

STUDY ON PATENTS AND PUBLIC DOMAIN

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Expert V: Part 7 with respect to Colombia

Summary

This article analyzes the impact of the patent system and the public domain on the development of science, innovation and technology in Colombia. Starting from the structuring of a public policy on the topic, the Colombian Government seeks to grant effective protection to creative activity and promote access to and utilization of the technical developments found in public domain patent documents. The main objectives of this initiative are to encourage creation and innovation through the use of the intellectual property system and its promotion as a mechanism for business development and employment generation in the country.

In its efforts to attain these goals, the State, through the government entities delegated for such purpose, has advanced in the management and promotion of public domain patent information, by means of training on efficient utilization, search in and use of patent banks. Although this task has generated important progress, it has been insufficient to consolidate the proper utilization of said technological tools and it is necessary to reinforce the strategies and combine efforts so that the use of this information will result in the creation of new technologies or the improvement of existing ones.

The importance of accessing and using this information for the development of industry and knowledge in Colombia has been understood by the academic and business sector. However, this source of knowledge is not efficiently used in Colombia, which is no doubt a disadvantage for a developing country.

This study leads to the conclusion that there is a significant quantity of technical documents in Colombia which are in the public domain, but there is no empirical evidence to prove the use or exploitation of the information contained in them for the development of new technologies by the business, academic and scientific sectors. Therefore, it is crucial to continue with the task of building awareness in society and developing new strategies to transmit the importance of taking advantage of this technological tool, which is at the disposal of the various economic sectors of the country.

1. Development of access to information in the public domain in Colombia and its relationship with the patent system.

In Colombia, it has been understood for several years that economic, scientific and technological development depends on two important factors: (i) Providing effective protection to creative activity through patent law, thereby fostering research and science; and (ii) Enabling access to technology and their exploitation by the different players in the market, for which purpose it is relevant to ensure access to the information contained in patents that have become part of the public domain.

Before analyzing the different initiatives and projects that have been implemented in order to ensure access to the documentation of patents that have become part of the

public domain, it is useful to briefly mention the relevant public policies and their regulatory foundations.

According to the intellectual property system applicable in Colombia, a patent can become part of the public domain for four main reasons: (i) Relinquishment of rights by the patent owner or a declaration of abandonment; (ii) Failure to pay the legal yearly maintenance fees; (iii) Expiration of the term of protection of the patent; and (iv) Denial, rejection or revocation of the patent right by the corresponding administrative or judicial authority.

If and when any one of these conditions applies, the product or process that is the object of the patent, as well as any related technical information, become part of the public domain, that is, they become available to any third party requiring them and said third party may exploit them without infringing the patent rights. This information, of course, becomes essential for the potential generation of future technical development and is considered "*the most important source of technological information available to researchers, entrepreneurs and industrialists in Colombia.*"¹

The importance of access to the contents of patent information has been well understood by the Colombian Government and has not remained only on paper. In fact, the Government has expressly urged public entities related to innovation, technology and intellectual property, to develop plans and strategies for the furtherance of Colombia's technological development.

In principle, the legal basis for the promotion and furtherance of scientific and technological activities by the State is established in Article 70 of the Political Constitution: "*The State has the obligation to promote and foster equal access to culture for all Colombians, by means of permanent education and scientific, technical, artistic and professional instruction at all stages in the process of creating a national identity. (...) The State shall promote research, science, development and dissemination of the cultural values of the Nation.*" More specifically, the dissemination and disclosure of technological information contained in patents is based on the Community regulation contained in article 271 of Andean Decision 486 of 2000, according to which the Member Countries of the Andean Community (Colombia, Ecuador, Peru and Bolivia) shall undertake the establishment of mechanisms for disseminating and disclosing this type of information.

Together with this and, possibly, in response to these regulations, Colombian public policy with regard to innovation, competitiveness and exploitation of Intellectual Property is set out mainly in Law 1286 of 2009 and in the following CONPES (National Council for Economic and Social Policy) documents:²

¹ Article "La ampliación del término de patentes: ¿un atentado a la salud?" ("*The extension of patent terms: An affront to health?*") Updated 5 May 2010. Superintendency of Industry and Commerce. Available at: <http://www.sic.gov.co/index.php?idcategoria=30&ts=a11ce019e96a4c60832eadd755a17a58>. Consulted on 15 October 2010.

