



Title	Prospective Reform in Zairian Patent Law after the Enforcement of the TRIPs Agreement (Trade-Related Aspects of Intellectual Property Rights)
Author(s)	Kongolo, Tshimanga
Citation	国際公共政策研究. 1997, 1(1), p. 147-160
Version Type	VoR
URL	https://hdl.handle.net/11094/3832
rights	
Note	

The University of Osaka Institutional Knowledge Archive : OUKA

<https://ir.library.osaka-u.ac.jp/>

The University of Osaka

Prospective Reform in Zairian Patent Law after the Enforcement of the TRIPs Agreement (Trade-Related Aspects of Intellectual Property Rights)

Tshimanga Kongolo*

The Agreement on Trade-Related Aspects of intellectual Property Rights (TRIPs Agreement) has established minimum standards of protection of intellectual property rights to be respected by all member countries of the WTO (World Trade Organization).

This paper analyses and highlights the extent to which Zaire will have to comply with the recommendations of the WTO embodied in the TRIPs Agreement in the area of patent. The study comes to the conclusion that three factors (legal, economic, administrative and policy) shall be taken into consideration when advocating the reform in Zairian Patent Law. We have recommended gradualism has the policy to adopt in the course of implementation of the TRIPs prescriptions.

Keywords : WTO : World Trade Organization , TRIPs Agreement : Trade-Related Aspects of Intellectual Property Rights , Minimum Standards of Protection , Zairian Patent Law

*Ph. D. candidate, Osaka School of International Public Policy, Osaka University

I. INTRODUCTION

The Agreement on Trade-Related Aspects of Intellectual Property (TRIPs Agreement) aims at promoting harmonization in international trade by protecting intellectual property rights within the international framework. The TRIPs Agreement has set minimum standards of protection to be respected by member countries of the WTO (World Trade Organization) in the area of intellectual property. The TRIPs Agreement has brought a new wake of protection of intellectual property by establishing a universally minimum standards of protection. The Agreement attempts to reglobalize the international regime in many ways. It is intended to bind most countries, cover much of the field of intellectual property, and mandate sanctions for failures to meet its terms.¹⁾ This Agreement came into effect on January 1995. Since the enforcement of the TRIPs, many member countries have amended their legislation in order to meet the recommendations of the WTO in the field of intellectual property.

Zaire was member of the GATT and is now a full member of the WTO since January 1, 1997.²⁾ Consequently, she has to comply with the prescriptions of the TRIPs Agreement. It would seem appropriate that laws relating to intellectual property be revised to meet the minimum standards of protection required under the TRIPs Agreement.

This article is written in the aim of assisting Zairian lawmakers to deliberate how they can

proceed to harmonize the current Patent Law in the process of implementation of the TRIPs Agreement. In this regard, particular attention will be paid to the factors needing consideration when advocating reform in the Zairian Patent Law. This article explores the current state of Zairian Patent Law and the legal regime of the international patent system embodied in the TRIPs Agreement before making a number of recommendations concerning the extent to which Zaire should continue to participate in the international patent system.

II. Overview of Zairian Patent Law

The purpose of this chapter is to outline in broad terms the Zairian patent system. It is not exhaustive, but merely signposts some of the most important elements in Zairian Patent Law.

A. Historical Perspectives

Prior to January 1982, three Royal-Decrees (Acts) had been the basis for the protection of industrial property rights:

- Royal-Decree of October 29, 1886 relating to patents;
- Royal-Decree of April 26, 1888 relating to trademarks;
- Royal-Decree of April 24, 1922 pertaining to the registration of designs and industrial designs.

All of the Royal-Decrees were enacted during the colonial period. They were revised several times. On January 7, 1982, Zaire promulgated, as an independent country, her first Law relat-

1) Paul Edward Geller, *Intellectual Property in the Global Marketplace: Impact of TRIPs Dispute Settlements?*, 29 THE INT'L L., at 103, 1995.

2) Zaire has adopted the Convention establishing the WTO and has adhered to the WTO since January 1, 1997.

ing to Industrial Property. Consequently, the three Royal-Decrees were abrogated.

