, making it possible for those directors to decide whether to invest or not in a new product.

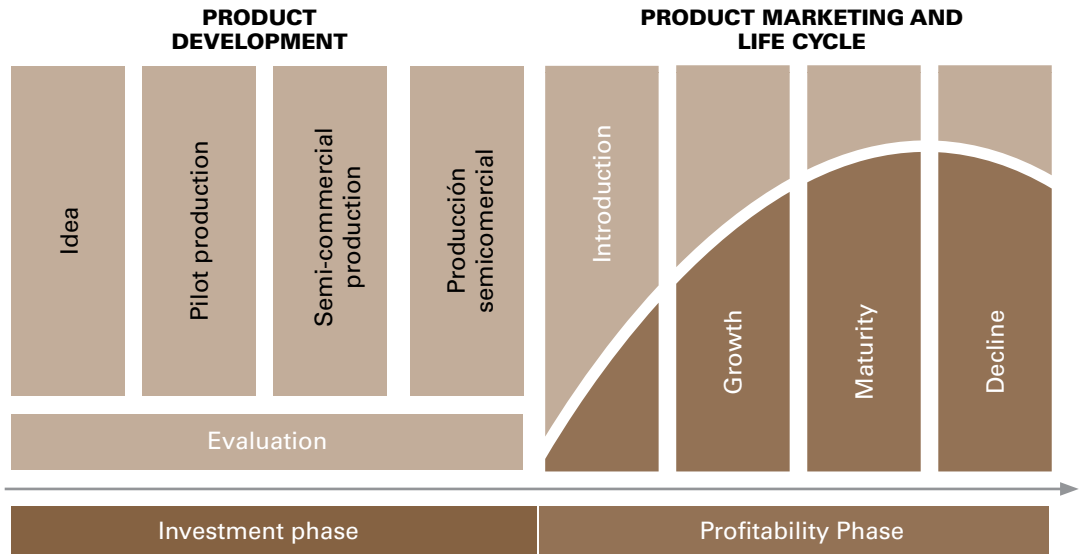


Figure 29 - Stages involved in developing and marketing a new product

6.10 The importance of prototypes in developing new products

At a certain point in the process of researching into or developing a new product, the need arises to materialize its concept and predict its actual behavior. This need can be met by building prototypes (Figure 30).

The best prototypes are those with which suppliers and customers can interact, reducing the ignorance of the developer in relation to what they see in the concept being proposed to them. In precursor prototypes, the focus should be on simplicity and on learning very basic concepts. In more advanced prototypes, the focus should be on the essence of the design. Ideal prototypes are those that make it possible for designers, customers and

suppliers to introduce sequential improvements. The purpose of a prototype is to bring a developer team together around a common concept to point out problems and possible solutions, as well as paths for the following stages of a product's innovation process.

A prototype is a physical or digital three-dimensional and functional model of a product whose main purposes are the following ones:

- Presentation and demonstration;
- Visualization of design features and actual dimensions;
- Confirmation of the product's concept and usability;
- Testing;
- Definition of important details before applying for a patent or industrial design registration.

Figure 30 - Illustration of a prototype of a concept car

Prototyping

- Design - When one thinks about launching a new product, the first thing that is usually done is to design it manually or using specialized software.
- Construction - Physical prototypes can be built using various materials such as wood, metal alloys, resins, fabrics, plastic materials, etc., provided that they allow for a three-dimensional visualization of the product.

Stages involved in building prototypes

The first prototype, referred to as concept prototype, is usually meant to materialize the idea and concept of a product. After this first model is built, improvements begin to be introduced in a process involving design, ergonomics, adjustments in the light of technical standards, etc., with the aim of checking the product's concept. This is the functional prototype. After the functional prototype passes simulation tests, a final prototype is prepared with the main characteristic of being adaptable for production on an industrial scale.

Virtual prototyping

The methodology applied to building and testing some prototypes can consume time and resources beyond what would be desirable for a company, meaning that it might not be the ideal solution in some cases.

Virtual prototyping consists in creating a computational model through dynamic and interactive simulation before a physical prototype is created. This model is prepared based on the intended final product's characteristics in terms of shape, size and material, taking into account its specifications of functionality and performance, and it is then subjected to simulated tests to check if the project meets its specified needs, constraints and performance.

Virtual prototyping is very practical and involves lower costs for the company. It allows for a product to be demonstrated to partners or investors using only a computer.

In the process of building a prototype, the following parameters should be taken into account:

- Don't try to fit all the pieces together at the same time. Prototypes should be built to provide insights into one or two basic uncertainties. This allows for valuable information to be generated in relation to the nature of a problem and its potential solution.
- The prototype should be built quickly and small, inexpensive and practical tests should be applied. Preferably, this activity should be performed with partners (suppliers, major customers), so that costs, risks and benefits may be shared. Results should be analyzed with the aim of modifying and improving the prototype.
- Learning from mistakes is important for the project to succeed faster.

6.11 Marketing Intellectual Property Assets

Intellectual property should be used for the benefit of society. It should be used as a means to disseminate knowledge and to transfer technology and development. The intellectual property system is not meant to protect items derived from creative activity only, but also investments made to bring them to market. The holders of intellectual property rights are protected by specific laws against unauthorized use of their work, products, processes, brands and services. The availability of temporary exclusive rights to exploit intellectual property commercially contributes to enhance the competitiveness of enterprises and the competitive environment as a whole by fostering innovation and stimulating human creations, entrepreneurship and the technological, cultural and scientific development of a nation.

For a country to be attractive from the standpoint of business and to have a dynamic and healthy economy, it must have:

- A regulatory framework for trade designed to protect enterprises and encourage them to be innovative and competitive;
- An efficient, competent and agile legal system to settle business disputes;
- A strong system for protecting property rights, including intellectual property rights, capable of ensuring adequate return on investment and of promoting innovation in enterprises.