² CONPES documents are prepared by the National Council for Economic and Social Policy – CONPES –, which is the Government's technical advisory body and the highest Colombian authority with respect to economic and social planning. The purpose of these documents is the formulation and establishment of public policies that must be implemented as part of the country's social and economic policy.

1.1. The first directive or ordinance with regard to this topic, which constitutes the foundation for the public policy on exploitation of intellectual property and its impact on the country's competitiveness and development, can be found in **CONPES Document 3533** dated 14 July 2008, entitled "**FOUNDATIONS OF AN ACTION PLAN FOR THE ALIGNMENT OF THE INTELLECTUAL PROPERTY SYSTEM WITH NATIONAL COMPETITIVENESS AND PRODUCTIVITY – 2008 - 2010.**"

The justification for this directive can be explained in the following terms: *"In the 21st century, knowledge is a crucial resource among the multiple determining factors of competitiveness of a country. Generation of value as a result of intellectual creation, that is, the production of knowledge, as well as the application of available knowledge, are fundamental tools for the production of innovative goods and services with a potential for adequate insertion into competitive markets. In the broadest sense, Intellectual Property is a tool for the furtherance of intellectual production and creation and it is therefore a tool available to countries' efforts to contribute to the achievement of higher levels of competitiveness and productivity. In this respect, it is justified to set the foundations for a public policy on Intellectual Property that is consistent with the activities currently being conducted by the National Government within the National Commission for Competitiveness and Productivity (...)."*

Specifically, the CONPES indicates the following with respect to the importance of technological information contained in patents: *"The most competitive countries are those that, in turn, generate the largest quantities of patentable knowledge, the latter being understood as a proxy for intellectual creation and production. The production of patentable knowledge is based, among other things, on the use of available knowledge to direct efforts, both human and economic, toward innovation based on available technical developments. This use of knowledge, which benefits the productivity and competitiveness of companies, must be accompanied by the benefits for the innovator resulting from the protection of his/her invention."*

1.2. **CONPES 3582** of 27 April 2009, on the other hand, refers to the **NATIONAL POLICY ON SCIENCE, TECHNOLOGY AND INNOVATION.**

This document states that scientific, technological and innovation activities (ACTI) in Colombia are performed by a variety of players that interact with each other under the so-called National System of Science, Technology and Innovation (SNCTI).

The study shows that the System has achieved significant progress that has contributed to the scientific and technological development of society. However, it also concludes that the efforts made to date have been insufficient.

In order to establish the public policy to be followed, the CONPES identified the limitations of the System as follows: *"i) Poor enterprise innovation levels, ii) weak system institutionalization, iii) scarcity of human resources to carry out research and innovation, iv) lack of focus of the policy on strategic areas, v) poor social appropriation of knowledge and regional disparities with regard to scientific and technological capabilities, which, taken as a whole, results in vi) inadequate capacity for generation and application of knowledge."*

One of the strategies proposed to improve the low innovation levels of companies is the consolidation of the intellectual property system through implementation of the guidelines formulated in the aforementioned Conpes 3533. In this respect, it should be highlighted that this strategy is aimed at *"strengthening the dissemination function of*

intellectual property rights by government entities through seminars, workshops and handbooks about intellectual property institutionality and legislation in force at the national and international levels."

Summarizing, the main objective of this State policy is the "*identification, generation, dissemination, application, integration of knowledge to support the productive and social transformation of the country*", thereby accomplishing development of the country and a reduction of the existing innovation and technology gap with respect to other countries of the region.

1.3. Finally, enactment by the Government of **Law 1286 of 23 January 2009** marked a major milestone in the implementation of national policy on this issue.

With respect to the objectives of the law as they relate to access to technical and scientific information which, of course, includes the information contained in patents, it is important to highlight the provision of Article 2 of the law, which refers to "*strengthening a culture based on continuous generation, appropriation and dissemination of scientific knowledge and research, technological development, innovation and learning.*"

This law therefore serves as the legal framework for all initiatives promoted by government entities toward the creation of strategies intended to provide effective access to technological information for users of the patent system.

From the legal viewpoint, this law incorporates into the Colombian regulatory system the concept of innovation, understood as the process that allows the conversion of a creative idea or concept into a product or process subject to protection under patent law.

Thus, the importance, in the innovation process, of access to knowledge and information contained in patent documents becomes apparent, given that said information will make it possible to precisely identify the specific technical problem to be resolved in accordance with the state of the art, in order to obtain a product or process that resolves the problem and may be eventually protected under patent law.