In the field of intellectual property, we note the existence of two Acts in Zaire:

- Industrial Property Act of January 7, 1982 that embodied Patents, Trademarks, Models and Industrial Designs, and Geographical Indications;
- Copyrights and Neighboring Rights Act of April 5, 1986.

It should be noted that Zaire is a member of WIPO (World Intellectual Property Organization) and a member signatory of the Paris Convention for the Protection of Industrial Property. Accordingly, Zaire Patent law is likely similar to the law of many other signatories of the Paris Convention.

The actual Zairian Patent Law covers subject matters recognized internationally as patentable inventions.

B. Patentable inventions

The scope of the patent protection is "inventions." The Zairian Industrial Property Act has distinguished three types of patents: Invention-related patents, patents of importation, and patents of improvement.³⁾

Inventions must meet three conditions (requirements) before a patent right can be granted: novelty, inventive step, and industrial application.⁴⁾

An invention is new if it does not form part of the state of the art. Shall be considered as the

state of the art, any matter that has at any time before the priority date of that invention been made available to the public by written or oral description, by use or any other way.⁵⁾

The novelty is subject to some exceptions. The invention is still considered new if within six months before the filing date the invention was first revealed publicly at an international exhibition recognized by the Zairian government; or the invention was disclosed by a third person without the consent of the inventor. In the first case, the applicant shall within six months from the end of the exhibition file his application for the patent. Priority is then determined by the date of the disclosure of the invention. Furthermore, when the inventor or the owner of the invention has exploited or has used his invention before the filing of application for patent, he must file his application for that purpose within six months from the beginning of the exploitation otherwise his rights become irrelevant.⁶⁾

An invention involves an inventive step if it is not obvious to a person skilled in the art, having regard to the process, product or other means.⁷⁾

An invention shall be taken to be capable of industrial application if it can be made or used in any kind of industry, including agriculture, fishing, craft industry, services. The term industry is used in its broadest sense.⁸⁾

A subject matter of an invention can be a process or a product. It should be mentioned that an

3) Zairian Industrial Property Act, Article 5. Invention – related patent covers inventions which are not yet, at the filing date, patented elsewhere. Patent of importation covers inventions already patented, at the filing date, in other country(ies). Patent of improvement covers any improvements to the patented inventions or any changes brought in the existing invention.

4) Zairian Industrial Property Act, Article 6.

5) Zairian Industrial Property Act, Article 7.

6) Zairian Industrial Property Act, Article 23.

7) Zairian Industrial Property Act, Article 9.

8) Zairian Industrial Property Act, Article 10.

invention can be declared to be secret for security or national interest purposes. In such a case the exploitation of the invention may be prohibited to its owner. It is necessary to point out that the Zairian Patent Law provides protection for inventions relating to drugs, pharmaceutical products, and foods. In other words, pharmaceutical products, foods, drugs are not excluded from the patentability scope.

C. Unpatentable inventions

Article 12 of the Zairian Industrial property Act enumerates matters not available to patent. Most of them are those excluded from patentability by almost all member countries of the Paris Convention for the protection of Industrial Property: rules and methods for mental activities; ornamental creation; financial methods, rules relating to games, programs; inventions which the exploitation or the publication may impair Public Order, State security and social morality; and the discovery of things existing in nature. Under Zairian Patent Law, a discovery is subject to a title so-called "certificate of encouragement." The latter provision does not cover "scientific discovery" subject matter of the Geneva Treaty relating to the International Registration of Scientific Discoveries.

Zairian Patent Law is silent as to the patentability of computer software or computer programs. Shall we conclude that computer programs are excluded from patentability on the ground that they are rules and methods for mental activities or as programs precluded under Zairian Patent law? By interpretation, it could be said that computer programs are out of the scope of patentability. However, as men-

tioned above, pharmaceutical products, foods are not excluded from the scope of patentable inventions.

D. Rights Conferred and Obligations

A patent for an invention may be granted to the inventor, joint inventors or to the successor or successors in title. The inventor or joint inventors of an invention shall have a right to be mentioned as such in any patent granted. However, if an invention is carried out independently by several persons, the priority is accorded to the applicant who first files the application for the patent.⁹⁾ Zaire has adopted the "first-to-file" principle.

