OPEN SOURCE BEHIND LEGAL DOORS: THE PATENT MENACE

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ABSTRACT

Software has not only gained copyright protection in legislation but can now also be patented in some countries. This paper examines the adequacy of legal protection of open source software in the context of South African legal system. The US and EU systems are accordingly considered focusing on advantages and disadvantages of patenting of software.

At present, there are three main influential legal regimes in the world that govern protection of software: the international (through the World Intellectual Property Organisation), the United States of America (US) and the European Union (EU). Due to the fact that today open software is still perceived as a more affordable alternative, developing countries, such as South Africa, are becoming more and more pro open source.

This paper concludes that copyright protection in itself is sufficient, because it is more flexible than patenting as it provides for a “fair use” exception. This means, there is no need to tighten the regulation of the area any further by imposing strenuous limitations on developing countries by introducing a system of patenting for software.

KEY WORDS

Software patents; open source; intellectual property rights; patents; copyright; South Africa

OPEN SOURCE BEHIND LEGAL DOORS

1 INTRODUCTION

In October 1995, computer scientists asked the United States of America (US) Supreme Court for permission to intervene as *amicus curiae* ("friends of the Court") and lodge their submissions as to why software should not be copyrighted.[1]

Since then, software has not only gained copyright protection from various legislative Acts in different countries of the world, but also has been patented in some of the countries, notably in the US. In 2005, a public campaign is under way which aims at preventing the European Union from introducing patents for software.[2]

Licenses, copyright and patents[3] are the concepts that send most information technology (IT) software developers together with their consumers into a deep state of shock. Open question surrounding open source software adds to the confusion that reigns supreme.

First of all, the distinction between proprietary and open source software needs to be drawn. In the case of the former, a person or a company, such as Microsoft, would assert and protect its rights through all legal means available to it, such as court actions against software pirates, for example. For software to qualify as open source, the latter must comply with two main requirements: (i) access to and use of the source code for free or without a significant cost, and (ii) a licensing agreement, if any, should allow for distribution of the software in its original and modified form.[4]

As a result, a case can obviously be made that open source is perceived as a more affordable alternative to, for example, Microsoft-based products.[5] Many developing countries, including South

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[1] *Lotus Development Corporation v. Borland International, Inc.*, the *amicus* curiae brief, http://www.eff.org/legal/cases/Lotus_cases/compsci_1095_supct_amicus.brief.

[2] The campaign is called "No Software Patents!" For more details see http://www.nosoftwarepatents.com/en/m/intro/index.html.

[3] A patent is "an exclusive right granted for an invention, which is a product or a process that provides, in general, a new way of doing something, or offers a new technical solution to a problem." See http://www.wipo.int/about-ip/en/patents.html.

[4] See http://www.istl.org/05-spring/article2.html#4; http://www.dir.state.tx.us/standards/srrpub09.htm.

[5] When addressing the Conference on Legal Issues Relating to Free and Open Source Software, held in Australia in 2002, the Honourable Queensland Minister for Innovation and Information Economy Paul Lucas (Australia) had, for example, the following to say in this regard:

> "Open Source software provides a cost effective solution to start-up companies and provides a forum for testing ideas before they go to market."

See Fitzgerald B and Bassett G (2002) *Legal Issues Relating to Free and Open Source Software*, (Queensland University of Technology School of Law, Australia) ISBN 0-9751394-0-1, at vii, http://opensource.mit.edu/papers/opensourcelawbook.pdf. See also Benson T (2005) "Free software finds large ally in Brazil", *The New York Times*, 17 April 2005, at 7, which states that:

> "'high-quality free software' has proved more effective in stimulating computer use among the poor than scaled-down versions of proprietary software."

Africa, would therefore think twice before falling prey to monopolistic demands of companies promoting such software. It is therefore of utmost importance to ascertain whether patenting of open source strings of code is at all possible and/or desirable.