This law also provides a framework for State investment in science, technology and innovation. Thus, the State subsidizes research and development processes, which of course is essential for an effective implementation of the strategies and purposes of the previously defined public policy and is in line with the investment strategies implemented by developed countries for their technological growth. This initiative constitutes an important opportunity for the private sector to carry on its research and development projects, without the initiative being frustrated by the lack of financial resources, which is quite frequent in a country such as Colombia³.

³ Fred Block refers to the importance of State investment in the advancement of research and development processes in his article entitled US Industrial Policies, R&D, And The WTO's Definition Of Non-Actionable Subsidies, from which we highlight the following: "(...) a robust strategy of industrial upgrading can be organized through these kinds of subsidies. In fact, a number of countries have very explicitly copied the SBIR program and China has been using all of these tools as part of its development strategy. Chile is another example of a country that has successfully used government-funded research to facilitate the successful upgrading of such industries as salmon farming and wine production. But industrial policy through state R&D subsidies is a problematic development path for those less developed countries that have only a rudimentary science and technology infrastructure. When government budgets are extremely tight and basic human needs have not been met, it would be irresponsible for governments to devote resources to R&D subsidies that are inherently risky". Article published on 23 December 2010 in the Intellectual Property Watch website. http://www.ip-watch.org/weblog/2010/12/23/us-industrial-policies-rd-and-the-wto-s-definition-of-non-actionable-subsidies/?utm_source=post&utm_medium=email&utm_campaign=alerts

2. Strategies presented as public policy of the Colombian State with respect to exploitation and access to information on patents belonging to the public domain.

According to the study carried out in CONPES 3533 of 2008, Colombia does not take full advantage of the technological information available in patent documentation belonging to the public domain, thus wasting an important source of knowledge for users and society in general.

The limited use made of technological information can be attributed, among other things, to ignorance about the protection granted by intellectual property, including the benefits derived from it. This, in turn, has a negative impact on the development of intensive inventive activities.

In order to resolve this problem and inform users that the documentation of patents belonging to the public domain may be useful as a starting point for new inventions or for the improvement of existing ones, which in turn may be protected by patent law, the Government established two main strategies:

i. Stimulate intellectual creation and production through the effective use of the intellectual property system, proposing for such purpose that the administrative entities in charge of intellectual property management must design mechanisms to disseminate and instruct the different users with regard to the importance, application, exploitation and regulation of intellectual property in Colombia.

By virtue of this government recommendation or directive, these entities have entered into several cooperation agreements with the purpose of spreading this information and have extended their efforts to many regions of the country.

ii. Promote Intellectual Property as a mechanism for entrepreneurial development, with the aim of structuring a competitive system based on creation, technological adaptation and innovation.

As a result of the execution of these strategies, the public entities in charge have promoted the use of the technical information contained in patent documents that are part of the public domain, through implementation of the following tools and services:

2.1. Projects and tools developed by the Superintendency of Industry and Commerce.

➤ **Structuring and management of the Patent Bank:** In order to facilitate access to the technological information contained in patent documents, the Superintendency of Industry and Commerce has implemented and made available to users a Patent Bank which provides the service of patent and state-of-the-art searches in particular topics, at the national and international levels. Moreover, it issues certifications regarding the existence and characteristics of patents registered in Colombia.

By means of this certification service, at the request of a user, the Superintendency of Industry and Commerce establishes the status of the relevant patent, that is, whether it is subject to any industrial property right or, on the contrary, belongs to the public domain and could be commercially exploited without the patent owner's authorization. The application includes several search criteria, such as: name of the patent owner, inventor, applicant and patent number.

The Patent Bank service provided by the entity also includes technical assistance to the user, who may find answers to certain questions about the invention, establish whether the invention fulfills the legal requirements for protection, and the different forms of protection, among other topics. It is also responsible for the promotion and dissemination of the patent system and the use of information belonging to the public domain.

