

The proposal of the Brazilian patent office for the backlog solution: an unconstitutional proposition

Sílvio Sobral Garcez Júnior

Postgraduate Program in Intellectual Property Science, Federal University of Sergipe, Brazil

silvio.sobral@gmail.com

Rodrigo Nogueira Albert Loureiro

Postgraduate Program in Intellectual Property Science, Federal University of Sergipe, Brazil

rodrigoalbert@gmail.com

Bruno Ramos Eloy

Postgraduate Program in Intellectual Property Science, Federal University of Sergipe, Brazil

bruno.eloy@live.com

Gabriel Francisco da Silva

Postgraduate Program in Intellectual Property Science, Federal University of Sergipe, Brazil

gabriel@ufs.br

João Antonio Belmino dos Santos

Postgraduate Program in Intellectual Property Science, Federal University of Sergipe, Brazil

joaoantonio@ufs.br

Francisco Valdivino Rocha Lima

Postgraduate Program in Intellectual Property Science, Federal University of Sergipe, Brazil

valdivino@ifpi.edu.br

Abstract

It is notorious that there is an efficiency crisis in the Brazilian patent system, unable to meet society's demand for a faster patent examination. The INPI takes about 11 years to concede a patent. There are 231.184 pending patent applications, and in June of 2017 it promoted a public consultation proposing an infra-legal norm that allows the granting of patents without substantive examination in the country, the so-called simplified procedure of granting of patent applications. Currently, the Brazilian government recognizes that it does not have the structure to make the substantive examination of all pending patent applications. This article aims to analyze not only the legality but the very constitutionality of the proposal under examination. After analyzing the Constitution of the Federative Republic of Brazil and also the national legislation, it was concluded that it is not possible to grant patents without substantive examination in Brazil. In search of solution for INPI backlog, it should be based on the social interest and

the technological development of the country, and this is not the case of the proposal commented in this paper.

Keywords: backlog, patent, substantive examination, simplified procedure, Brazil.

1. Introduction

It is notorious that there is an efficiency crisis in the Brazilian patent system, unable to meet society's demand for a faster patent examination. Because of the shortage of employees, the average time between filing and the final patenting decision is 11 years (INPI, 2018). According to Garcez Junior and Moreira (2017), the need for a patent examiner at INPI is 10.4 times higher than the European patent office (EPO) and 12.7 times higher than the American office (USPTO) that has 41 times more employees than the Brazilian office. Thus, in Brazil there are not enough employees to examine all patent applications that are submitted each year to the INPI causing retards, and allowing the existence of patents that exceed the minimum period of 20 years required by Article 33 of the TRIPs Agreement, due to the application of the sole paragraph of article 40 of Law No. 9.279 / 96, as emphasized by Garcez Junior et al. (2019).

King (2003) states that the most important elements in patent examination (times/examiner and actions/examiner) remain constant over time despite increased working hours. This has led to increased applications for patent examinations (backlog¹), bringing concern to users of the patent system, increasing legal uncertainty, reducing investment and creating obstacles to technological innovation and economic development (LONDON ECONOMICS, 2010).

In 2017, in order to solve the backlog problem, INPI made a public consultation proposing an infra-legal norm that allows the granting of patents without substantive examination, the so-called "simplified procedure of granting of patent applications" (Brazil, 2017). In fact, currently the Brazilian government recognizes that it does not have the structure to make substantive examination of all patent applications. Proponents of the new regulation explain that it is an exceptional measure that will allow granting over 230.000 pending patent applications through judicial cognizance. In principle, all patent applications will be subject to the simplified procedure, except for pharmaceutical patent applications.

This article aims to analyze the legality and constitutionality of the simplified procedure. Brazilian laws allow the granting of patents without substantive examination in Brazil? Answering this important question, this paper used empirical and deductive methods based on legal doctrine, periodicals, scientific works, INPI management reports, jurisprudence and legislation in force.