The Industrial Property Act confers to the patentee the monopoly and exclusive right to exploit his invention. He is the one to authorize third parties to use his rights. Applying this line of reasoning, no one can exploit the invention without his consent. The patentee has the right to prevent third persons from practicing or carrying on activities covered by the patent, such as to make the patented products, to use, to sell, to offer for sale, to import or to introduce the patented products in Zaire; he has also the right to prohibit third persons to employ, to sell or to offer for sale the patented process; he is entitled to forbid third persons not possessing license to exploit the invention. He has the right to request competent authority to bar the entry of infringing products into the national territory. The protection does not extend to acts accomplished in the purpose of scientific research. It covers only acts carried out for industrial and trade purposes.¹⁰⁾

The patentee has the exclusive right to enter

9) Zairian Industrial Property Act, Article 47.

10) Zairian Industrial Property Act, Article 49.

into a license agreement with another person. A licensee cannot grant a sub-license to another person without the prior consent of the licensor or the patentee. A licensor can limit some rights granted to a licensee.

The owner of the patent has the obligation to exploit or to work his invention in Zaire in an effective, serious and continuous manner himself or through any authorized person. The exploitation of the invention shall be carried out within 5 years from the filing date of the application for patent or within 3 years from the issue of the patent. In respect of patent relating to drugs, for the purpose of the public health concern, the exploitation shall be undertaken within 4 years from the issue of the patent. As regard to patent of importation, the exploitation shall be carried out within 3 years from the filing date of the application. If the invention had been worked abroad, the exploitation in Zaire must take place within 2 years from the filing date of application. A grace period of 1 year is provided.¹¹⁾

Under Zairian Patent Law, the exploitation of a patented invention means the realization of that invention through effective technical execution as provided under the Regulation. The importation of patented product made (manufactured) abroad is not deemed to be an exploitation of an invention.¹²⁾

It should be noted that the owner of a patent of improvement cannot exploit or work his invention without the prior authorization of the owner of the first patent. Likewise, the owner of the first patent cannot exploit the second patent (patent of improvement) without the

authorization of its owner. The best way to resolve the issue is the conclusion of a cross-license.

If a right holder or the owner of a patent does not exploit his invention within the prescribed periods, or if the second patent has a significant impact on the development of the country, and if within normal commercial terms its owner cannot get a license from the owner of the first patent, the competent authority may grant to the interested person a compulsory license.

E. Compulsory License

Zairian Patent Law has distinguished two types of compulsory license: non-voluntary license and statutory license. Both are similar to some extent. The main difference is that the statutory license is granted to the State (government) and exploit by the State or by third parties on its behalf; and it can be exclusive or non-exclusive.

As set forth above, if the patentee fails to work his invention in lapses of time prescribed in Article 54 of the Industrial Property Act, any person can request to the court the grant of a compulsory license. In general terms, a non-voluntary license must be non-exclusive. The compulsory licensee must pay the patent owner a reasonable exploitation fee (remuneration). After the grant of a compulsory license, the patentee cannot accord a license or sub-license to other persons in the conditions and terms more advantageous than those given under the compulsory license.

The State (government) may request from the Ministry of Industry the grant of a statutory license where the non-exploitation of the inven-

11) Zairian Industrial Property Act, Article 54.

12) Zairian Industrial Property Act, Article 55.

tion impairs the economic development of Zaire in particular, or public interest in general. It might be exclusive or non-exclusive. In the case where it is exclusive, a statutory license is granted for a maximum period of 5 years. The government shall pay royalty to the owner of the patent. The amount of the royalty is fixed by the parties or the competent court if they cannot reach an agreement.¹³⁾

F. Term of Protection

According to Article 36 of the Zairian Industrial Property Act, the term of protection of patents has been established for 20 years from the filing date of application in general, and 15 years for patents relating to drugs.

G. Enforcement of Patent Rights

The enforcement measures facilitate the great implementation of the Law. In the field of intellectual property in general and patent in particular, civil and criminal remedies are provided. If a third person uses or exploits the patented inventions without the prior authorization of the patentee or if a third person impinges the exclusive rights of the owner of the patent described above, the patentee or the right holder may seek for civil or criminal remedies to the Court. In fact, the enforcement

measures have not been adequately implemented as required under the TRIPs Agreement.