The assets of a company can be divided into two categories:

- Tangible or physical assets such as buildings, machinery, infrastructure, vehicles, raw materials, financial assets (stocks, bonds), etc.
- Intangible assets, which comprise the intellectual capital, industrial secrets, trademarks, designs, patents, literary, artistic and scientific works, etc.

There is no doubt that material assets play a very important role in determining the strength and degree of competitiveness of an enterprise in its business environment. However, intangible assets play an even greater role today in increasing the value of a company. Organizations may hold exclusive rights to intellectual property assets such as:

- Patents and utility models for innovative products and processes;
- Patrimonial rights to works protected by copyright and related rights, such as books, music, movies, software;
- Trademarks;
- Industrial designs;
- Integrated circuit topographies for manufacturing computer chips;
- Industrial secrets for commercial purposes.

In a dynamic market eager for novelties, there's always demand for innovative products and services protected by IPRs. It is thus important for companies to learn how to create, protect, manage and market their intellectual property assets, since they can be of great value to the business.

- Intellectual property rights can ensure revenue generation for an enterprise through licenses and sales of these assets.
- A legally protected intellectual property asset can open doors to new investment, development and marketing opportunities for a company.
- An intellectual property asset can generate business opportunities involving mergers, acquisitions, spin-outs, joint ventures and collaborative activities for a company.

Building an intellectual property portfolio for business

Executives need to have the right information to assess options that can maximize return on investment in developing and acquiring intellectual property assets. Consequently, a company should prepare a business plan for its intellectual property assets as part of its overall business vision.

Building an intellectual property portfolio for business purposes necessarily involves the definition and creation of the required internal competence to implement a strategy designed to maximize the value of the business. This activity involves managing intellectual property goods as assets that ensure a competitive edge for the company, which needs to do the following to structure its portfolio of intangible assets:

For intellectual property assets to be negotiated appropriately, one must understand the marketing process and have a realistic view of the various aspects involved in a business opportunity. These assets are very attractive to entrepreneurs, but professionalism and a sound business strategy are necessary to turn them into value-added and, ultimately, into financial return.

Brazil has taken significant steps in its innovation agenda. The consolidation of a significant strategic alignment between the public and private sectors by placing innovation at the core of industrial policy confirms this fact. This alignment has made it possible for appropriate support mechanisms to innovation to be developed through incentives, economic subsidies and specific financings for research, development and innovation (R & D & I) activities.

- Check its collection of intellectual property assets and identify those that form the basis of a competitive advantage for the company due to their comprehensiveness, market size, growth rate, return on investment and other criteria, grouping them by process;
- Develop a plan based on its competitive strategy to use its previously identified and grouped intellectual property assets;
- Use transfer strategies for each group with the aim of preserving competitiveness;
- Align the planning for each group of intellectual property assets with its business strategy and commercial objectives;
- Determine situations that could lead to legal disputes over intellectual property rights and predict when it should litigate or offer a license to the offender, taking into account the following:

  - the company's position in the market;

  - the effect of a court battle on the image and reputation of the company;

  - the impact of possible side effects, such as retaliation;

  - effectiveness of the repressive action;

  - probability of judicial success and compensation for damages;

  - cost and time involved in a lawsuit.

Innovative companies need to continually evaluate the best way to protect their intellectual property portfolio while considering opportunities for licensing or selling these assets individually or in groups. This evaluation can take into consideration an analysis of:

- Potential cash flow generation;

- Lifetime of the technology;

- Possibility of entering new markets;

- Possibility of disputes.

Business decisions must be made based on the appropriateness of remaining in a certain market or withdrawing from it strategically. This includes the possibility of implementing a program for licensing or selling goods that do not constitute the main focus of the business but can offer an alternative source of revenue. In some cases, the possibility of selling intellectual property assets that are part of the main portfolio of the company for use in other market niches could be considered, with a prediction of reverse licensing for the company's target market.

In process of assessing the possibility of selling or licensing a new proprietary technology, it is important to determine whether the value of the portfolio (e.g. of the patent portfolio) is based on a defensive strategy (infringement of intellectual property rights by third parties) or if the portfolio is related to new business opportunities (offensive strategy). In the case of a patent, it is easier to sell it when it is related to a future market, as its holder can amortize the costs involved in its commercial exploitation in the various markets in which the patent is protected.

To ensure the best management of a portfolio of intellectual property assets, thereby increasing the company's profitability, the strategies for developing and negotiating these assets must be defined at the highest levels of the organization. Legally protected intellectual property assets can be objects of technology transfer contracts that can involve the sale or assignment of these rights. These contracts must comply with legal requirements, and to become effective against third parties they must be registered with the INPI.

Besides transferring technology, executives also have the following options for marketing their industrial property assets:

- Exploitation of patents: Licensing of a patent or of a patent application filed with the competent agency (in Brazil, the INPI);
- Use of trademarks: licensing of a registered trademark or of an application for registration filed with the INPI;
- Use of industrial designs: licensing of an industrial design already registered with the INPI;
- Supply of technology: this is recommended when acquiring knowledge and techniques for producing industrial goods and services not protected by industrial property rights;
- Provision of technical assistance services: this is recommended when hiring specialized technical services involving planning and programming methods, as well as research, studies and projects. Only contracts involving service providers domiciled abroad must be registered with the INPI;
- Franchise: a franchise consists in granting temporary rights involving the use of trademarks and the provision of technical assistance services in combination or not with any other technology transfer modality that might be required for a business objective to be achieved.

6.12 Determining royalty rates

Royalty rates are usually calculated as a percentage of the net sales of licensed products or services. They can also be determined as a fixed amount on sales. Studies show that royalty rates on licensed products or services range between 0.1% and 50% of the net sales price. This is a broad range that shows that, for each contract, a detailed economic-financial study should be carried out to provide a solid basis for negotiations.