¹ There is no consensus in the literature about the definition of the backlog concept. According to joint study of the United Kingdom Intellectual Property Office - UKIPO and the United States Patent and Trademark Office - USPTO), the term backlog as such is not well defined. For some, it refers to all unexamined requirements; for others, all pending applications and, for some, the "excess" of requirements beyond the patent office's capacity (MITRA-KAHN et al., 2013, p. 1).

2. The processing of patent applications in Brazil (BRASIL, 1996)

In order to obtain a patent on an invention or utility model in Brazil, it is necessary that the object of the patent application be subjected to a rigorous analysis and obtains a favorable opinion from INPI. The Brazilian law n° 9.279/96 ensures that for the invention to be protected by patent it is necessary that it meets the requirements of novelty, inventive activity, industrial application and descriptive sufficiency (according to article 8° and 24 of the law n° 9.279/96 –IPL - Intellectual Property Law). In fact, the lawgiver's will is for the invention to provide a technological contribution, resulting in improvements and social well-being. Therefore, it will not have patent protection what does not bring an effective technological contribution.

The invention will be considered brand new when not understood in the state of the art. The invention will possess inventive activity when an expert understands that it is not obvious from the state of the art. Moreover, the invention is to be produced on an industrial scale (articles 13 and 15 of Law 9.279/96). The request of patent will be in Portuguese language and will contain the data of the holder/inventor², descriptive report³, claims⁴, summaries, drawings⁵ and also the evidence of payment (article 19 da IPL). The request of patent will be protocolled and submitted to the preliminary formal examination, and if all information and documents are in accordance with legal requirements, it will be accepted and considered as the filing date as the submission date.

When the request of patent is accepted by the INPI, it will kept confidential for 18 (eighteen) months from time of filing or the oldest priority, except in the case established by article 75 of the IPL, which imposes absolute secrecy on the patent application whose object is of interest to the national defense. The publication of the request of patent may be anticipated and ensures that the patent holder, after obtaining it, asking for compensation for the improper exploitation of its object, occurring between the date of publication and the granting of the privilege (article 30, § 1° and article 44 of IPL).

The examination will begin after 60 days of publication of the request of patent and must be required by the depositor or other person within 36 months from the date of submitting, and it may be filed after that (Article 31, single paragraph, and article 33 of IPL). However, the depositor may require that the request of patent be extended for 36 months from the date of submitting, and it happens sometimes. Once the legal requirements have been fulfilled the letter patent is made and delivered to the patent holder, and he has the right to ownership and exclusive use of the object of the patent, under IPL conditions. The annulment of the patent may be requested administratively after 6 months of granting, and during its validity by lawsuit (articles 51 and 56 of IPL).

² The patentee may or may not coincide with the person of the inventor. The patent may be applied for in its own name (by one or all authors), by the heirs or successors of the author, by the transferee or by whom the law or the contract of employment or service provides that ownership belongs (article 6, § 2 and § 3 of the IPL).