III. Minimum Standards of Patent Protection Required under TRIPs

The TRIPs Agreement is a new attempt to promote universality in the protection of intellectual property rights.¹⁴⁻¹⁵⁾ The TRIPs Agreement has established minimum standards of principles and rules to be respected in the field of intellectual property in general and patent in particular. As stated above, members of the WTO must comply with these requirements.¹⁶⁾ Moreover, the TRIPs Agreement has not abandoned rules provided under pre-existing conventions relating to intellectual property such as the Paris Convention for the Protection of Industrial Property. It has recognized and incorporated Articles 1-12 and 19 of the Paris Convention as part of the Agreement. Therefore, member countries of the WTO shall also comply with these provisions. The TRIPs Agreement does not constitute a wholly new regime systematically filling all the gaps left open from the old regime.

13) Zairian Industrial Property Act, Articles 79-81.

14) * Carlos Alberto, The Economics of Intellectual Property Rights and the GATT: A View From the South, 22 VAND. J. of TRANS. L., (1989) at 252.

See also, * Wilner, An International Legal Framework for the Transfer of Technology, THE POLITICAL ECONOMY of INTERNATIONAL TECHNOLOGY TRANSFER, (1986) at 53.

* Meessen, Intellectual Property Rights in International Trade, 21 (1) J. WORLD TRADE L., (1987) at 67.

15) Harold C. Wegner, TRIPs Boomerang---Obligations for Domestic Reform, 29 VAND. J. of TRANS. L., 534-558 (1996).

See also, Marco C.E.J. Bronckers, The Impact of TRIPs: Intellectual Property Protection in Developing Countries, 31 COMMON MARKET LAW REVIEW, 1245-1281 (1994).

16) A. Samuel Oddi, TRIPs---Natural Rights and a "Polite Form of Economic Imperialism", 29 VAND. J. of TRANS. L., 415-470 (1996).

See, Marci A. Hamiton, The TRIPs Agreement: Imperialistic, Outdated, and Overprotective, 29 VAND. J. of TRANS. L., 613-634 (1996).

See also, MITSUO MATSUSHITA, KOKUSAI KEIZAI HO, YUHAKAKU, at 151-166 (1996).

* GYO WATANABE KISHIDA MAKOTO, WTO HASSOKUGO NO SEKAI BOEKI, at 186-197 (1996).

The TRIPs Agreement has given a certain amount of leeway to member countries to grant more extensive protection than is required. In other words, the point to be made here is that each member country of the WTO is free to determine the level of protection to be accorded to intellectual property rights. The sole requirement of the TRIPs Agreement is not to go below the minimum standards of protection. In the general provisions and basic principles, national treatment, and most-favoured-nation

treatment clauses are provided (Articles 3-4)
¹⁷⁾

In this chapter, I will outline some matters that will be useful for gaining a greater understanding of comparisons between the TRIPs Agreement and the Zairian Patent Law.

Under the TRIPs Agreement, three conditions for patentability of inventions are required. The invention shall be novel (new), involve an inventive step, and be capable of industrial appli-

A. Substantive Standards of Patent Protection

Scope of protection	Rights conferred	Term of protection	Compulsory license
Patentable inventions 3 conditions: Novelty, Inventive step, and Industrial application in all fields of technology	All economic rights in respect of both product and process patents e.g. the owner of patent has the exclusive rights to exclude third parties from making, using, offering for sale, selling, or importing for these purposes the product or product obtained directly by that process without his consent	20 years from the filing date of application	Articles 30-31 13 conditions have been provided for the grant of compulsory license
<i>Unpatentable inventions</i> * For protection of Public Order or morality purpose; including to protect human, animal or plant life or human health and to avoid environment prejudice * Diagnostic,therapeutical and surgical methods for treatment of humans or animals * Plants and animals other than microorganisms, and other than non-biological and microbiological processes	Right to assign, to conclude licensing contracts		

17) Members shall accord to the nationals of other members treatment no less favorable than that accords to its own national (article 3). Furthermore, any advantage, favor, privilege or immunity granted to the nationals of any other country shall be accorded immediately and unconditionally to the nationals of all other members. Some exceptions have been provided (article 4).

cation.¹⁸⁾ An invention might be a product or a process. In addition, the TRIPs Agreement has extended the scope of the availability for patent to inventions in all fields of technology, and regardless to the place of invention. That is to say that, in any field of technology, a patent may be available for any invention that fulfill all the three conditions.