For a fair and realistic royalty rate to be established between the parties involved in a contract, preparing a consistent business plan is recommended. This plan should include financial scenarios and calculations of the profitability of the licensed product or service and of the economic benefits it can bring to the licensee. Experts say that a fair royalty rate is one that, during the license term, ensures the licensor about 25% of the profits made by the licensee as a result of the commercial exploitation of the intellectual property in question. This is only a reference that can be appropriate in some cases and not in others.

From the point of view of the licensee, royalties are seen as an additional cost item. Their value is added to the total cost of a product, along with the costs of labor, raw materials, distribution and others. Thus, royalties should not account for most of the cost associated

with a product, as this would undermine the profit margin for marketing it successfully and ensuring a desirable return on the investment made by the company.

It is therefore important to know that royalties are calculated on the basis of:

- The extent of the licensee's competitive advantage (product differentiation due to innovation, impact on production costs, etc.);
- Duration of the competitive advantage linked to the term of protection of the intellectual property rights (e.g. term of a patent);
- Profitability of the licensing activity;
- Size of the licensing market.

Marketing rules:
• Develop the product sufficiently to sell it;
• Offer it for sale;
• If it sells, improve it!
One should remember that the customer, and not the company, is the final judge of how good, valuable and exciting a product or service is. The sooner the company gests customer feedback the better!
Nothing matters more to a company that selling its products or services!

6.13 Strategies for marketing intellectual property assets

The absence of a product on the market doesn't necessarily means that there is a commercial opportunity. Another company might have tried to market it before without success.

Market research and analysis of sales potential provide key inputs for an innovative company to have a fair degree of certainty that its product will be successful in the market. Companies have several options for developing new business lines, as mentioned below.

6.14 Licensing and sale of intellectual property assets

Depending on its business strategy, a company may choose to license or sell (transfer) intellectual property rights. This activity involves a strategic approach for choosing the right partner. Since one of the key factors of success is establishing mutual trust in a business relationship, the company should do an audit (due diligence) on the integrity and reputation of the future partner in the market.

If licensing is the option chosen as the best commercial exploitation strategy, the contract should contain specific clauses defining the rights to exploit intellectual property that are being licensed, including a definition of minimum performance parameters. If the desired performance is not achieved, the licensor can terminate the contract and ensure the reversal of its marketing rights.

Depending on the technology in question, a license may be more appropriate in the initial stages of its development, when substantial investments are still necessary and the holder of the intellectual property right is not willing to run the commercial risks involved alone.

Another option, which is appropriate when the intellectual property asset is not aligned with the organization's business strategy, the business is for sale or the company wants to change the focus of its business, is that of the holder of the right selling the intellectual property asset permanently and irrevocably.

In the specific case of sale of a patent, all the risk is transferred in exchange for a fixed payment (royalties), which is calculated based on projected revenues from present and future opportunities. This modality of royalty payment is referred to as lump sum.

6.15 Stages involved in licensing intellectual property assets

The offer of a license consists in the possibility of a licensor assigning rights over legally protected intellectual property to a third party (licensee) for commercial exploitation purposes. Thus, in a licensing agreement, the parties agree to share a potential future cash flow based on their relative needs and contributions to generating revenues from the marketing of an intellectual property asset. To avoid misinterpretation of contractual terms, innovative companies should incorporate the best practices into their licensing strategies.

Critical success factors for commercial transactions with intellectual property assets:
- Deal with intellectual property as a strategic asset;
- Select the best commercial partner possible;
- Recognize the value of royalty agreements;
- Apply the best practices in contract management;
- Avoid unnecessary disputes and litigation by investing time and effort at the beginning of the business relationship.

The strategy of licensing intellectual property can be an interesting alternative for a company to grow when it wants to:

- Expand existing business lines (territory X portfolio);
- Improve the quality of products, processes and services;
- Reposition the business in the market.

A license agreement should be tailored to the business in question. The attention paid to drawing up this document should be proportional to its financial importance. Drawing up contracts is a task that requires very specific expertise, and it should therefore be done by professionals skilled and experienced in the marketing of intellectual property.

There are many types of licensing agreements, but they usually fall into three basic categories:

- Technology license;
- Trademark and franchise license;
- Copyright license.

Several companies have adopted policies to find out and assess ideas of others about new products, processes and services and copyright goods. Therefore, identifying these companies, knowing their systems and establishing preliminary contacts with them are important steps if the business strategy of the organization is that of offering its intellectual property.

Depending on the business circumstances, contracts involving the licensing of an intellectual property right may be necessary for merger transactions, acquisitions or joint ventures.

These contractual mechanisms, with specific objectives (licensing) or in combination with other aspects of the business, provide both the licensor and the licensee with a wide variety of possibilities for conducting business in the country of origin and in foreign territories. Thus, either as the holder of an intellectual property right or as a licensor, a company can expand its business to the market boundaries of its partners and thereby ensure an additional revenue stream to the enterprise. On the other hand, as a licensee, without having invested in its development, a company can have a portfolio of products and services to produce, sell, import, export and distribute.

Licenses can be of the following types:

- Exclusive license: the licensee becomes the holder of the exclusive right to exploit the intellectual property asset. In this case, the licensor loses the right to exploit the intellectual property asset commercially;
- Non-exclusive license: under this modality, the right to exploit an intellectual property asset can be granted to more than one licensee. Multiple licenses can be granted and used for commercial exploitation purposes in several applications and markets by various licensed partners;

- Single license: this type of license is granted to a single licensee, but the licensor retains the right to use the intellectual property.

In the international context, an intellectual property license contract can be entered into when the asset to be licensed is formally protected in the country or countries of commercial interest. If the intellectual property asset is not protected in those markets, the company cannot license and cannot prevent or impose restrictions on its use by third parties either.

Intellectual property rights are usually granted by country. For this reason, licensing contracts usually make a precise reference to the territory or territories in which the licensing rights will be protected. For business involving multinational companies, licensing agreements are usually global.