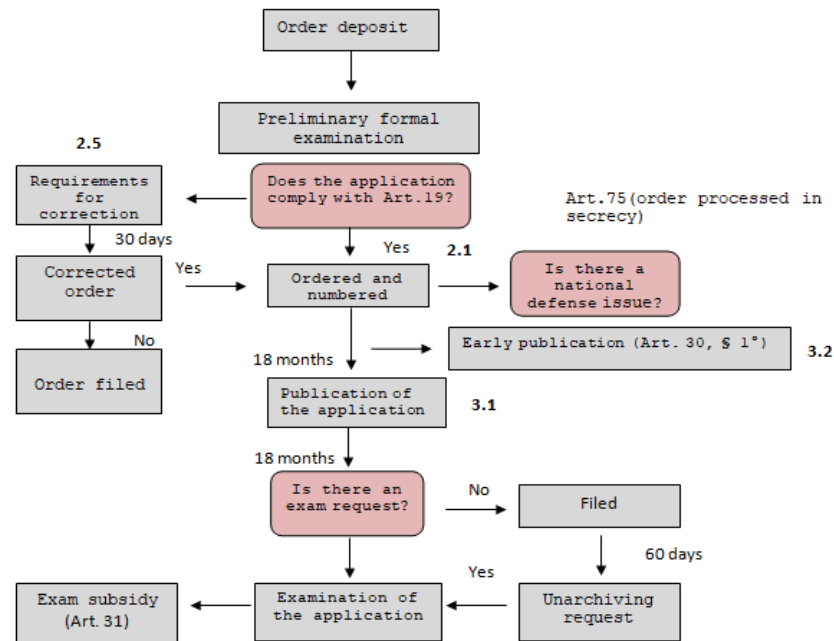
³ The descriptive report shall, among other things, inform the technical sector to which the invention relates; describe the state of the art that may be considered useful to the understanding, the search and the examination of the invention; to describe the object of the invention in a consistent, precise, clear and sufficient manner, so as to enable it to be performed by a technician in the subject and indicate, where appropriate, the best form of execution (INPI, 1997).

⁴ The claim must be fully based on the descriptive report, characterizing the particularities of the request and clearly and precisely defining the subject matter of protection. They are identified by the expression "characterized by". Explanatory passages will not be accepted in the field of claims regarding the operation, advantages, and simple use of the object.

⁵ Widely used in utility models, it defines the scope of the invention, that is, what was invented.

Figure 1 describes in a systematized and succinct way the processing of a patent application in Brazil until its actual examination, with the corresponding dispatch codes (2.1, 2.5, 3.1, 3.2, and so on).

Figure 1: Processing of a patent application in Brazil until effective examination.



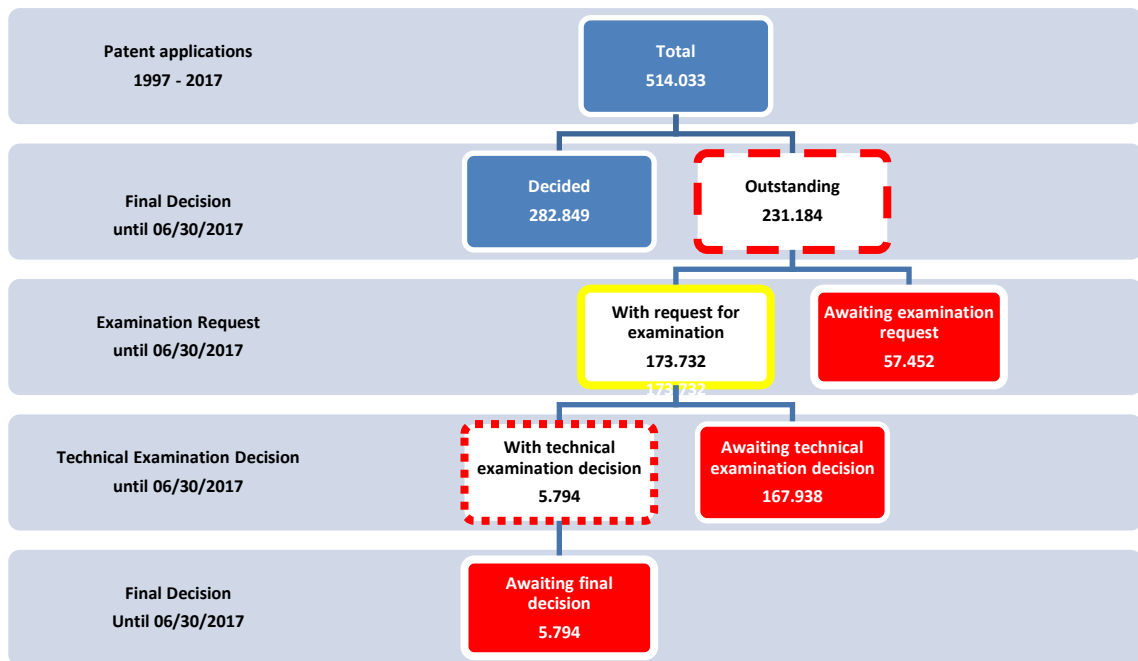
Source: Made by author.