Two provisions deal with the matter relating to the unpatentability of inventions. In addition to exclusions from patentability provided by most of members of the Paris Convention for the Protection of Industrial Property, the TRIPs Agreement sets forth some exclusions due to the necessity to protect Public Order or morality, animal or human health, plant life, and environment. Inventions which are contrary to the Public Order or morality, or whereby the exploitation may impair human health, and may cause prejudice to the environment, might be excluded from patentability. This can be used as a tool to exclude from patentability pharmaceutical products.¹⁹⁾ Many developing countries consider this issue one of health policy and technology transfer.²⁰⁾ It must be recognized that each member has the discretionary authority to determine situations that trouble

Public Order or morality.

Pursuant to Article 27(3), plants and animals other than microorganisms, and other than non-biological and microbiological processes may be excluded from patentability. This provision would seem too permissive. However, Members are obliged to protect plant varieties either by patents or by an effective *sui generis* system or by any combination thereof.

A computer program is not a patentable subject matter.²¹⁾ The TRIPs Agreement has opted for copyright protection of computer programs.

Under the TRIPs Agreement, the owner of the patent has the exclusive rights in respect of product patent and process patent. This provision is mandatory. Each member country shall comply with this prescription. In addition to the exclusive rights, the owner of the patent has the right to enter into license agreement with third parties. He has also the right to assign by any means his patent.

However, the TRIPs Agreement has provided some exceptions to the exclusive rights of the owner of the patent through the compulsory license.

The TRIPs Agreement provides conditions to comply with while granting the compulsory li-

18) TRIPs Agreement, Article 27(1).

19) Frederick M. Abbott, Protecting First World Assets in the Third World: Intellectual Property Negotiations in the GATT Multilateral Framework, 22 VAND. J. of TRANS. L., (1989) at 713.

In the course of discussion of the TRIPs, India argued that exemption from patent protection in areas such as pharmaceuticals, foods products, chemicals, microorganisms, and agriculture machinery and method must be permitted: Every country should be free to determine both the general categories as well as the specific products sectors that it wishes to exclude from patentability under its national law taking into consideration its own socio-economic, developmental, technological and public interest needs.

See also, Frederick M. Abbott, The International Intellectual Property Order Enters the 21st Century (Commentary), 29 VAND. J. of TRANS. L., 471-479 (1996).

See also, S.K. Verma, TRIPs--Development and Transfer of Technology, 27 IIC, 331-364 (1996).

20) Robert W. Kastenmeir and David Beier, International Trade and Intellectual Property: Promise, Risks, and Reality, 22 VAND. J. of TRANS. L., (1989) at 295.

21) J.H. Reichman, Universal Minimum Standards of Intellectual Property Protection Under the TRIPs Component of the WTO Agreement, 29 INT. LAWYER, (1995) at 360.

cense. The concept compulsory license has not been used. Instead, the TRIPs uses the phrases: "Exceptions to rights conferred or other use without authorization of the right holder." Article 31 provides conditions to be respected while allowing the use of owner rights by third parties. Some of those conditions are similar to those provided by the Paris Convention for the Protection of Industrial Property. The compulsory licensee must have made reasonable efforts to enter into a license agreement with the right holder of the patent within reasonable commercial terms but without being successful at last.²²⁾ The compulsory license shall be non-exclusive and shall be granted in the individual merit. In any case, the right holder shall be paid adequate remuneration. In relation to the existence of two conflicting patents which bar each other, the owner of the first patent shall be entitled to a cross-license on reasonable terms to use the invention covered by the second patent (and vice-versa).²³⁾

In principle, both the public interest exception and measures to prevent abuse could justify resorting to compulsory licensing.²⁴⁾ However, one of the shortcomings of a compulsory license is that it conveys only a "naked" license to practice the patented invention; there is no requirement that the patent owner transfer the

needed information or cooperate in the working of the invention by the licensee.²⁵⁾

Generally speaking, the term of the compulsory license shall not be longer than the term of protection required for patent rights.