Checklist for intellectual property contracts:
Set clear and objective criteria;
Pay attention to details;
Take into local factors into consideration (language, culture, administrative practices); Include a clause in the contract to ensure ongoing audit during its execution;
Monitor the contract execution from the outset, as well as the reports of royalty payments.

Pre-licensing preparation

During the negotiation phase, the licensor should protect his know-how, trademarks, trade secrets, software and other proprietary information by preparing a confidentiality agreement or a memorandum of understanding. This document should be drafted in such a way as to allow the company to file suit if there is a breach of confidentiality. The confidentiality agreement should be signed by employees, collaborators, consultants and all other parties that will have access to the inside information in question.

Content of a licensing contract

It is not to be expected that all the clauses of a licensing agreement for intellectual property will be standardized. Certain technological areas require unique and well-defined considerations with regard to the specification of the product to be licensed and its use. These definitions are usually the ones based on which royalty rates are calculated, i.e. they constitute the "heart" of the contract. The basic structure of a licensing agreement involves the following:

- **Defining the product to be licensed:** the parties need to find the correct definition of the intellectual property to be licensed, including a determination of the scope of possible improvements therein;
- **Defining the royalty rate:** this is an aspect of the contract that requires great attention and clarity from the parties. Objective and consistent wording that reflects what was actually negotiated is essential to avoid future disputes. This definition should include:

  - the deadline for royalty payments;

  - the extent of use by the company, companies belonging to the same group and its subsidiaries;

  - projected mergers and acquisitions;

  - the basis for calculating revenues - for example, "x"% of the gross revenues of the company or "x"% of the net revenue from the marketed product - per fiscal year;

  - minimum marketing performance;

- **Defining royalty terms:** in the case of patent licensing, royalty payments in Brazil

are only allowed during the term of a patent to prevent economic abuses (Anti-trust Law, no. 8,884/1994, article 21, XVI).

- **Access to information:** contracts must also include clauses providing for the provision of strategic information on its execution by the licensee in regular flows, covering both financial and operational aspects. For certain types of technologies, it might be appropriate for the licensor to have direct access to parts of the licensee's management system to enable continuous monitoring of business operations with the licensed asset;
- **Scope of possible improvements in the intellectual property asset:** the value of a license agreement can consider rights on likely and possible improvements in the IP asset. If there is no clause in the contract providing for this situation, there could be room for litigation. In this context, an improvement is defined as any new feature that increases the value of a product, process or service or makes them more attractive to consumers. Thus, an improvement is an additional feature that makes the licensed asset even better in relation to its original purpose.
- **Co-marketing and co-promotion agreement:** licensing contracts can also include clauses providing for marketing and promotion activities. Both strategies are aimed at expanding sales and market gains:
- **Co-marketing:** a co-marketing agreement provides that two or more companies agree to sell the same product independently and with different brands. In this case, the licensor shares reputation and notoriety with the licensee, as well as risks involved in the transaction; this type of license usually involves an upfront payment to the licensor and enhances the efficiency of the commercial exploitation of a technology.
- **Co-promotion:** a co-promotion arrangement is established when two or more companies cooperate in a manufacturing process or launch marketing campaigns using the same brand. In this case, the licensor seeks to align performance indicators, reduces costs with the licensee, shares risks involved in the operation and shares experiences and knowledge.
- **Contingency plan:** depending on the strategic importance and commercial value of the intellectual property asset to be licensed, the licensing company should prepare a contingency plan for possible situations beyond its control that could affect the performance of the contract. Provisions should be made for the possible consequences of such situations, which can include:

  - restrictive actions by regulatory bodies (important for licenses in the pharmaceutical and food industries);

  - entry of competitors into the market with a new technology that could change the competition scenario;

  - risks associated to the product, process or service itself;

  - shortcomings in the promotion and marketing strategy;

  - manufacturing defects;

- problems with the administrative-financial management of the licensed company, among other issues.

Managing a licensing contract

Checklist for intellectual property contracts:
Set clear and objective criteria;
Pay attention to details;
Take into local factors into consideration (language, culture, administrative practices); Include a clause in the contract to ensure ongoing audit during its execution;
Monitor the contract execution from the outset, as well as the reports of royalty payments.

The key aspect of a licensing contract for intellectual property assets is the outsourcing, by the owner, of the operation to the licensee, which may include: manufacturing, marketing and distribution. After the stage of negotiating and signing the contract, the management of the business outsourced to another company begins. This new activity is often the hardest one in the business relationship. Besides the need to ensure that your company is operating profitably in the market, the licensor must make sure that the licensed company is also doing its part in the business arrangement. Checking the implementation of the licensed object periodically is a key requirement to ensure the success and good performance of the contract. Unfortunately, few companies have structured programs or routines for this kind of activity.

Post-contract monitoring is essential to ensure the expected financial return for the licensor. This involves continued management and governance. If all of this is done, the licensing company has a good chance of building a sound business relationship with the licensee and of ensuring the best financial return possible for all the stakeholders.

The process of monitoring a contract should be seen as a best practice activity adopted by the licensing company, as it serves to detect potential problems and to encourage the licensee to perform well. When a contract involves considerable sums in royalties, a well-structured monitoring program can provide concrete evidence of audits that can actively contribute to avoid possible disputes.