The technical examination is made by INPI and it evaluates if all the legal requirements is fulfilled for the patent grant. Once the examination is over and after any manifestations and appeals, the patent is granted or rejected. After the granting of the patent, the right of exclusivity arises for 20 years for the invention patent and 15 years for utility model, counting from the time of filing.

3. Analysis of INPI statistics justifying the proposal for the simplified procedure.

In June 2017 INPI had 231.184 patent applications and in 21 years (1997-2017) received 514.033 request of patents and decided 282.849 of them.

Figure 2: Detail of the patent application numbers between 01/01/1997 and 06/30/2017.



Source: INPI (2017).

Analyzing figure 2, it is verified that if maintained 14.142 decisions per year during the period from 1997 to 2017, the Brazilian office would take about 16 years to analyze all pending applications.

In June 2017 the INPI had 326 employees dedicated to the examination of patents, and each employee examined 55 patent applications per year, so in 2029 the INPI would have a backlog of 350.000 patent applications. It is concluded that if they were 110 decisions per year would not eliminate the delay and the backlog would be 190.000 patent applications. Therefore, if there were 687 new patent examiners the backlog would be solved in 8 years. However, this solution would cost R\$ 1 billion in this period of 8 years, and from the 9th year, more than 500 employees would be idle, so this would not be efficacious and feasible⁶. Chart 1 contains the number of patent applications and INPI decisions in the period from 2014 to 2016.

Chart 1: patent applications and INPI decisions.

PATENTS	2014	2015	2016
Applications	33.182	33.043	31.020
Decisions	22.336	15.842	25.481
Filed	16.574	8.978	17.488
Rejection	2.586	2.864	3.167
Withdrawals	53	105	55
Grants	3.123	3.895	4.771

⁶ Available at: http://www.inpi.gov.br/menu-servicos/patente/consultaspublicas/arquivos/INPI_consulta_publica_JUSTIFICATIVA_proposta_reduzir_backlog_patentes_27072017_final.pdf

Source: INPI (2017).

In the period from 2014 to 2016, 97,245 patent applications were received and 11,789 were granted, a percentage of 12% higher than the applications submitted. However, the grant of 12% results in 88% of patent applications not granted. Even if we consider that part of the requests have not been refused during the examination stage of the legal conditions (for example, they may have been abandoned by the applicant before the examination), the projection of these numbers to the requests accumulated in the INPI, pending merit analysis, makes it possible to conclude that there are at least a considerable number of applications which do not bring any technological contribution and thus are not worthy of patent protection. Then consider the possibility of such patent applications, which do not justify the grant of an exclusive right, to be granted by such a simplified procedure. In this case, the potential deleterious effect of the normative proposal becomes evident.

4. Depository system x prior examination system

Barbosa (2004) states that historically there are two alternatives of examination. The first alternative is that of the old French system which did only a formal examination of the application. In this case, the patent had no guarantee of validity, and the validity examination was done by the judiciary afterwards, if the patent were challenged judicially. The patent office is only a depository system, not a technical agency. The second alternative is the technical examination, a solution adopted today in practically all patent system (except Switzerland, South Africa and other countries). In Europe, Switzerland and other countries using the depository system are not relevant because of the full examination made by the European Patent Office (EPO) which issues title of national securities.