Promotion and dissemination is carried out by means of the following mechanisms:

- *Awareness seminars addressed to businesspersons, entrepreneurs and university students.*
- *Participation in programs for the support of SMEs [small and medium-sized enterprises] with the support of the Ministry of Commerce, Industry and Tourism (MCIT).*
- *Workshops for entrepreneurs regarding ways to gain access to patent documents through the different available public databases.*
- *Participation of research centers in training programs.*
- *Promoting of alliances with universities, public research centers and companies."*

The Superintendency of Industry and Commerce currently has two ongoing cooperation agreements in place for the development of dissemination and promotion activities. One of these is with the Administrative Department of Science, Technology and Innovation (COLCIENCIAS) and the other, entitled INDUSTRIAL PROPERTY COLOMBIA, was developed together with the Medellin Chamber of Commerce for Antioquia, in an alliance with the Chambers of Commerce of: South Aburra, Barranquilla, Bogota, Cali, Cartagena, Manizales and Eastern Antioquia, and with the support of the Inter-American Development Bank, IDB. The objective of the latter project is *"to contribute to the economic development, improve productivity and competitiveness in Colombian micro, small and medium-sized enterprises, and generate added value in their processes through an institutional trademark and the provision of support services fostering innovation and enabling the MSMEs [micro, small and medium-sized enterprises] to improve their use of the intellectual property system"*⁴.

According to the 2008-2009 Management Report of the Superintendency of Industry and Commerce, the entity has conducted various training workshops on the topic of patents and has been present at various dissemination events at the national level

⁴ Web page of the Colombia Intellectual Property Project. Available at: <http://www.propiedadintelectualcolombia.com/site/Quiénessomos/Antecedentes/tabid/60/Default.aspx>. Consulted on 18 November 2010.

organized by the following entities: Society of Engineers and Architects of Antioquia (*Sociedad Antioqueña de Ingenieros y Arquitectos*) SAI (2nd Inventors and High-Tech Exhibition), Chamber of Commerce of Cúcuta; CEPA – TECNOPARQUE – SIC, CODECYT – Governor’s Office of Boyacá, Colciencias – Institute for Research Training in Plastic and Rubber (*Instituto de Capacitación de Investigación del Plástico y del Caucho*) – EAFIT University, MCIT - COLOMBIA CRECE, Proexport – Zeiky, Tecnoparque – SENA (Bogotá and Bucaramanga Nodes), Education, Research and Development Network of Eastern Colombia (*Corporación Red de Instituciones de Educación, Investigación y Desarrollo del Oriente Colombiano*) – UNIREN, University of Caldas, Industrial University of Santander UIS, Santiago de Cali University, among others. This report indicates that during the 2008 – 2009 period, the entity attended 47 events, with a total attendance of 3,307 people.

➤ **Databases:** The Superintendency of Industry and Commerce also has a complete database on its Web page (www.sic.gov.co), including a record of patents filed and published in Colombia. In addition, there is a database of inventions that are in the public domain.

The following are the search criteria for the database of patents that have been filed and published in Colombia: File numbers, words in the title, name of the individual or legal entity, number of the gazette in which it was published, patent registration certificate or title number or patent priority date, as well as priority country.



SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO
CONSULTA DE NUEVAS CREACIONES (patentes, modelos y diseños)..
 Jueves 18 de Noviembre de 2010

Datos de la Creación

Número del expediente: Número: Ctrl:

Palabra(s) en el título: Contenedida (en mayúsculas)

Nombre de la persona natural o jurídica: Empieza por Tipo (en mayúsculas)

Número de Gaceta:

Número de Certificado:

prioridad de la patente: Pais: de prioridad:

Número de consultas atendidas :268190

Si desea que esta consulta mejore, por favor reporte sus comentarios a la Oficina de Sistemas

With respect to inventions that are part of the public domain, the search criteria are the following: The dates for which the search is desired, indicating "from" and "to" a given date, the right that applied to the invention, that is, patent, utility model or industrial design, and the technological sector to be searched.

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO
CONSULTA DE INVENCIONES EN DOMINIO PUBLICO
 Jueves 18 de Noviembre de 2010

Datos de la Creación [Manual de Usuario](#)

Fecha del estado Desde Hasta

Tramite Sector

Número de consultas atendidas :14711

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The following search criteria have been classified to date: Biotechnology, Electrical Engineering, Mechanical Engineering, Chemical Engineering, Pharmaceutical Chemistry and Pure Chemistry. It is also possible to conduct the search without a specific topic.

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO
CONSULTA DE INVENCIONES EN DOMINIO PUBLICO
 Jueves 18 de Noviembre de 2010

Datos de la Creación [Manual de Usuario](#)

Fecha del estado Desde Hasta

Tramite Sector

Número de consultas atendidas :14711

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- Todos
- ABOGADOS
- BIOTECNOLOGIA
- INGENIERIA ELECTRICA
- INGENIERIA MECANICA
- INGENIERIA QUIMICA
- QUIMICA FARMACEUTICA
- QUIMICA PURA
- SIN TEMA

According to information provided in the website of the Superintendency of Industry and Commerce⁵, the list and number of patents, utility models and industrial designs which have entered the public domain from January 1, 2000 until December 31, 2010 in Colombia is the following:

⁵ Available at <http://serviciospub.sic.gov.co/~oparra/externas/reportes/solultimaactsectorcaducado.php> Consulted on 21 January 2011.

