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STUDY ON PATENTS AND THE PUBLIC DOMAIN^{1 & 2} - SUMMARY³

prepared by the Secretariat

1. The Annex to this document contains an Executive Summary of the Study on Patents and the Public Domain prepared under the project on Intellectual Property and the Public Domain (CDIP/4/3/REV). This Study has been prepared by a group of experts. It comprises an overview of patents and the public domain, together with a number of country-specific accounts concerning the relationship between the public domain, national patent law and relevant information-retrieval mechanisms.

2. The CDIP is invited to take note of the information contained in the Annex to this document.

[Annex follows]

¹ The views expressed in the study are those of the authors, and not necessarily those of the WIPO Secretariat or its Member States.

² The Patents and the Public Domain part of the study was prepared by Mr. Jeremy Phillips, Professorial Fellow, Queen Mary Intellectual Property Research Institute, University of London, London, United Kingdom. The Development Dimension: National Practices and Experiences part was prepared by:

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³ Following a request by the CDIP at its eighth session to present a more substantive summary, this Summary has been prepared by the WIPO Secretariat. The Original Summary prepared by the authors of the study is contained in the document CDIP/8/INF/3.

EXECUTIVE SUMMARY

At its fourth session, held from November 16 to 20, 2009, in Geneva, the Committee on Development and Intellectual Property (CDIP) agreed to commission a Study on Patents and the Public Domain (hereinafter called "Study") under the Project on Intellectual Property and the Public Domain, as described in document CDIP/4/3 Rev. The overall objective of the Project is established by Recommendations 16 and 20 of the WIPO Development Agenda.

The objective of the Study is to deepen the analysis of the implications and benefits of a rich and accessible public domain and to explore the role of the patent system and patent information in identifying accessing and using subject matter in the public domain. Therefore, the Study focuses principally on the patent system and the role which patent information plays in the identification, access, use and preservation of public domain knowledge. Possibly because the public domain is so familiar and ubiquitous, it does not appear that any systematic study on its relationship with the patent system has been undertaken. Accordingly, this Study should be viewed not as the final word on the subject, but as a set of preliminary thoughts which are not designed to preempt discussions.

The Study comprises two parts: the first part provides an overview of patents and the public domain,⁴ and the second part examines a number of country-specific accounts concerning the relationship between the public domain, national patent law and relevant information retrieval mechanisms in South Africa, Egypt, Colombia, Ukraine and India.⁵

I. PATENTS AND THE PUBLIC DOMAIN

(a) The notion of "public domain" in relation to the patent system

There is no single accepted, official definition of "public domain" for the purpose of international patent law. The Paris Convention on the Protection of Industrial Property, the Patent Law Treaty and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement) make no mention of the public domain. A few studies on the public domain, published relatively recently, focus on a specific area of intellectual property law, namely, copyright law. One reason why there have been very few studies on the public domain as a generally applicable concept within the sphere of intellectual property law may be that it has simply been taken for granted, like the air we breathe, and has not been adequately recognized as a commodity which can be utilized as a technical resource, packaged for sale and distribution and cultivated for the benefit of mankind in general. As a result of debates concerning the entitlement to gain access to and use known information, the subject can be expected to come under increasing scrutiny within WIPO and other international organizations. One particular complexity in relation to patents is that the private rights of patent owners are not absolute and that, notwithstanding the fact that patent-protected subject matter is inherently private, it may still be lawfully used by others - the aggregate of a large number of individual entitlements to use another's private property may be little different in reality from "public domain".

⁴ The first part of the Study was prepared by Mr. Jeremy Phillips, Professorial Fellow, Queen Mary Intellectual Property Research Institute, University of London, London, United Kingdom.

⁵ The following experts prepared these country-specific studies: (i) Mr. McLean Sibanda, Chief Executive Officer, The Innovation Hub, Pretoria, South Africa; (ii) Mr. Hossam El Saghir, Professor of Commercial Law and General Director of the, Regional Institute for Intellectual Property, Helwan University, and Attorney at Law, Cairo, Egypt; (iii) Mr. Ernesto Rengifo García, Professor, *Universidad Externado de Colombia*, Bogota, Colombia; (iv) Mrs. Olena Pavlina Orlyuk, Director, Scientific Research Institute of Intellectual Property, Kyiv, Ukraine; and (v) Mr. Calab Gabriel, Senior Partner, K&S Partners, Intellectual Property Attorneys, Gurgaon, National Capital Region, India.