In the first 40 years of the Paris Union Convention (PUC), Brazil had neither the substantive examination nor a centralized examination agency (ABRANTES, 2015). According to Domingues (1980) "In Brazil the previous system of examination was implemented without technical and budgetary resources, with surplus and disqualified personnel." Brazil adopted the depository system, similar to the old French regime, until December 1923, when Decree n°. 16,264 of December 19, 1923 was published, which created the Office of Industrial Property, linked to the Ministry of Agriculture, Industry and Commerce, thus introducing the system of prior examination (BRASIL, 1923). Couto (1923) cites that the newspaper "O Paiz" of July 17, 1918 denounced that the abuses of the system of free concession reached such a point that a patent could be obtained for a new method of drinking water in the glass by bringing it to the mouth with the right hand.

Barbosa (2004) states that countries that have used the free concession system have abandoned it precisely because of the social damage caused for a patent that is worthless, but it seems very much. Thus was England until the end of the century XIX, and, soon, the United States, at the beginning of the same century (1836). The examples left by England and South Africa are emblematic. MacLeod et al. (2003) examined United Kingdom patents of the 19th century and concluded that "as late as the 1840s well over half of all steam-power patents protected either rotary or perpetual-motion engines or other technically unviable ideas that would not have got past a competent patent examiner". Pouris and Pouris (2011), in its

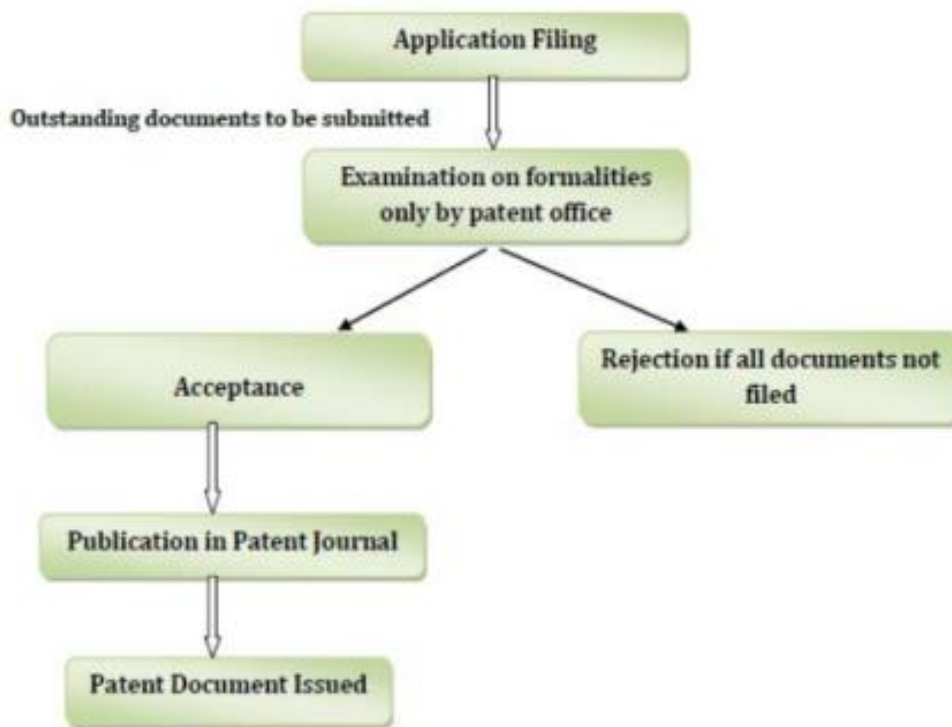
turn, esteemed that about 80% of patents in South Africa would not have been granted if that country implanted the prior examination system.

Kieff (2003) defends the application of the depository system, arguing that "the level of scrutiny the Patent Office gives patent applications should be ratcheted down, because the cost of thorough examination would be higher than the costs of federal court litigation". The author recognizes that the USPTO already has very low levels of inventiveness, which brings it closer to the depository system. Jaffe and Lerner (2007), for their part, agree that a system that thoroughly analyzes each patent application is cost-inefficient, however, disagree that the USPTO status with low-quality patents is acceptable because it provides an even greater social cost.