The TRIPs Agreement has set the term of protection of patent rights to 20 years from the filing date of application for patent. This provision has standardized the period of protection in respect of both product patent and process patent in all fields of technology to 20 years.

B. Enforcement of Patent Rights

The enforcement measures can be considered an innovative element of the TRIPs Agreement. Member countries shall ensure that enforcement procedures are available under their national laws. The TRIPs Agreement has provided administrative, civil and criminal procedures and remedies for any infringement of the right holder rights. In addition, the judicial authorities shall have the authority to bar the entry into their jurisdictions of infringing products. The right holder shall be paid compensatory damages for the injury he has suffered. Members shall provide criminal procedures and penalties to be applied in case of infringement. Provisions pertaining to enforcement of intellectual property in general and patent in particular will bring a new wave to the protection

22) This requirement may be waived by a member in the case of a national emergency or other circumstances of extreme urgency or in cases of public non-commercial use.

23) Robert P. Merges and Richard R. Nelson, *On the Complex Economics of Patent Scope*, 80 COLUMBIA LAW REVIEW, (1990) at 860.

Two patents are said to block each other when one patentee has a broad patent on an invention and another has a narrower patent on some improved feature of that invention. The holder of the narrower patent cannot practice his invention without a license from the holder of the dominant patent (and vice-versa).

In fact, the most efficient way to deal with the problem would probably be a system of compulsory licensing, whereby the improver would pay a fair royalty to the original patentee.

24) J.H. Reichman, *supra* note 21, at 355.

25) A. Samuel Oddi, *The International Patent System and Third World Development: Reality or Myth?*, 1987 DUKE L.J., (1987) at 873.

of intellectual property.

C. Innovations of the TRIPs Agreement Pertaining to Patents

Typical examples of perceived inadequate intellectual property protection have included the total or partial exclusion of inventions in certain areas (such as pharmaceuticals and chemical products) from patent protection and excessive compulsory licensing and patent forfeiture provisions.²⁶⁾ Various approaches were considered for solving these problems under the TRIPs Agreement.

The main innovations of the TRIPs Agreement are as follows²⁷⁾:

- There is a statement of the scope of patentable subject-matter and the permissible exceptions which may be made to this (Art. 27); there is also a specification of the conditions for patentability, namely novelty, inventive step, and industrial application and the disclosure requirements for patent applications (Art. 29).
- The exclusive rights to be conferred are specified (Art. 28).
- Limits on exceptions to protection are established (Art. 30).
- Conditions concerning compulsory licenses are indicated in addition to those applying under the Paris Convention (Art. 31).
- Revocation and forfeiture are made subject to judicial review (Art. 32).
- The term of the protection is set at a minimum of 20 years (Art. 33).
- There is a comprehensive set of enforcement standards to which countries must adhere.

IV. Prospective Reform in Zairian Patent Law

As stated at the outset of this paper, after becoming a full member of the WTO on January 1, 1997, Zaire has to comply with requirements of the TRIPs Agreement. The present Industrial Property Act enacted in 1982, which the Regulation came into effect in 1989, has been implemented by competent authorities in a manner that profers less protection of the right holder exclusive rights. The lack of effective implementation in respect of patent law is due to the existence of a large number of factors which will be examined via three main categories: legal perspectives, economic considerations, and policy and administrative considerations.

A. Legal Perspectives

From a legal viewpoint, Zairian Patent Law shall be harmonized with prescriptions of the TRIPs Agreement. Zairian patent law must be revised and an efficient protection must be granted by taking into account the interest of the right holder of patented rights on the one hand and on the other to avoid anti-competition practices due to the monopoly position of the owner of the patent.

Similar to the TRIPs Agreement, Zairian Patent Law has set three conditions for an invention to be patentable; items must be new, involve an inventive step, and be capable of industrial application. An invention may be a

26) Dam Kenneth, The Growing Importance of International Protection of Intellectual Property, 21 INTL. LAWYER (1987), at 627.

27) Sam Ricketson, The Future of the Traditional Intellectual Property Conventions in the Brave New World of Trade-Related Intellectual Property Rights, 26 IIC, (1995) at 889.