In order to address this pertinent question, three main influential legal regimes in the world that govern protection of software are examined in this paper. They are the international (through the World Intellectual Property Organisation), the United States of America (US) and the European Union (EU) regimes. Thereafter, South African position is discussed keeping the international standpoint in mind. Finally, conclusions are drawn on whether patenting is necessary for South Africa especially in the light of accelerated development it seeks vis-à-vis the developed world. Before the Pandora box of legal complications is opened, however, it is desirable to consider the contextual background surrounding the issues of intellectual property under discussion.

2 CONTEXTUAL BACKGROUND

The theoretical justification for entrenching intellectual property rights lies in the belief that a person would be encouraged and thus more willing to be creative for the benefit of the humanity if he/she is assured of such protection.

Monetary benefits that are intrinsic to provision of the limited-period monopoly are core building blocks of a theory on pure capitalist economy. Empirical observations of implementation of the theory would, however, differ from the imaginary set-up depending on the societal setting of a country under consideration.

Currently, the international community faces one of the most dangerous threats that have ever existed: the digital divide. This problem, which could be partially solved through promotion of use of open source software, has far-reaching consequences, which directly impacts on the rights and privileges of software developers. Except for the selected few, many of the latter place freedom of information, which includes untamed availability of the source code, first. This stems from the natural inquisitive nature of computer scientists and practitioners, who follow the approach of "let us see what happens if I do that" when it comes to creativity in the software field.

With the above in mind, it is now important to consider the top layer of the regime governing intellectual property: the international law.

3 INTERNATIONAL PERSPECTIVE

The World Trade Organisation (WTO) and the World Intellectual Property Organisation (WIPO) are organs of the United Nations that have facilitated negotiations and acceptance of a number of treaties crucial to promotion and protection of authors of original creations. The WIPO has even adopted the Patent Law Treaty on 01 June 2000.[6] The Treaty, unfortunately, only deals with formalities associated with lodging an application for and registering a patent and not with its merits. The very fact that open source is inherently freely available to the public invokes a question of merits of the whole patenting system because it undermines the very nature of the subject matter endeavoured to be patented.

The apparent *lacuna* (void) that exists in international law has, allegedly, been filled with existing agreements on copyright. Therefore, even in considering the question of software patenting, it is still imperative to consider the following international instruments adopted under the auspices of these two organisations.

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[6] The WIPO Patent Law Treaty, http://www.wipo.int/treaties/en/ip/plt/pdf/trtdocs_wo038.pdf.

3.1 The Berne Convention for the Protection of Literary and Artistic Work

The Berne Convention for the Protection of Literary and Artistic Work ("Berne Convention") came into existence in 1886 and was on a number of occasions amended by members of WIPO. This makes it the oldest multilateral copyright treaty that aims at international protection of intellectual property. The Convention has also led to establishment of the Union, which oversees implementation of the Convention.[7] Since it was the first treaty of its kind, the Berne Convention is understood to set out the framework and facilitate legislative creativity in individual member-states in this area of law.[8]

One important consideration that needs to be kept in mind, however, is the time period during which the Convention was drafted. At first glance, it would be unrealistic to assume that software would be included into the ambit of copyright protection afforded by the Convention under the category of "literary works".[9] The Convention, however, specifically states that the mode or form of the expression itself is irrelevant. The physical writing/typing of the strings of code would therefore fall under the definition of literary works and be afforded proper protection under the Convention. Thus, it is this category that many countries around the world, including South Africa, have classified creation of software, including open source software, under. With this in mind, more recent international agreements have to be examined.

3.2 WIPO Copyright Treaty

The WIPO Copyright Treaty is a treaty promulgated in terms of enabling article 20[10] of the Berne Convention.[11] It reinforces article 2 of the Berne Convention as far as the computer programs are

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[7] Article 1 of the Berne Convention for the Protection of Literary and Artistic Work, http://www.wipo.int/treaties/en/ip/berne/trtdocs_wo001.html, provides that:

> "The countries to which this Convention applies constitute a Union for the protection of the rights of authors in their literary and artistic works."