In terms of the concepts which have traditionally governed the understanding of the patent system, the public domain complements the patent system mainly as a by-product of the following processes: (i) the placing before the public of any new product or process: (ii) the juxtaposition of intellective elements, whether contained in patent documents themselves or in knowledge which resides outside patents; (iii) the termination of any legal restriction placed upon the use of any product or process by virtue of the expiry, surrender, cancellation or revocation of the patent rights. While it is frequently assumed that access to documentation concerning expired patents which have entered the public domain is of assistance in the process of fresh innovation, the connection between the two has not been proven, and there is no evidence upon which to compare it favorably or unfavorably when contrasting it with any other means claimed to foster future creativity. However, it is reasonable to suppose that the provision of better means for identifying and accessing public domain information will confer a benefit on all sectors of the innovation community, if only by assisting in the elimination of previously fruitless attempts to solve technical problems and in the avoidance of duplication of research the results of which have already entered the public domain. An accessible public domain is also expected to offer existing technical solutions to the same or similar problems that might be present elsewhere. The direction of a clear legal policy regarding the public domain would be facilitated if more empirical evidence were available concerning the relevance of the different factors mentioned in this Study.

Public domain in the patent system differs from public domain in other intellectual property rights: there are effectively two dimensions to the patent public domain, namely, the information domain and the action domain. The information domain relates to the information contained in published documents relating to the patent application and grant, as well as to data gleaned from office actions such as opposition proceedings and judicial decisions. The action domain relates to what may be done with the above public information, which is partly defined by each national law in terms of the scope of patent rights and exceptions and limitations to such rights.

(b) Rationale of the patent system and the public domain

In its earliest forms, both in Venice and England, the idea of "technology transfer" into their territory was the driving force of the patent systems, and no explicit reference to public scrutiny of technical contents and the concept of a public domain was made at that time. The description of patented invention was initially a practice introduced by patent owners, on an informal basis, in order to assert the scope of their patents against alleged infringers during patent infringement litigations. An important shift, from the conceptual point of view, was brought by the United States Constitution in which the focus of the patent system was deflected from that of personal advantage to the granters of a patent privilege and possessors of such privilege. Rather, it tied the rationale of the patent system to the aim of progress of science and useful arts and the greater goods of mankind, and for the first time, accommodated the public domain. It was not until the nineteenth century in England that the value of collating the technical information contained in patent applications for the purpose of using them as a research resource was appreciated. Benett Woodcroft conceived the notion of a patent office as a repository of technical information through which descriptions of inventions were laid open for consultation by the public at large.

Besides dissemination and transfer of knowledge, often, the rationale of the patent system is also explained from the points of incentives to invent and invest. However, in the case where patents are seen as investment in themselves, the public domain as a repository of information for technological development has little attraction for such investors.

The policy objectives of the patent system may be distinguished from its rationale in that, while the rationale looks backwards in explaining the reasons for the patent system, its policy objectives are generally identified by the system's future direction in order to achieve specific targets. In principle, it would be desirable to give an authoritative review of the policy objectives of the public domain, in the same way as the policy objectives of the patent system. In practice, this is not possible due to the lack of a general agreement on the scope and role of the public domain. However, one policy

objective might be that the public domain should be accessible, even if the debate on the extent to which it should be accessible remains diverse between intellectual property rights. However, the debate on the extent to which the public domain should be accessible in the context of copyright may have a certain significance in the context of patents. As computer science advances, public domain storage and retrieval takes on a more than merely archival aspect, since any new technology is a threat to the existing technologies. A further consideration relates to the language and format in which public domain information is held and made available, and the fact that not all the information contained in the public domain is transmittable online via the Internet. In connection with the preservation of the public domain, one of the difficult issues may be the relationship between the public domain and trade secrets, as information which was once publicly available could be forgotten by the public and thereby regain its value in the confidential "private" domain.

Once material is identified as falling outside the scope of patent protection and therefore within the public domain, a number of significant policy issues must still be addressed. First, notwithstanding the lack of patent protection, the use of public domain material may still be restrained due to public law factors that are external to intellectual property law and which generally override it, such as in environmental measures that prohibit the use of toxic chemicals. The second form of restriction on the use of materials which have fallen outside of patent protection arises from a private law factor: those materials may belong to the public domain from the perspective of the patent system while remaining protected by other intellectual property rights. A third form of restriction relates to the recent moves towards the protection of traditional knowledge and genetic material upon which some of that knowledge is based, although much of such knowledge and materials are regarded by classic patent law as falling within the public domain.