There are risks associated with the execution of a licensing agreement that involve:

- **Change in the environment:** It's important to know that the only thing that remains "fixed" in a licensing contract is the contract itself. Over time, both parties change and adapt their businesses to new realities and situations. The technology and technological standards themselves also change. Despite this changing scenario, the parties remain committed to the original terms of the signed contract. For this reason, the environment must be monitored for adjustments to be made in the terms of the contract if necessary, ensuring benefits to both parties;
- **Performance of the License:** this second risk is associated to the license itself. When a company licenses a technology, content or software, it is putting its intellectual property in the hands of third parties. The challenge for the licensor is to get consistent information about the licensee with the aim of protecting its intangible asset. It is estimated that about 70% of all statements of royalty payments submitted by licensees contain errors, as identified in audits. This means that payments due by licensees are not correct usually. In an open work environment, a professional relationship is the foundation of any agreement. In the case of licensing, trust is also a key element. The parties must work together to make sure that appropriate financial, operational and governance controls are in place;
- **Investors and regulators:** in today's business world, a licensing company should not think that a licensee is not linked to its business. In fact, in many cases a

licensee can be seen as an "extension" of the licensor, implying additional risks to its business that regulators and investors are well aware of. Therefore, to avoid additional risks, a licensing company should have well-defined policies to oversee its contracts and avoid lawsuits.

Effective monitoring of a licensing contract

The main purpose of monitoring is to secure and preserve a sound business relationship with the licensee. Inaccurate information can lead to misinterpretations by one or both parties. This may not be fatal to the relationship, but it can cause unnecessary damages and friction between the companies.

Effective monitoring should cover not only financial aspects, but also operational aspects, which are paramount to the success of a business. Many licensing contracts contemplate investments in communication and marketing that impose a cost on the licensee. These aspects must also be monitored. Monitoring should be carried out at two levels:

- Preventive monitoring;
- Corrective monitoring.

The licensing company must be provided with the necessary managerial tools to analyze and detect problems and, if problems are actually identified, to take corrective measures.

In most cases, licensors are reluctant to start monitoring and auditing for fear that the licensee might interpret this action as revealing lack of trust in the business relationship. Licensors that adopt this attitude end up losing control over their intellectual property. To avoid any embarrassment, it is advisable that monitoring is provided for in the contract in the first place.

Post-contract monitoring is a crucial activity in connection with licensing agreements. It improves the management of contracts and of the business operation, contributes to a better risk management and can be self-sustaining, since it enhances the chances of higher returns to the licensor.

6.16 Trademark and franchise licensing

Business options involving licensing contracts for trademarks or franchises are appropriate when an enterprise wants to:

- Promote the sale, through third parties, of a product or service with a registered trademark or industrial design;
- Enter or expand new markets through the commercial activities of third parties for their products or services protected by trademarks and industrial designs.
- Since the use of a trademark involves the identification of the manufacturer and its reputation in the market, the company that owns it must make sure that its partner is idoneous. This is necessary because these licenses can compromise its image if the licensee fails to comply with the terms and conditions of the contract. The licensing company must keep an efficient management system closely linked to the licensee to ensure the desired quality standard and keep the end customers satisfied with the product and service.

A franchise is a type of business association where a franchisor authorizes a franchisee to exploit the right to use a trademark and distribute products and services in a specific market segment, as well as the right to use the operations and management system of an already tested and successful business.

In Brazil, the franchise industry has been growing every year. Its revenues rose from R$25 billion in 2001 to R$55 billion in 2008.
The number of franchised networks increased from 600 to 1,379 over the same period.
In the franchise industry, the following business segments stand out:
• Cosmetics and perfumes;
• Education and training;
• Furniture, decoration and gifts;
• Food;
• Apparel;
• Hotels and tourism.
More information can be found at: <www.portaldofranchise.com.br>.

Under a franchise arrangement, an entrepreneur who owns a trademark and has know-how, experience and success in an area allows a franchisee to benefit from such knowledge and to use his or her trademark and marketing, administration and management methodology for a certain period of time. Because franchising involves the standardization of a successful business model, it usually also involves the use of standardized packaging, store layout and employee uniforms to make it easier for customers to identify the business.

6.17 Copyright licensing

In the field of copyrights, a patrimonial right on a work (literary, artistic, scientific work) can be licensed by its holder to third parties when there is an interest in allowing a licensee to:

Produce, distribute, disseminate the results of his or her creations;

Enter or expand the market for his or her copyrighted works;

License the representation of the commercial exploitation of patrimonial rights on the works with the aim of organizing a collective management arrangement.

6.18 Software marketing

Because IT is an activity under permanent improvement, the holder of the rights must precisely define the limitations imposed on the guarantees provided, excluding those that are not of his or interest, so as not to be surprised by any claims from end users in connection with the harmful use of a software (e.g.: lack of specific training in a software).

Because in legal terms software falls under the copyright category, it should be mentioned that the software developer is the holder of the author's right on it and its property is not fully transferred in commercial transactions, since a permanent link is established between the product and its creator.

The mechanism that is used for marketing software is an element that differentiates it from other intellectual works. The rights of a software developer are inalienable and, for this reason, buying and selling operations are not applied to software. Software is not considered a merchandise. According to Law no. 9,609/98, Article 9, the use of a computer program in Brazil is the object of a license agreement.

All conditions should be contemplated in the contractual instruments signed between the holders of rights on software and its end users, including the period of technical validity of the marketed version. These instruments can range from a simple license agreement included in the packaging of the product (which is common for the so-called off-the-shelf software) to specific contracts exclusively designed to meet the needs of the parties (which are common in the provision of outsourced services for developing computer programs for companies).

In Brazil, software can be marketed in the following ways:

- Directly by the holder of the right to the end user;
- By distributors authorized by the holder of the right.

Each one of them has benefits and limitations. The final decision as to the best option depends on the particular type of software and on the creative capacity of the company and its development structure.

End-user license agreement

This is the most traditional software licensing model. The company that developed the software licenses its program directly to the end user. This model allows for the software developer company to have full control over its price and over the definition of its end user, enabling it to restrict to whom the software will be licensed. This is a good option for companies that don't want to license its intellectual property rights on software to a potential competitor. However, in this case the developer company will be responsible for all activities involving marketing, technical support and warranty. These activities require investment in, for example, maintaining a sales team and post-licensing support, which many companies are not willing to make.