See also, KUMATANI KEN'ICHI, KAISEI TOKKYO HO, YUHIKAKU, (1996) at 48-74.

product or a process. It would be necessary to mention that, unlike a large number of developing countries, Zairian Patent Law does not exclude from patentability, foods and pharmaceutical-related inventions.

Concerning the scope of protection of inventions, Zairian Patent Law does not expressly exclude from patentability any domain. Shall we state that Zairian Patent Law provides protection for any invention that fulfills the all three conditions required for patentability in all fields of technology? In accordance with a general principle that "what is not expressly forbidden by the law may be deemed to be permitted", we can argue that patents are available for any inventions in all areas of technology. Nevertheless, an explicit provision is needed to clarify the scope of inventions for patentability purpose.

Article 55(2) of the Zairian Industrial Property Act prescribes that the importation into Zaire of patented goods (products) made (manufactured) abroad should not be deemed to be an "exploitation of an invention" as required under article 54(1) and 55(1) of the same Act.²⁸⁾ The TRIPs Agreement prohibits discrimination between imported products and those locally produced. It can be said that Zairian Industrial Property Act provisions deal with first exploitation of the invention in Zaire. This provision aims to foster the technological exploitation of the invention into Zaire for the development purpose.²⁹⁾ The non-working of the invention may lead to the grant of compulsory license to a third party. This provision should

be ascertained.

Zairian Patent Law does not provide explicitly the exclusion from patentability inventions that the exploitation may impair human or animal health or which cause prejudice to the environment. Notwithstanding that this provision gives competent authorities more discretion to appreciate to what extent the exploitation may distort the environment or spoil human health, it nonetheless, ensures the protection of the environment or human health. Considering situation prevailing in Zaire, it would seem appropriate to introduce a similar provision.

Regarding the protection of plant varieties, lawmakers will appreciate which system of protection is appropriate or adequate. Competent authorities will also have to decide whether to accord protection to plants and animals other than microorganisms or other than non-biological and microbiological process. This provision is not mandatory.

In respect of compulsory licenses, Zairian Patent Law must be amended to confer the right holder the possibility to seek for judicial review or other independent review by a distinct Court of higher authority for any decision regarding the authorization of a compulsory license.

The TRIPs Agreement has set the term of protection of patents to 20 years from the filing date of application for patent. Zairian Patent Law must provide a uniform term of 20 years protection of patents from the filing date. Under the current law, the term of protection is 20 years for general patents, and 15 years for patents pertaining to drugs or medicines.

28) See, Regulation relating to the application of Zairian Industrial Property Act, article 50.

29) There is no meaning to grant a patent if it cannot be worked in Zaire. Zaire is seeking for technology and investments to develop her R and D.

Under Zairian Patent Law, an opportunity for judicial review of any decision to revoke or forfeit a patent shall be available. This provision aims at guaranteeing the right holder against the abuse of competent authorities in determining causes and conditions in which the revocation may occur.

The TRIPs Agreement sets forth comprehensive enforcement standards to which countries must adhere. In principle, Zairian Patent Law provides enforcement measures to be applied in case of violation of right holder rights. The Industrial Property Act in articles 88-95 prescribes civil and criminal remedies. However, because of the lack of effectiveness enforcement measures, Zairian Patent Law shall be amended in such a way as to reflect the importance of enforcement measures in the area of intellectual property in general and patent in particular. These must be efficient to ensure the protection of rights on both sides, notwithstanding the existing enforcement measures are likely to be rendered practically inapplicable due to some economic issues.

B. Economic Considerations

The issue is to determine the contribution of patent system to the development of Zaire. Being a developing country, Zaire has been seeking investments (national and foreign) and

technology to develop her economic sectors. The patent protection system would be irrelevant if it is not followed by inventions or technology which may lead to public well-being. It has been said by some scholars that³⁰⁾ an increasing number of inventions would have likelihood of positive economic implications. Patents protection must induce inventions in all fields of technology and in any kind of industry, from the craft industry and food industry to heavy industry.

There are two types of inventions: patent-induced inventions and independent inventions or non-patent-induced inventions. In the case of Zaire we cannot state which one prevail.