Another issue relating to access to unpatented and out-of-patent knowledge is the existence of practical means to access public domain information, for example, the possibility of physical access to public domain archives and databases. A further issue relates to the gap between what public domain materials (for example, patent documentation) disclose, and what the readers need to know in order to fully make use of the information so disclosed. In addition, the relevance of competition law in determining the public domain sphere should be noted.

(c) Relationship and interplay between the patent system and the public domain

While the patent system was not custom-built to create or serve the public domain, its unique and undeniable impact on the creation, use and preservation of the public domain cannot be denied. Depending on the applicable law, the main features of the patent system which assist in the creation of the public domain may be: (i) the definition of a patentable invention and the scope of permissible claims; (ii) the publication of applications for patents and granted patents; (iii) the inspection of files relating to patent applications; (iv) the collective examination of published applications by interested members of the public; (v) the legitimate use of a patent by others (exceptions and limitations to the patent rights); and (vi) the forfeiture of a patent, although there is scarcely any jurisprudence on this topic.

Regarding the patent system's contribution to the use of the public domain, the distinction between the information domain and the action domain is important. Once information is made available to the public via the patent system, that information may be intellectually absorbed, assimilated with other information and used as a means of creating further inventive concepts. All these uses however remain within the domain of mere information. When one seeks to implement those intellectual concepts to put them into action, they enter into the action domain where activity performed in respect of them may or may not infringe a patent. In reality, the patenting of subsequent incremental inventions and improvements over an earlier patent is often dealt with by the owner of the earlier patent. The practice of seeking to retain profitability from the commercial exploitation of those improvements by the owner of the earlier patent even after the expiration of the earlier patent is sometimes pejoratively termed "evergreening". Patent information may have

higher intrinsic value than the information emanated from other sources in certain cases, because (i) it is classified mostly under the International Patent Classification scheme; (ii) legal rulings on the meaning and interpretation of contested patent documentation are increasingly reported and made publicly available on the Internet; (iii) there is a legal requirement that a claimed invention shall be described in a patent application in a sufficiently clear and complete manner (the enabling disclosure requirement); and (iv) prior art information in patent applications as well as search and examination reports enable members of the public more easily to link one invention with another. In addition, abstracts published with patent applications facilitate the identification of patent-based material within the public domain.

The preservation of the public domain is a concept which is almost too great to comprehend, as in its widest sense, it is the preservation of the entirety of publicly available science, technology, know-how, music and literature since the dawn of civilization. The patent system primarily operates upon the preservation of the public domain through the archiving of past patent documentation. There may be scope for WIPO, and UNESCO, which is primarily tasked with responsibility for the preservation and accessible use of the public domain specifically on account of its historical, cultural and social significance, to consider whether a joint initiative should be undertaken with regard to, for example, the development of a technique or methodology for identifying and categorizing elements of public domain information.

Public policy in the sphere of patent law carries with it the implication that, while the good of the public may in general terms be served by maintaining a patent system, the grant or enforcement of each specific patent must be judged not only in terms of its general acceptability and conformity with the law, but also in terms of its specific impact upon the market in which a patentee may prevent or restrict unauthorized activity. In that regard, the sector-specific nature of public policy implications cannot be overemphasized. For example, public policy addressed in the healthcare sector is very different from public policy considerations which are relevant in the information and telecommunication sector. In some exceptional circumstances, a limitation of the free and unrestricted use of public domain materials may be tolerated for the sake of a public policy interest that outweighs the apparent presumption in favor of the preservation of such free and unrestricted use. One example found in some jurisdictions is the special period of marketing exclusivity for orphan drugs. Where public policy makes demands on the patent system which are not constant as between different technologies, the best that the patent system can do is to respond to those demands on an ad-hoc basis and to do so as guickly as is feasible, so as to deflect accusations that the patent system is out-of-touch with reality and that, in looking after its uses, it fails to serve the needs of the wider public.

(d) <u>The international dimension</u>

While the international conventions currently governing substantive and procedural aspects of patent law make no specific mention of the public domain, it is not to say that there is no international dimension to the subject. In most countries, there is no limitation with respect to the geographical location of prior art under their patent laws. Thus, a national patent application will not succeed if the invention it embodies is anticipated or rendered obvious by public domain material anywhere in the world.