Distribution license

Under this option, the software developer company transfers the responsibility for all marketing, maintenance, technical support and warranty activities to the licensee (dealer). It broadens its user base by using the distributor's customer base and the software can be included in solution packages offered by the licensed dealer. The disadvantages of this option are that the developer company has to offer price flexibility to the distributor, to depend on the performance of the distributor's sales force to have a return on its investment and to keep limited control over the operation, besides not having any direct contact with the end customer.

6.19 Creative Commons License

Creative Commons is a nonprofit project that makes flexible and standard licenses available for open, free and shared management of content and information for licensed intellectual works. It is represented in Brazil by the Technology and Society Center of the Law School of the Getúlio Vargas Foundation (FGV) in Rio de Janeiro. A Creative Commons license is recognized by the symbol shown in Figure 31.

The Creative Commons project was officially launched in 2001 by Professor Lawrence Lessig of the Stanford University. More information is available at: <www.creativecommons.org.br>.

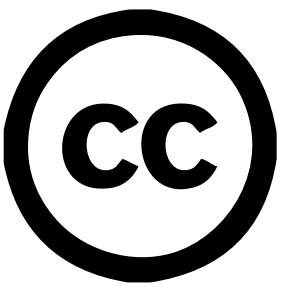


Figure 31 - Illustration of the Creative Commons logo

Offering a work under a Creative Commons license does not mean giving up copyrights. It means offering some of those rights to the public under certain conditions. These licenses were designed to allow the standardization of declarations of will for licensing and distributing cultural content in general (text, music, images, movies, etc.) to facilitate their sharing and recombination under the copyleft philosophy.

Copyleft is a way of using copyright laws with the aim of removing barriers to using, distributing and modifying a creative work imposed by classic intellectual property rules, and it is thus different from public domain, which doesn't have such restrictions.

The licenses created by the organization allow copyright holders to waive some of their inherent rights to their creations in favor of the public, although they retain other copyright rights. This arrangement can be operationalized by means of different types of licenses that are ready to be aggregated to contents one wishes to license. The available options can result in licenses ranging from almost total abdication of patrimonial rights by the licensor to more restrictive options, under which the possibility of creating derivative works or using licensed material for commercial purposes is forbidden. However, all the licenses require that credit (attribution) be given to the author or licensor as specified by him or her.

The types of Creative Commons licenses available, with their respective symbols, are described below.

Attribution. Under this modality, others are allowed to copy, distribute, display and perform a work protected by copyright - and derivative works created from it - but only if credit is given as defined by the author.

Non-commercial use. Others are allowed to copy, distribute, display and perform a protected work - and derivative works created from it - but only for non-commercial purposes.

No derivative works. Others are allowed to copy, distribute, display and perform only exact copies of a protected work, but not derivative works.

Sharing under the same license. Other people are allowed to copy and distribute derivative works only under an identical license to the one that governs the original work of the author.

Note: A license may not contain the options "Sharing under the Same License" and "No Derivative Works." The sharing under the same license condition is only applied to derivative works.

6.20 Other Forms of Business Involving Intellectual Property Assets

Collaborative research

This is the name given to the relationship between universities or research institutions and the business sector with the aim of obtaining a specific product or process derived from research. This type of relationship is developed by means of cooperation agreements that set out predetermined conditions in terms of financing, availability of qualified technical staff, facilities and equipment, as well as issues regarding secrecy and confidentiality, definition of ownership rights and commercial exploitation of intellectual property.

One should remember that the basis of any collaboration arrangement is the establishment of a two-way process and that it basically depends on a relationship that benefits both parties.

Strategic alliance

A company might need to raise financing or use the expertise of others to continue to develop an innovative project for a product, process or service. Developing a strategic alliance with an appropriate business partner can ensure the successful marketing of a new

technology. As in the case of collaborative research, a formal contract should provide for all the rights and obligations of the parties involved and for issues related to the ownership and commercial exploitation of the IP asset in question.

Creation of a new company by means of a spin-out or joint venture

A spin-out involves the creation of a new company to market newly-developed proprietary technology. The new company can be financed by the "parent company" or by other companies or foreign investors. For companies with a long-term strategy, this option can result in large returns on investment if the new company is subsequently sold or goes public. Under this option, the parent company, which developed the intellectual property, may decide to completely separate its activities from those of the new company, which will manage its operations autonomously and take all the responsibility for sales, support and maintenance.

A joint venture is type of business relationship that involves two or more partners who decide to invest their resources collectively with the aim of establishing a common-purpose business arrangement. Under this type of contract, one party usually provides proprietary technology or know-how while the others provide financial resources and make professionals available to support the development of the business. Thus, a joint venture agreement defines the terms under which technology requiring further development or completion will be licensed, regulates the use of proprietary information and defines the financial compensation of the partners.

Each strategy has advantages and disadvantages and companies should opt for the one that involves less risks, provides quicker return on investment and delivers the highest profitability for them. The parameters that should be taken into account in making this decision include:

- Potential of the technology;
- Stage of development of the technology;
- Size of the market;
- Financial capacity;

Intellectual capital (professional competence and availability).

Sale under own brand

This strategy happens when a company manufactures a product under its own brand for other companies to market it through their distribution channels, e.g. supermarket chains, snack bars and other outlets.

Sales by OEM

OEM stands for Original Equipment Manufacturer. Under the OEM marketing strategy option, a company with intellectual property rights produces components or sub-assembles parts to be integrated into a final product by a large company. This type of technology sale agreement is used by car manufacturers and their suppliers of original parts.

Corporate Partnership

A start-up company and a large company enter into an agreement for developing a collaborative product, usually involving an upfront payment to the young company for its efforts to develop the technology in question. In return for this investment, the large company is granted the - often exclusive - right to use the results of those efforts in its own business for a certain period of time.