Some scholars from developing and developed countries have argued that the patent system does not induce inventions and is not needed in developing countries.³¹⁾ Others have favoured the patent system.³²⁾ In addition, the grant of patents may promote development by increasing the amount of foreign investment in the developing countries.³³⁾ Indeed, patent protection can induce research in some fields of technology, especially in the area of medical or pharmaceutical, and agriculture. In traditional medicine for instance, there is a large number of research done in this field.

The granting of patents may also increase the

30) F.M. Abbot, *supra* note 19.

31) See, * U. ANDERFELT, INTERNATIONAL AND PATENT LEGISLATION AND DEVELOPING COUNTRIES 131-39 (1971);

* E. PENROSE, THE ECONOMICS OF THE INTERNATIONAL PATENT SYSTEM 110-17 (1951);

* Greer, The Case Against Patent Systems in Less-Developed Countries, 8 J. INT'L. L. ECON. 223 (1973);

* Kronstein Till, A Reevaluation of the International Patent Convention, 12 LAW CONTEMP. PROBS. 765,766 (1947).

32) See, S. LADAS, PATENTS, TRADE-MARKS AND RELATED RIGHTS: NATIONAL AND INTERNATIONAL PROTECTION 1030 (1975);

- Kunz-Hallstein, The Revision of the International System of Patent Protection in the Interest of Developing Countries, 10 INT'L. REV. INDUS. PROP. COPYRIGHT L. 649 (1979).

33) Frederick M. Abbott, *supra* note 19, at 698.

33) A. Samuel Oddi, *supra* note 25, at 848.

transfer of technology that supports industrial development.³⁴⁾ Finally, attention must be paid to inventions which have efficiency impact on public welfare. Accordingly, administrative reform would be welcomed by adopting adequate policy able to ensure a fair application of rules relating to intellectual property in general and patent in particular.

C. Administrative and Policy Considerations
The administrative reform must be made through two stages. First, an independent Patent Office must be established in order to deal with matters relating to the filing of applications for all kinds of industrial property. The Patent Office must be financially independent and must have its own budget. Secondly, competent staff are needed. The treatment or the examination of applications must be undertaken by staff who have sufficient industrial property knowledge. Otherwise, they will not be able to provide the technical information needed by applicants.

As a matter of policy, the existing staff must be trained in order to make them fulfill their job in an effective manner.

The costs of establishing an effective intellectual property system (from the organization of a "cadre" of patent examiners to the costs of enforcing intellectual property rights) must be considered. Therefore, the administrative reform must be made step by step taking into account the priority of the system to be established. The aim of the administrative reform is to develop a structure which would enable applicants to gain a greater understanding of industrial property in general and patent in par-

ticular, and to give them an opportunity to be informed of their rights and obligations. In addition, it would guarantee the effective application of the Industrial Property Act and its Regulation.

The policy to be adopted in the course of revision of the existing Patent Law must ensure that the minimum standards required under the TRIPs Agreement have been respected. In addition, the TRIPs Agreement grants for developing countries have a grace period of 5 years or 10 years for least-developed countries in which to implement most of the required standards.

V. CONCLUSION

This paper attempts to point out some main features of the new wake brought out by the TRIPs Agreement (Trade-Related Aspects of Intellectual Property Rights) in the field of intellectual property in general and patent in particular. The TRIPs Agreement has provided minimum standards of protection to be respected by member countries of the WTO (World Trade Organization) in the area of intellectual property. In principle each member country shall endeavor to meet these requirements by amending its current laws pertaining to intellectual property.

Zaire has been a full member of the WTO since January 1, 1997. Before that time, she was a member observer of the WTO and in the past was a full member of the GATT. This paper attempts to foresee which changes are needed in Zairian Patent Law after she signed the Con-

34) Frederick M. Abbott, *supra* note 19, at 698.

vention establishing the WTO.

Changes in Zairian patent system have been examined in three dimensions: legal perspectives, economic considerations, and policy and administrative considerations. It is obvious that the three realities have to be taken into consideration when advocating changes in the Zairian patent system. The restructuring of the patent administration, the economic conditions of the country, and reform to be undertaken, are linked together. Thus, gradualism is probably the best policy to adopt in the course of implementing minimum standards of patent protection required under the TRIPs Agreement.