If the term "international public domain" means "everything known and made available to the public everywhere in the world", and the term "national public domain" means "everything known and made available to the public within any specified national borders", it could be said that, in general, the international public domain is a mere aggregation of national public domains. In the real world, this aggregation is subject to a number of significant conditions that affect the functionality of the international public domain. These include the following: (i) each country determines under its own patent law what constitutes "public domain"; and (ii) the pervasive nature of the Internet as a means of storing, disseminating, identifying, accessing and even translating information has transformed our view of the national/international dichotomy.

At present it is fair to say that the public domain is a by-product of the international patent system and does not have a meaningful institutionally-established relationship with it. To the extent that the use of the multinational patent filing system under the Patent Cooperation Treaty results in a larger number of inventions being the subject of the publication of international patent applications. the international patent system accelerates the speed at which information covered by those applications is transferred, via the patent system, into the public domain. The absence of an international institutional framework may not, however, be an obstacle to the preservation of the utility of the patent public domain and to the facility with which its contents may be identified and accessed. This is because the achievement of those ends is something which benefits all members of the patent administration and innovation communities alike, regardless of their economic, cultural or political allegiances. Access to the public domain is necessary in cases where its content is used as a means of invalidating erroneously granted patents or of innovating technical solutions to existing and future problems. Recent experience has shown that patentgranting authorities have worked closely together on matters of mutual interest and concern. It might be reasonable to suppose that, in terms of promoting the utility of the patent public domain and in training people to use that resource more effectively, the same level of cooperation might arise by itself once the importance and significance of the resource is more broadly appreciated.

II. DEVELOPMENT DIMENSION: NATIONAL PRACTICES AND EXPERIENCES

(a) South Africa

This part of the Study looks at how the South African legislation on patents deals with public domain information and when patented inventions fall into the public domain, Furthermore, the study deals with some of the contemporary debates on the role of patents particularly in respect of results of publicly financed research and development and the development of the public domain.

The Patents Act No. 57 of 1978, as amended (hereinafter the "Patent Act"), provides guidelines in respect of inventions falling into the public domain. The requirements of patentability, including the exclusions of certain inventions from patentable subject matter, provide safeguards with respect to regulating public domain knowledge from being proprietary through the patent system. As there are no instances of extension of the 20 year statutory period of patent protection under the South African laws, any patented invention falls into the public domain in the following circumstances: (i) its validity is successfully challenged; (ii) the patent lapses owing to non-payment of renewal fees (subject to a right for restoration in case where non-payment was not willful); or (iii) the patent expires at the end of the statutory 20 year period.

The South African patent system is a deposit or non-examining system, meaning that there is at all times the danger that some of the patented inventions are in essence part of the public domain. Lack of a substantive examination system places a burden on the public to prove that indeed the patented invention should not have been patented as it already was in the public domain. The Patents Act prevents a patentee from instituting infringement proceedings against a member of the public within a period of nine months from the grant of a patent, except with the permission of the court or the Commissioner of patents. This specific provision is intended to allow the general public to become acquainted with patents that are granted so that they could assess the validity of such patents and review their activities vis-à-vis the scope of such granted patents.

The role of patents and the public domain has become topical in recent years in South Africa with the debate being held during the passage of the Intellectual Property Rights from Publicly Financed Research and Development Act, 2008 (hereinafter the "IPR Act"). The IPR Act regulates the protection, management and commercialization of intellectual property emanating from publicly financed research and development to the benefit of the people of South Africa. It appears that most of the arguments against the IPR Act are not so much based on the fact that intellectual

property emanating from such research and development should not be patented *per se*. The arguments are based on ensuring that researchers are unrestricted in disseminating useful and basic research results, which can contribute further to the generation of knowledge and teaching. The regulations to the IPR Act provide various mechanisms of ensuring that the IPR Act does not prevent dissemination of knowledge. Some of these mechanisms include release to the general public of research results, either through open source, publication or non-exclusive royalty free licenses.

There is a need for more public awareness of the patent system and its interaction with the public domain – what is in the public domain and what is under patent protection. Such awareness needs to also focus on when patented invention becomes freely available for use by the general public. Furthermore, the awareness needs to cover the principles of territoriality, which in general allows the public to use inventions in territories in which such inventions are not patented.