Sectors	Patents	Patents - PCT	Utility Models	Utility Models - PCT	Industrial Designs
ME – Mechanical Engineering	1317	17	160	2	12
PC – Pharmaceutical Chemistry	1302	37	1		1
CI – Chemical Engineering	911	11	8		
PC – Pure Chemistry	499	5			
EE – Electrical Engineering	203		7		1
BT – Biotechnology	106				3
UT – Unspecified topic	4		375		218
Total	4342	70	551	2	235

In addition to the possibility of reviewing these documents, the user is also provided with information about the different public databases of the intellectual property offices of other countries, such as esp@cenet, oepmpat, uspto and latipat, in which, of course, it will be possible to find a greater number of documents and information regarding the state of the art in the different sectors of technology and knowledge. It is even possible that many of the foreign patents compiled in such databases belong to the public domain in Colombia, due to the principle of patents territoriality and its consequent, lack of protection in our country.

Algunas bases de datos a nivel mundial	
ESP@CENET	
ESP@CENET: Base de datos online gratuita que permite la búsqueda de patentes del mundo en más de 40 millones de documentos.	
 ESP@CENET	
OEPM PAT	
OEPM PAT: Base de datos online de la oficina española de patentes y marcas (OEPM) que da acceso a información de invenciones españolas	
 OEPM PAT	
USPTO	
USPTO: Bases de datos online gratuita en inglés que da acceso a información de patentes de USA.	
 USPTO	
LATIPAT	
LATIPAT: Se proporciona acceso a la información bibliográfica (título, resumen, clasificación internacional de patentes, solicitante, inventor, número de prioridad, número de solicitud y número de publicación, y fechas) de documentos de patentes que han sido presentados en las Oficinas de Propiedad Industrial de América Latina.	
 LATIPAT	

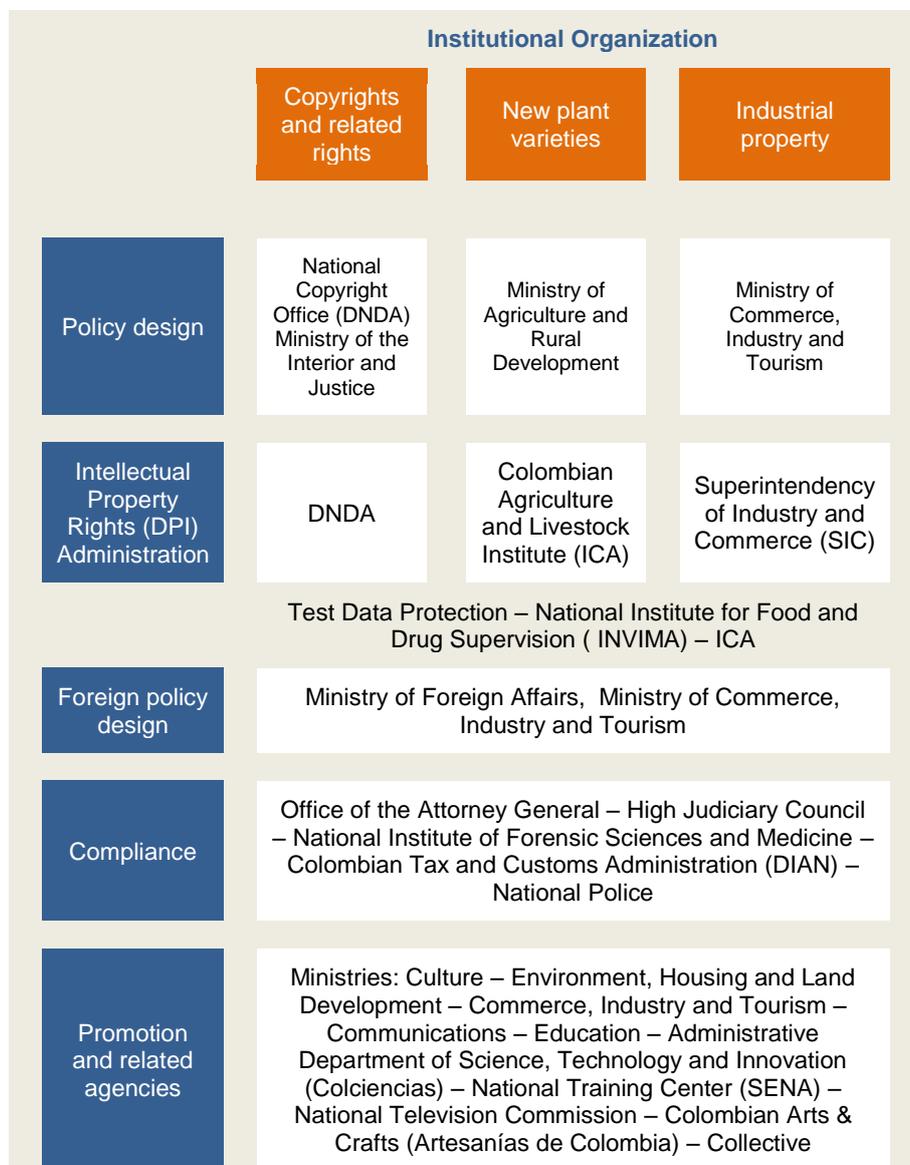
2.2. Participation of other public entities in order to inform users about the effects and characteristics of the Colombian patent system.