If even the substantive examination does not guarantee the validity of the patent, what about those systems that do not require the analysis of patentability requirements? For example, the United States of America patent system adopts the substantive examination, but the system is criticized because of the increase of patents with dubious merit, causing uncertainties and litigation (JAFFE and LERNER, 2007). Absence of prior examination may cause deleterious effects. In the period from 2003 to 2008, 278 patents were granted in Brazil in the pharmaceutical sector and in South Africa, which did not occur the technical examination, 2.442 patents were registered (CORREA, 2011). The World Health Organization (WHO) advocates rigorous patent scrutiny, protecting legitimate innovation, and avoiding granting of secondary claims (ICTSD, WHO and UNCTAD, 2006). Since 2011, civil society organizations in defense of the right to health have campaigned against the South African Patent Law (Patent Law Campaign) requiring the examination of patent applications⁷.

Figure 3: Patent Registration System in South Africa

⁷ Available from: <https://www.fixthepatentlaws.org/>



Source: TAC, MSF and RIS (2013)

Activists such as the Treatment Action Campaign (TAC) have argued that the absence of substantive examination in South Africa allows the registration of invalid patents for large pharmaceutical companies, increasing drug prices and making inaccessible to the poor, affecting the availability of these medicines in the National Unified Health System (TAC, MSF and RIS, 2013). It is considered a political issue for the South African government. Activists emphasize that the substantive examination will avoid the registration of invalid patents, and will therefore permit generic versions of these drugs in South Africa, lowering prices and increasing population access to these drugs (IBID).

5. The illegality and unconstitutionality of the proposal

The most important aspect of the procedure in this study is the need for prior examination for the granting of privilege. Articles 35⁸ and 37⁹ of the IPL affirm that the approval or rejection of the patent application will be preceded by a technical examination, so that at least from this point of view of legality, INPI's proposal to eliminate the stock of pending orders suffers from an addiction for non-observance of the law in the strict sense.

⁸ Article 35. On the occasion of the technical examination, the search and opinion report shall be prepared regarding:

- I - patentability of the application;
- II - adaptation of the claim to the claimed nature;
- III - recasting of the request or division; or
- IV - technical requirements.

⁹ Article 37. Upon completion of the examination, a decision shall be rendered, granting or rejecting the patent application.

The technical examination examines all patentability requirements and the conditions established by IPL, according to article 6¹⁰ of the law. The nullity of the patent will happen if all the requirements are not fulfilled, according to article 46¹¹ of IPL. Patents are an important mechanism of exchange between inventor and society. There is protection against competition in the short term in exchange for the fruits of long-term innovation.

Choate and Francis¹² (1981) stated:

The concession of the patent privilege by the state is an act having a threefold character. As a reward bestowed the inventor for his past invention, it is an act of justice. As an inducement to future efforts, it is an act of sound public policy. As a grant of temporary protection in the exclusive use of a particular invention, on condition of its immediate publication and eventual surrender to the people, it is an act of compromise between the inventor and the public, wherein which concedes something to the other in return for that which is conceded to itself.

The presence of requirements and conditions for the granting of patents is necessary and its verification is intended to avoid granting undue competitive privilege, when, in practice, the right to a patent does not exist. In this hypothesis, if such patent right is granted, a negative, illegal and illegitimate impact may occur, causing illicit enrichment to its holder, without any technological contribution to society.

The intention of the legislator in introducing the prior examination into the Brazilian patent system was to ensure that the object of the application was only approved when was represented an originality, a genuine innovation, that actually increases the stock of knowledge of society, stimulating new inventions and promoting the economic and technological development of the country.

At this point a question arises. Brazilian laws current permit the granting of patents without substantive examination? No, Brazilian laws do not allow it. In Brazil, the right to intellectual property is a constitutional right, and is part of the "Fundamental Rights and Guarantees". In article 5^o, XXIX of the Federal Constitution, which states:

Article 5 - (...) XXIX - the law shall grant to the authors of industrial inventions a temporary privilege for their use, as well as protection of industrial creations, trademark ownership, company names and other distinctive signs, with a view to social interest and the technological and economic development of country (BRASIL, 1988).