(b) Egypt

The term "public domain" under the Egyptian patent system means the body of ideas, knowledge, science, technical information and innovations upon which no person or organization has any proprietary rights. Therefore, matters fallen into the public domain are available to everyone for free to use and exploit by any means. To widen the scope of the public domain, the policy underlying the Egyptian IP Law concerning patents was to stick to the minimum standard of protection provided under the TRIPS Agreement and interpreting it in accordance with the objectives and principles referred to in Articles 7 and 8 of that Agreement. In the light of such policy, the Egyptian IP Law provides patentability requirements, exclusions from patentable subject matter, the best mode requirement, exceptions and limitations to patent rights and lapse of patent protection.

Patent information disclosed to the public eventually becomes part of the public domain which serves as building blocks to create further inventions. The patent information, containing technical and legal information, is useful for the identification of the legal status of patent applications and patents, and the evaluation of technologies that have become part of the public domain. In addition, patent information can be lawfully and freely used during the term of patent protection in order to develop new inventions, as long as such activity does not infringe the claims of the patent. A Gazette issued by the patent office publishes only certain information regarding the accepted applications, such as bibliographic data, the title of the invention etc. The full text of the claims, description and drawings are made available for public inspections at the patent office. No database has been established to make it easy to search for the accepted applications and other relevant patent information. However, efforts to establish such database are exerted with the cooperation of the European Patent Office and WIPO.

The protection of biotechnological inventions presents a number of new challenges. For example, the IP law does not require applicants to submit the relevant nucleic acid sequence listings in electronic form. In addition, where the invention relates to a micro-organism developed outside Egypt, there are no clear rules pertinent to the clearance of the imported micro-organism from the Customs Authority to be able to deposit the organism with a national deposit center. The end result is that the applications remain suspended for a long period of time.

In relation to the preservation of the public domain, the Egyptian IP Law provides that a law suit may be filed to annul patents. However, in light of the jurisprudence, the civil and criminal courts entrusted to review patent infringement cases may not review the validity of patents which should be challenged before the administrative courts. Since there is no rule to stay in cases where an infringement case and an invalidation case are launched simultaneously, the dual nature of the Egyptian judicial system may lead to the issuance of inconsistent decisions by different courts.

While the introduction of the substantive examination of patent applications by the IP Law No. 82 of 2002 is expected to contribute to the preservation of the public domain, such a change requires an improvement of the skills of the personnel working at the patent office as well as of the infrastructure of the office necessary to conduct adequate prior art searches.

(c) <u>Colombia</u>

This part of the Study analyzes the impact of the patent system and the public domain on the development of science, innovation and technology in Colombia. The Colombian Government seeks to provide effective protection to creative activity by the patent law and to 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 an efficient utilization of the Patent Bank. The Patent Bank provides the service of patent and state-of-the-art searches at the national and international levels, issues certifications regarding the existence and characteristics of patents registered in Colombia and conducts capacity building and technical assistance activities. Facing challenges in promoting the patent system and in disseminating patent information, the following mechanisms have been carried out by the government authorities: (i) awareness seminars addressed to businesspersons, entrepreneurs and university students; (ii) participation in programs for the support of SMEs; (iii) workshops for entrepreneurs regarding ways to gain access to patent documents through the different available public databases; (iv) participation of research centers in training programs; and (v) promoting alliances with universities, public research centers and companies. To further enhance the dissemination of patent information, the entities have completed a searchable patent database and provide information on other public intellectual property databases.

In order to complement those tools, a network of public entities, which informs users about the Colombian Patent system, was established. Further, the academic sector established tools, including Patent Information Centers and Technology Transfer Offices, aimed at encouraging and promoting the use of information contained in patents which are in the public domain. 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. The main challenge is to strengthen the culture of using and exploiting intellectual property rights and the dissemination of the Patent Bank as a fundamental tool for entrepreneurs to obtain technological information in every region of the country. Currently, if a user wishes to access information in the respective patent file, he/she must come to the physical facility of the Administration in Bogota. The Administration is implementing the "zero paper" project in order to allow on-line consultation of all files.

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 and institutional record 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.

(d) <u>Ukraine</u>

This part of the Study aims to analyze the level of the development of the public domain in the patent law of Ukraine. While analyzing the relevant Ukrainian legislation, it assesses synergy issues of the Ukrainian national patent system and the public domain area and detects the available methods and tools in accessing patent information.