The Colombian Intellectual Property System was created to support the tasks of the Superintendency of Industry and Commerce, incorporating various government entities, which direct their activities mainly at three types of users:

- Private enterprises.
- Research institutions, such as Universities and research Centers.
- Public institutions with respect to their own inventions.

The objective of structuring this System was the creation of an institutional group in charge of establishing policy on Intellectual Property matters, with particular attention to the following topics: (i) Promotion of entrepreneurial development and competitiveness; (ii) Furtherance of scientific research; and (iii) Establishment of a culture of creation and innovation.

To date, the System is made up of a network of public entity institutions, in charge of fulfilling specific functions, and is organized as follows:⁶:



⁶ Web page of the Colombia Intellectual Property Project Available at: <http://www.propiedadintelectualcolombia.com/site/PropiedadIntelectual/SistemaColombianodePropiedadIntelectual/tabid/67/Default.aspx>. Consulted on 18 November 2010.

3. Tools implemented by the academic sector regarding access and knowledge of information belonging to the public domain.

In addition to the efforts of the public sector in the promotion and dissemination of the importance of making use of the technological information contained in patent documents, the academic sector has also set itself similar goals.

Its activities are directed at studying the patent and intellectual property system in order to protect its own inventions and intellectual creations, and to train and advise its students and independent inventors with regard to the protection of their rights.

The initiatives carried out by the academic sector are, mainly, training in access to and search for patents in public databases.

Among the various public universities in Colombia engaged in this task and which, of course, recognize its importance and transmit it to their students and professors, is the Universidad del Valle. This University created, in the year 2009, through its Technology Transfer Office, a training workshop dealing with the search for patents in public databases, which is offered in research methodology courses included in the Ph.D. course in Engineering at this University, as well as to undergraduate students. The Universidad del Valle also belongs to the SECOPI INDUSTRY AND ENERGY NETWORK, supported by COLCIENCIAS and directed by the Plastic and Rubber Institute of Medellín, which also trains professors in the topic. The results of this initiative have been evident and several of the students trained through this workshop are now experts on the subject and in turn provide advice in patent search. The initiative and interest in the topic on the part of this University arose in connection with the development of a workshop on the search in patent databases offered by the Superintendency of Industry and Commerce in the year 2005.

In addition to this, it is important to point out that patent databases are used in the research carried out at Universidad del Valle, mainly in order to avoid repeating inventions which are already within the state of the art and unnecessarily wasting efforts. The search in these databases is recommended whenever a research project is to be commenced at the University and, in essence, is useful for them to identify the state of the art and the novelty of the invention.

The Colombian National University has also created initiatives to encourage and promote the use of information contained in patents which are in the public domain. To this end, it established the Patent Information Center (PIC), which provides search and reporting services on the status or state of the art with respect to knowledge protected through patents. Among its objectives is that of determining the status of a given technology with the intention of improving it, inquiring into the current status of a given sector of science and the search for information in order to determine the approach to a project⁷.

⁷ For further information, see www.dib.unal.edu.co/cip/. Consulted on 19 January 2011.