Direct Consultancy

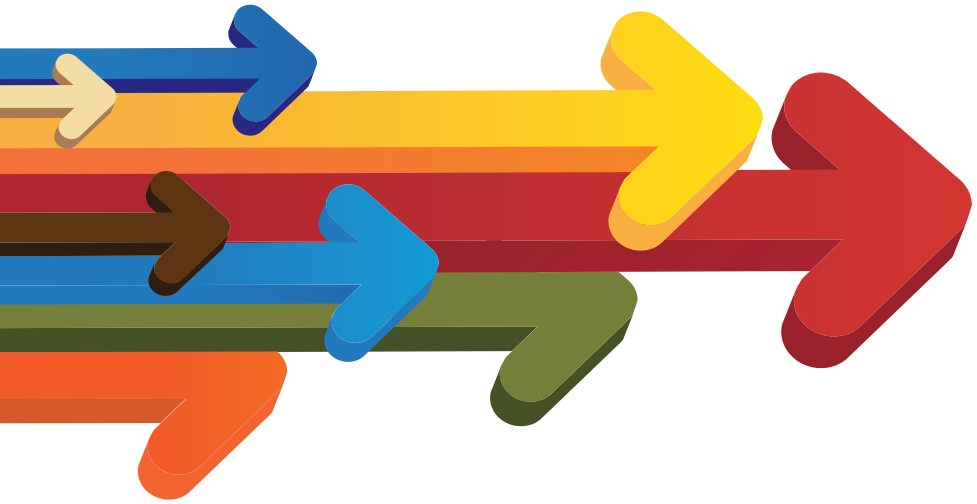
This form of business transaction occurs when a company hires a specialized company with the intent to develop or apply a technology that it doesn't own yet. In this case, the business objective is that of marketing an intellectual property asset and getting know-how from the company that owns it.

6.21 Ownership of intellectual property and labor relations

If the author of an intellectual property is an employee, an outsourced professional, a collaborator or a trainee of a company, who has the right to it? When an invention or utility model is developed under an employment contract entered into in Brazil whose object is research or inventive activity, or when it results from the nature of the services for which the employee was hired, the rights to the asset in question belong to the employer exclusively. In this case, the financial remuneration for creative work is limited to the wages agreed upon, unless there is an express contractual provision to the contrary. It is noteworthy that an invention or utility model for which a patent was filed by the employee up to one year after the termination of his or her employment is considered as having been developed under an employment contract.

Unless agreed otherwise, the same provision applies to patrimonial rights to a computer program and to an integrated circuit topography developed and produced during the term of an employment contract. This treatment is also applied to scholarship holders and trainees.

In order to avoid future problems involving disputes over the ownership of intellectual property, companies and institutions should always include specific and explicit clauses on intellectual property rights in their contracts with employees, outsourced professionals, trainees or scholarship holders. With this precaution, the organization defines its policy for intangible assets for all stakeholders.



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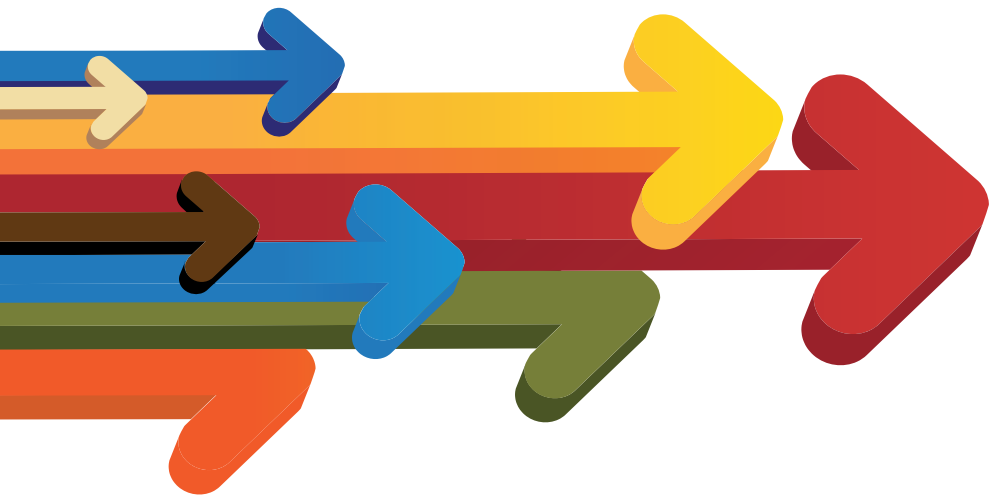