¹⁰ Article 6. The author of invention or utility model will be assured the right to obtain the patent that guarantees the property, under the conditions established in this Law.

¹¹ Article 46. A patent granted contrary to the provisions of this Law is null.

¹² Patent Law, West Publishing., pg. 77.

Brazilian jurists discuss the meaning of the expression in "view to social interest and the technological and economic development of country", understanding that the phrase can mean condition, that is, that the protection guaranteed to the inventor is conditioned to the social interest and the country's technological and economic development. Or, in an evaluative-finalist sense, the phrase may also mean that protection is given because it has positive consequences in meeting the social interest and providing the country's technological and economic development (CERQUEIRA, 2006). Barcellos (2010) analyzes the Federal Constitution and concludes that the patent system must meet functional criteria, taking into account the social interest, economic and technological development of the country. Barbosa (2010) also affirms that the patent is a right limited by its social function, existing while it is useful for the society.

For Barbosa (2010), in Brazilian laws, patents have a constitutional purpose. Its immediate objective is to reward the inventor for his creation, and his mediate objective is the social interest and the technological and economic development of the country. Therefore, the patent system is an exception to the principle of free competition, according to Article 170¹³, IV of the Brazilian Federal Constitution, subjecting the conditions of use to the immediate and immediate purposes. Anything that restricts competition, beyond what is strictly necessary to stimulate invention and ensure social return, exceeds the purposes of the patent –this is considered abuse.

The competitive advantage granted to the inventor by the patent privilege is monopoly, and there are immediate disadvantages to competitors and consumers (market entry barrier, low product variety and higher prices). However, the social return promised by the patent embodied in the technological contribution to society makes it possible to order the antagonistic interests of this exchange system, legitimating the right of exclusivity granted to the inventor. The technological contribution is presented as a balancing point for this balancing of interests, so that the series of advantages and guarantees that the patent assures its holder has as a necessary counterpart that its object (the invention itself) has the special attributes of novelty and inventive leap, thereby preventing the establishment of monopolies for useless, irrelevant or already existing technological acquisitions. Thus, in the words of Barbosa (2010), only what has not yet fallen into the public domain can receive legal exclusivity without violating freedom of competition.

Thus, the final clause of the patent institute, which is the social interest and technological and economic development of the country, prevents the singular appropriation of what was in the public domain, making it impossible to create a monopoly without the necessary and compelling counterpart of technological innovation, under penalty of confronting the principles of the economic order, especially that of free competition and provoking an imbalance in the system of exchange between the public interest and private interest, established between the collectivity and the holder of the patent.

In terms of historical background, it is important to remember that, under the current Federal Constitution, a simplified patent grant procedure without merit analysis has been implemented by the Brazilian office called the pipeline system. This system allowed patents granted abroad, relating to objects that were not patentable under the aegis of the former Industrial Property Code (Law n° 5.772/71), repealed

¹³Article 170. The economic order, based on the valorization of human labor and free initiative, is intended to guarantee everyone a dignified existence, in accordance with the dictates of social justice, observing the following principles: [...] IV - free competition;

by Law 9.279/96, to be revalidated in Brazil, taking advantage of the technical examination carried out in another country. The implementation of the pipeline system resulted in a direct unconstitutionality action (ADIN nº 4.234), filed by the Attorney General's Office and awaiting meritorious review by the Federal Supreme Court since April 2009¹⁴. Although the substantive examination of the pipeline patents was not made by the Brazilian office, it is noticed that due process was observed in the country where the first deposit was made, which removes the similarity of the proposal presented by INPI, object of analysis in this paper, which imports the grant of patents without any technical examination, neither in Brazil nor in any other country.