The current Ukrainian legislation is analyzed in terms of how the transfer of subject matter of industrial property to the public domain is taking place. In general, the subject matter of patents enters into the public domain at the expiration of the term of the patent (after 20 years for inventions and 10 years for utility models). In the case of refusal, non-payment of the maintenance fee and invalidation of patents by courts, the protection terminates prematurely. Further, the patent law of Ukraine contains different exclusions which enhance the public domain. Those issues are regulated by the Civil Code of Ukraine and by special legislation in the patent law. The research specifies general rules related to the protection of subject matter of industrial property (patents for inventions, utility models, and industrial designs) and limitations of such protection, prescribed by law.

The study emphasizes the increasing awareness of the importance of patent information to further the public domain. This leads government offices to enhance the public domain by the use of registers, databases and open data, which are suitable for repeated use and machine processing. While the patent office plays a leading role in the formation of free patent information in Ukraine, the real contribution of commercial suppliers of patent data is substantially less in comparison with developed countries, although certain individual attempts are found particularly in the context of technology transfer.

To provide further background, the main characteristics of the national patent system of Ukraine, its structure and goals are highlighted in the study. In addition, it defines the ways of the development of patent system and its impact on State's innovation development. The study further gives an overview of the different State agencies involved in the development and distribution of patent information and technology transfer, such as the creation of a digital patent library.

The study concludes that the term "public domain" in Ukraine was not subject to a systematic development but is being understood, in particular, as an opportunity to use information that is in free access. Therefore, the important role of patent information and information resources for innovative and scientific activities cannot be overemphasized. Under such circumstances, it seemed reasonable to highlight two main aspects of the public domain: (i) issues regarding the patentability criteria, the term of its legal protection and the conditions for entering into the public domain; and (ii) issues regarding patent information and other information resources that are in free access.

Accordingly, the study provides a review of the mechanisms and instruments existing in Ukraine for access to patent information which entered the public domain, by identifying information resources, defining the existing structures, such as government and scientific institutions, and examining possible ways of access to them. The development of the information society in Ukraine is defined as one of the country's priority areas. In that regard, among the tasks defined at the State level as priorities for the introduction of accessible information infrastructure are, for example, making public domain knowledge accessible for a significantly larger circle of the public and providing free access to the results of scientific research funded by the State budget of Ukraine.

(e) India

This part of the Study starts by assessing certain particular provisions in the Indian Patents Act of 1970 which relate to the public domain and public disclosure. It analyzes the influence of the concept of the public domain in the Indian patent system, in particular, the role of different aspects of the patent system, such as prior art, publication, disclosure and refusal and revocation of patents. In this context, the influence of the Indian "Protection and Utilisation of Public Funded Intellectual Property Bill" 2008, which provides for similar provisions as the U.S. Bayh-Dole Act, on the public domain in relation to publicly funded research is discussed.

The study further analyses existing legislation and proposed legislation governing certain aspects of the public domain, such as data exclusivity, publicly funded research, bio-diversity, traditional knowledge, plant variety protection and folklore. It highlights the influences on the public domain of the so-called "patent linkage" between the Indian patent system and the current and proposed legislation concerning bio-diversity and traditional knowledge, and conversely, it further analyses the proposed legislation relating to traditional knowledge and its impact on the Indian patent system. While analyzing the proposed legal framework on traditional knowledge, the distinction between registered and unregistered traditional knowledge, which can be either of public or confidential nature, and its impact on the Indian patent system and the public domain are briefly noted.

Further, the benefits of accessible public domain knowledge in India which is created by the patent system through the obligation of disclosing a sufficient description and of applying the "best mode" requirement are highlighted.

The study identifies available information tools to access the subject matter and information available in the public domain, such as Indian traditional knowledge documented in the Indian Traditional Knowledge Digital Library (TKDL), and its influence on the patent examination and the public domain. TKDL, which can be called "restricted accessible documented public domain", acts as a bridge between the traditional knowledge information existing in local languages and the patent examiners in IP offices.

With reference to prior art, the study sets out the different steps by which subject matter of patents could fall into the public domain. In this context, special attention is given to secrecy discretion, abandoning and withdrawing applications, which aim at avoiding subject matter potentially fall into the "public domain" by keeping it secret and avoid publication within the patent system. Special attention is given to Section 8(1)(d) of the Indian Right to Information Act of 2005 which strikes a balance between the interest in preservation of confidentiality of sensitive information and the public interest in access to information.

In conclusion, the study highlights the development dimension of the patent system and the public domain in India by building on the experience with the TKDL and its protection against misappropriation of traditional knowledge. It further emphasizes the development dimension of the famers' rights in the Protection of Plant Varieties and Farmers Rights Act of 2001.

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