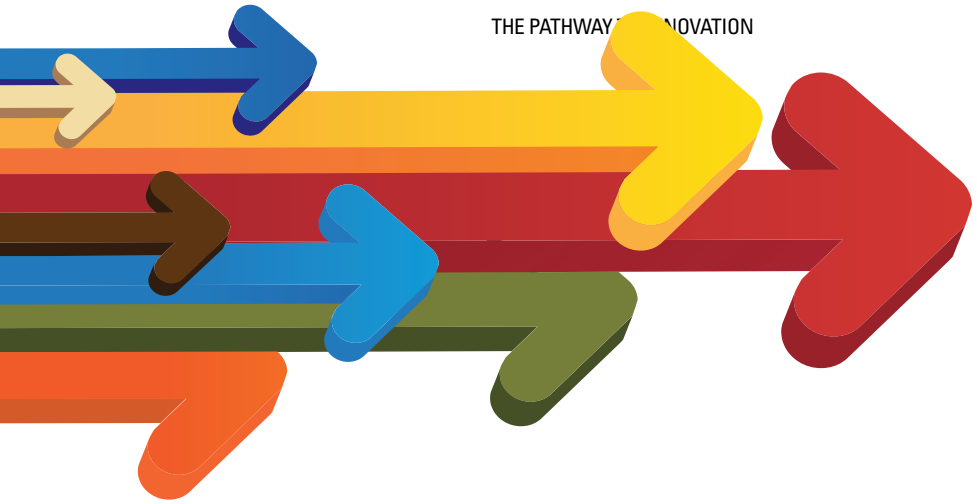

ANNEXES

APPENDIX A - CURRENT REGULATORY FRAMEWORK FOR INTELLECTUAL PROPERTY IN BRAZIL

Legislation	Object	Synopsis
Constitution of the Federative Republic of Brazil	Fundamental Rights and Guarantees	Chapter I - Individual and collective rights and duties.
Decree-Law no. 2,848/40	Penal code	Crimes against Intellectual Property
Decree-Law no. 3,689/41	Code of Criminal Procedure	Prosecution and judgment of crimes against Intellectual Property
Law no. 9,279/96	Industrial Property.	Regulates rights and duties related to industrial property.
Law 9,456/97	Cultivars	Establishes the Cultivar Protection Law and provides for other measures.
Law 11,484/07	Integrated Circuits	Provides for incentives for manufacturers of digital TV equipment and electronic semiconductor components and for means to protect the intellectual property of topographies of integrated circuits through the Technological Development Support for the Semiconductor Industry Program - PADIS - and the Program in Support of the Technological Development of the Digital TV Equipment Industry - PATVD amends Law 8,666 of June 21, 1993; and revokes article 26 of Law no. 11,196 of November 21, 2005. Veto message
Law no. 9,609/98	Intellectual Property.	Provides for intellectual property protection for computer programs, their marketing in Brazil and other measures.
Law no. 9,610/98	Copyrights.	Amends, updates and consolidates the legislation on copyright, among other provisions.
Decree no. 2,553/98	Regulates article 75 and articles 88-93 of Law no. 9,279 of May 14, 1996.	Regulates article 75 and articles 88-93 of Law no. 9,279 of May 14, 1996, which regulates rights and duties related to intellectual property.
Decree 2,556/98	Intellectual Property protection for computer programs.	Regulates the registration provided for in article 3 of Law no. 9,609 of February 19, 1998, which provides for Intellectual Property protection for computer programs and their marketing in Brazil and for other measures.
Decree no. 3,201/99	Provides for the granting of compulsory licenses.	Provides for the granting of compulsory licenses in cases of national emergency and public interest contemplated in article 71 of Law no. 9,279 of May 14, 1996.

Provisional Measure 2,186-16/01	Traditional Knowledge	Articles 1, 8, paragraph "j" 10, paragraph "c" 15 and 16, and paragraphs 3 and 4 of the Convention on Biological Diversity provide for access to genetic heritage, protection and access to associated traditional knowledge, sharing of benefits and access to technology and technology transfer for its conservation and use, among other measures.
Decree of August 21, 2001	Creates the Interministerial Group on Intellectual Property.	Creates, within CAMEX (Foreign Trade Chamber), the Interministerial Group on Intellectual Property, disciplining its composition and functioning, and provides for other measures.
Law no. 10,603/02	Protection of undisclosed information.	Provides for the protection of undisclosed information submitted for approving the marketing of products and contemplates other measures.
Decree no. 4,533/02	Regulates article 113 of Law no. 9,610 of February 19, 1998.	Regulates article 113 of Law no. 9,610 of February 19, 1998 for phonograms and provides for other measures.
Law no. 10,973/04	Incentives to innovation and research.	Provides for incentives to scientific and technological innovation and research in the manufacturing environment and for other measures.
Decree no. 5,244/04	Composition and functioning of the National Council to Combat Piracy and Crimes against Intellectual Property.	Provides for the composition and functioning of the National Council to Combat Piracy and Crimes against Intellectual Property and for other measures.
Decree no. 5,563/05	Regulates Law no. 10,973 of December 2, 2004.	Regulates Law no. 10,973 of December 2, 2004, which provides for incentives to scientific and technological innovation and research in the manufacturing environment and for other measures.
Biosafety Law 11,105/05	Stem Cells, Transgenics	Regulates sections II, IV and V of paragraph 1 of article 225 of the Federal Constitution, sets out safety standards and mechanisms for the inspection of activities involving genetically modified organisms - GMOs - and derivatives, creates the National Biosafety Council - CNBS, restructures the National Technical Commission on Biosafety - CTNbio, provides for the National Biosafety Policy - PNB, revokes Law no. 8,974 of January 5, 1995, and Provisional Measure no. 2,191-9 of August 23, 2001, and articles 5, 6, 7, 8, 9, 10 and 16 of Law no. 10,814 of December 15, 2003 and provides for other measures. Veto message

ANNEX B - CURRENT REGULATORY FRAMEWORK FOR SUPPORTING INNOVATION IN BRAZIL

Year	Regulatory Framework	Object
2004	Industrial, Technological and Foreign Trade Policy	Brazil's Industrial, Technological and Foreign Trade Policy is aimed at enhancing the economic efficiency and development and dissemination of technologies with the greatest potential to boost activity levels and competition in international trade. It is focused on increasing the efficiency of the production framework, enhancing the innovation capacity of Brazilian enterprises and expanding exports.
2004	Innovation Law, nº. 10,973/2004	Provides for incentives to scientific and technological innovation and research in the manufacturing environment and for other measures.
2005	Law on Tax Incentives, no. 11,196/2005	Establishes the Special Tax Regime for the Export of Information Technology Services - REPES, the Special Regime for the Acquisition of Capital Goods by Exporting Enterprises - RECAP and the Digital Inclusion Program; provides for tax incentives for technological innovation; and provides for other measures.
2007	Action Plan: Science, Technology and Innovation	The main objective of the plan is to define a wide range of initiatives, activities and programs designed to enhance the role of science, technology and innovation (ST & I) in promoting Brazil's sustainable development. Several of the contemplated initiatives are aimed at encouraging companies to incorporate research, development and innovation (RD & I) activities into their production process.
2008	Productive Development Program	The ultimate goal of this Policy is to ensure the continuity of Brazil's growth in several areas on a sustainable basis and with an emphasis on innovation, competitiveness, entrepreneurship support and increased exports.

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