By virtue of said commitment, the CIP also has a program called *El ABC de las patentes (The ABC of Patents)*, which deals, among other general aspects, with the usefulness of the information contained in patents. Among the objectives of the course is that of preparing and instructing students and professors regarding the manner in which searches can be conducted in the different databases, making them see that this information will allow them, mainly, "to reduce and refocus research projects or avoid their duplication; reach or generate new ideas and solutions to problems or needs; and facilitate technology transfer, enabling comparisons (technological mapping) and provide the eventual licensee with accurate information regarding the holder of the technology."⁸

These programs, which of course are not the only ones implemented by the university sector, allow us to conclude that there is an important academic effort in Colombia aimed at promoting the effective utilization of the various tools offered by the patent system, not only with regard to the manner of protecting new inventions and knowledge, but also to the use and exploitation of the technological and scientific information which can be found in public domain patents. The task carried on by the university sector is, no doubt, of paramount importance in the road taken by Colombia towards technological, cultural and social development.

4. Insufficient utilization of public domain patent information.

Despite the fact that reference has been made in the previous paragraphs to the initiatives and projects undertaken by government control entities and by the academic sector which, it is worth noting, are well directed, the same promising effects are not found in the practical business and industrial field. On the contrary, it can be concluded that in Colombia, even today, this valuable source of scientific and technical information is not effectively used for the development of industry.

On many occasions, the private sector, and even the academic sector, set aside the use of this information and focus their efforts on obtaining and developing new knowledge, that is, knowledge that is not derived from information belonging to the state of the art. This can be very valuable from a scientific point of view, but clearly leaves out an important source of scientific and technological information, which could be of great use, as indicated in this writing.

In this regard, the National Planning Department has stated that, "*the Colombian productive sector is still far from making prompt and efficient use of protected or unprotected intellectual property assets. Despite the existence of numerous patents, utility models and industrial designs which have passed to the public domain or may be licensed, the exploitation of these assets by the productive, academic and research sector in order to improve its products or to develop new research processes on these bases is generally low*"⁹.

This leads to the conclusion that, despite the efforts made to take advantage of the technological tools contained in patents, which as evidenced exceed 5,000 documents

⁸ Eng. Jaime Hernando Mayorga. EL ABC DE LAS PATENTES. UTILIDAD DE LA INFORMACIÓN EN LAS PATENTES. Universidad Nacional de Colombia. 23 March 2010.

⁹ International seminar. Strategic use of intellectual property for economic and social development. 21 August 2006. John Rodríguez. Coordinator of the Science, Technology and Innovation Group of the National Planning Department.

in Colombia, the private sector does not use them, or does not consider them necessary or useful for its research.

This view coincides with certain studies that have been conducted, according to which most developing countries exhibit an insufficient utilization of the valuable source of scientific and technical knowledge that can be found in patent documents¹⁰.

Now then, it is not easy to exemplify the use of said information by the private sector in Colombia either, given that there is no record of its utilization in the attainment of new knowledge or technology, or any empirical evidence to prove this. The Administrative Department of Science, Technology and Innovation – Colciencias - does not have a database corresponding to public domain patents either, given that its job is mainly focused on the fostering and encouragement of access and use of this information for the benefit of independent inventors or private enterprise.

On the other hand, the National Institute for Food and Drug Surveillance – INVIMA, in charge of the protection of test data, even those found in the public domain according with our legislation, does not have a record system for such purpose and, to date, no request for specific test data has been submitted by third parties.

5. Challenges of the System.

5.1. As pointed out in previous sections, there are several government and private entities in Colombia engaged in the task of creating awareness, promoting and disseminating the intellectual property system in the country, considering it an effective tool for its technological growth and development. The challenge for these entities and institutions is the execution of regional and national programs, seminars and training courses in order to generate new scientific and technical knowledge.

5.2. As to the Superintendency of Industry and Commerce, its challenges in the matter of promotion, access and exploitation of the information contained in patents are mainly in the following:

¹⁰ In this regard, it is stated that “*unfortunately, for their business needs, many SMEs [small and medium-sized enterprises] do not use patent documents as a source of competitive intelligence. SMEs, particularly in developing and least developed countries, [such as Colombia], should be made aware of and be equipped to use business, legal, and technical information contained in patent documents, which is in the public domain to come up with innovative products, which have been adapted to local conditions*”. Christopher M. Kalanje. Role of Intellectual Property in Innovation and New Product Development. In http://www.wipo.int/sme/en/documents/ip_innovation_development.htm#P3_97. Consulted on 19 January 2011. Likewise, Duncan Matthew states, “*So there is great potential for patent information focusing on a particular technology – known as patent landscapes – to contribute to the development needs of developing countries by identifying essential technologies, know-how, processes and methods that are potentially of use to them. However, even though patent information is easily accessible via the internet, this resource is used to only a small fraction of its potential for stimulating invention and innovation. In building their economic success, Japanese firms used the publication provisions of the international patent system as a valuable source of information, even in pre-electronic information days, far more effectively than firms in any other country have done. The use of patent disclosure information remains limited in developing and least-developed countries, despite the existence of a number of free patent database services such as WIPO’s Patentscope®15 or Cambia’s Patent Lens. General knowledge and techniques in searching patent information, including the extraction of relevant information from patent databases, are not at present readily known and therefore it is fundamentally important to support these through technical assistance initiatives in favour of developing and least-developed countries in the future*”. Matthews, Duncan. Patents in the Global Economy. 2010. A Report to the Strategic Advisory Board for Intellectual Property Policy (SABIP).

- *Strengthening of the culture of using and exploiting intellectual property rights in coordination with productivity and competitiveness programs;*
- *Disseminating the importance of the patent bank, which constitutes a fundamental tool for entrepreneurs to obtain technological information leading to the optimization and modernization of productive processes and to foster technology transfer, given that technology transfer and inventive activities are determining factors for social and economic progress¹¹.*

In order to guarantee access to the information contained in patents, it is necessary to decentralize the system. The majority of administrative entities in charge of the promotion and dissemination of technical information regarding patents carry out their activities in a centralized manner.

With the aim of resolving this difficulty, Law 1286 of 2009 considers decentralization as one of the underlying principles and criteria of any activities to foster and promote science, technology and innovation. In this regard, Article 4 provides the following: "(...) *Decentralization: The instruments for the support of science, technology and innovation must be promoters of territorial and institutional decentralization, aiming at a coordinated development of the scientific and technological potential of the country, while endeavoring to achieve growth and consolidation of scientific communities in the departments and municipalities.*"

It therefore becomes an essential challenge for the Administration to promote access by, and participation of all users of the system and to improve its physical and technical infrastructure in order to reach every region of the country, not only in relation to the procedures for patent registration and the observance of rights, but also with regard to access to document information of patents that have become part of the public domain. Today, using a valuable technological tool implemented by the Superintendency of Industry and Commerce, it is possible to consult the patents that are in the public domain in Colombia. Nevertheless, this search is limited to a brief summary of each invention and, therefore, if what a user wishes to know are the documents contained in the respective files, he/she must come to the physical facilities of the entity, located in the city of Bogotá D.C., which represents an obstacle to access said information. The Administration is aware of this difficulty and, consequently, among its challenges is that of implementing the "zero paper" project, the aim of which is to scan and organize all files of the entity on electronic media, in order to allow their online consultation.

6. Conclusions.

6.1. Insufficient use is made in Colombia of technological information contained in patent documents that have become part of the public domain; for this reason, despite the fact that the initiatives and strategies set out by the Government are on the right track and represent a step forward for Colombian society and the technological development of the country, these strategies must be effectively implemented and better results must be generated.

¹¹ Superintendency of Industry and Commerce. Available at www.sic.gov.co. Consulted on 15 October 2010.

6.2. As indicated by the administrative authority on the topic of intellectual property, the information contained in patents that are part of the public domain is used in Colombia by private enterprises, by independent individuals and by the university sector, but no records are kept about its use or the outcomes of such use. Without an institutional record regarding the use of public domain patents, it is difficult to identify the private sectors that have accessed said information and have effectively used it to develop their own technology.

6.3. A proper coordination of the various State agencies is necessary in order to structure a public policy regarding the utilization of information contained in patents that are in the public domain and continue with the task of building awareness regarding the patent system and the importance of the information it contains. It is necessary to transmit to the various productive and academic sectors of the country that the patent system, beyond the protection it grants, also constitutes the basis for new patentable knowledge.

6.4. The commitment of private enterprise and academia is essential to the development of projects concentrated on national competitiveness and productivity. Greater financial investment by the State to finance research and development processes is undoubtedly necessary.

6.5. Society must understand that the consideration obtained from the monopoly granted to an entrepreneur for 10 or 20 years over a product or procedure based on patent law, become effective and palpable when the invention becomes part of the public domain and can be exploited by any entrepreneur without requiring authorization for such purpose. If said information is not taken advantage of by the various sectors of society, we would be granting an exclusive right without obtaining any benefit in exchange.

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