The United States Supreme Court in a unanimous decision issued in 1989 clarified that the Congress may not "authorize the issuance of patents whose effects are to remove existent knowledge from the public domain, or to restrict free access to materials already available."¹⁵ Similarly, the Australian Supreme Court notes in a ruling issued in 2002 that it is not possible to grant a patent to an invention that is not innovative because, in that case, there would be a monopoly burden borne by the company, without the necessary counterpart of a technological contribution¹⁶. The Brazilian Federal Supreme Court (STF), in turn, has already issued the following ruling:

Summary of the judgment: patent of invention. Cannot be granted without the requirement of novelty of the invention. Nullity of the patent because, at the time of registration, it was already in the public domain or common, and, therefore, unsusceptible to constitute privilege. Extraordinary appeal known and provided. (own translation)¹⁷

In the judgment cited above, the STF decided that the granting of patents requires substantive examination, and a conclusive opinion of the "nothing" type is insufficient. Thus, it is not enough for the examiner to affirm that he has not found a anteriority that could affect the novelty. He must demonstrate this positively. The patent issued without substantive examination is based on a legal fiction of a formal act, and not on the seriousness of a well-founded technical examination¹⁸.

Therefore, patent and novelty are inseparable. The patent expression itself contains, ontologically and necessarily, notion of novelty or inventive leap, which can only be measured by rigorous and detailed technical examination. In this sense, Barbosa (2004) teaches that the procedures of search and technical examination are necessary to guarantee the existence of the substantial assumptions of the patent, which guarantee the constitutional feasibility, so that the absence of the examination of anteriority, in Brazilian legislation, is a cause of absolute nullity, insupportable, offending not only the law but the Constitution itself (Greater Law).

¹⁴ Available from <<http://portal.stf.jus.br/processos/detalhe.asp?incidente=12879>>. Access on 05/22/2019.

¹⁵ *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141 (1989)

¹⁶ *Aktiebolaget Hassle v. Alphapharm Pty Limited*, HCA 59 (december 2002)

¹⁷ STF. RE 58535-SP, rel. Ministro Evandro Lins, DJ 12.4.67.

¹⁸ *Idem*.

In this way, INPI's proposal for a backlog solution with the summary approval of patents, without technical analysis of patentability requirements - including the attributes of novelty and inventive activity - is not supported by the Brazilian legal system precisely because it allows singular appropriation of what was already in the public domain, allowing the creation of a monopoly privilege without the necessary counterpart of the technological contribution and against the constitutional principle of free competition.

6. Conclusion

The backlog problem is an important obstacle of the Brazilian patent system. However, it does not seem reasonable to weaken this system even further with the summary approval of orders. The granting of patents for obvious, useless or even existing inventions unfairly rewards its owner at the expense of real inventors, consumer and social welfare.

A comparative assessment between countries adopting the depository system, such as South Africa, and the prior examination system, like currently Brazil, indicates that a substantial number of concessions in that system would not occur under a different regime (substantive examination).

The INPI proposal for the summary approval of patent applications, without substantive examination, is not covered by Brazilian law and fails to observe the constitutional imperatives of promoting social interest, technological and economic development of the country, defying the interests of competitors and consumers in general, besides fomenting the abusive use of the patent system, proliferating requests that do not contain any technological contribution to the society, necessary counterpart for the granting of the exclusive privilege.

Article 5, XXIX of the Brazilian Constitution, when it establishes the right of inventors to patent their industrial inventions, does so only in order to guarantee and encourage technological advances of interest to the national community. It should be borne in mind that the patent system, as conceived in Brazil, serves not the inventor but the Brazilian society, so that the withdrawal of a technology from the public domain must be an exception, which is only justified if there is a technological contribution to be assessed after complete and thorough technical examination. In spite of the need to seek a solution for INPI's backlog, it must necessarily be geared to the social interest and technological development of the country, which is not the case of the proposal commented here.

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