[8] Article 2(2) of the Berne Convention for the Protection of Literary and Artistic Work, http://www.wipo.int/treaties/en/ip/berne/trtdocs_wo001.html, provides that:

> "It shall, however, be a matter for legislation in the countries of the Union to prescribe that works in general or any specified categories of works shall not be protected unless they have been fixed in some material form."

[9] Article 2(1) of the Berne Convention for the Protection of Literary and Artistic Work, http://www.wipo.int/treaties/en/ip/berne/trtdocs_wo001.html, provides that:

> "The expression "literary and artistic works" shall include every production in the literary, scientific and artistic domain, whatever may be the mode or form of its expression, such as books, . . .and other writings. . .or science."

See also Chissick M and Kelman A (2002) *Electronic Commerce: Law and Practice* (Sweet & Maxwell, London) 140.

[10] Article 20 of the Berne Convention 1886, http://www.wipo.int/treaties/en/ip/berne/trtdocs_wo001.html, provides that:

> "The Governments of the countries of the Union reserve the right to enter into special agreements among themselves, in so far as such agreements grant to authors more extensive rights than those granted by the Convention, or contain other provisions not contrary to this Convention. The provisions of existing agreements which satisfy these conditions shall remain applicable."

concerned.[12] In particular, it recognises, in terms of articles 4 and 5, a computer program to be a literary work of its original creator, which should be protected as such. Articles 6[13] and 7[14] of the WIPO Copyright Treaty also states that only owners of a computer program may distribute or rent it, respectively, in full or in part to the public.

3.3 WTO Agreement on Trade-Related Aspects of Intellectual Property Rights

The WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement), which came into effect on 1 January 1995, is to date the most comprehensive multilateral agreement on intellectual property.[15] It confers both copyright and patent protection to inventions, such as software.

Article 10 of the Agreement, for example, affords computer programs, both proprietary and open source, privileges associated with copyright,[16] and article 11 grants the creator of the program exclusive rental rights in this regard.

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[11] Article 1 of the WIPO Copyright Treaty, http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html, provides that:

> "This Treaty is a special agreement within the meaning of Article 20 of the Berne Convention for the Protection of Literary and Artistic Works, as regards Contracting Parties that are countries of the Union established by that Convention."

[12] Article 4 of the WIPO Copyright Treaty, http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html, provides that:

> "Computer programs are protected as literary works within the meaning of Article 2 of the Berne Convention. Such protection applies to computer programs, whatever may be the mode or form of their expression."

[13] Article 6 of the WIPO Copyright Treaty, http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html, provides that:

> "Authors of literary and artistic works shall enjoy the exclusive right of authorizing the making available to the public of the original and copies of their works through sale or other transfer of ownership."

[14] Article 7 of the WIPO Copyright Treaty, http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html, provides that:

> "Authors of
> (i) computer programs;
> . . . .
> shall enjoy the exclusive right of authorizing commercial rental to the public of the originals or copies of their works."

[15] http://www.wto.org/english/tratop_e/trips_e/intel2_e.htm.

[16] Article 10 of the WTO TRIPS Agreement, http://www.wto.org/english/docs_e/legal_e/27-trips.doc , provides that:

> "Computer programs, whether in source or object code, shall be protected as literary works under the Berne Convention (1971)."

Article 27[17] of the TRIPS Agreement deals with the question of patents in the field of technological advances. It clearly affords member-states a right to grant patents for various inventions, including computer software. According to the treaty, there are three requirements that have to be complied with before a patent may be granted. The material capable of being patented must, thus, be (i) new; (ii) involve an inventive step, and (iii) be capable of industrial application. Even if all these conditions are met, a member state may refuse to grant a patent if *ordre public* (public policy) or morality requires it for the purposes of protection of protection of human, animal or plant life or health or in order to avoid serious prejudice to the environment.[18] One level of criticism that could be levelled against these requirements is that contemporary commercial software is no longer "new", but is in fact "remodelled", while "inventive step" requirement leaves very few opportunities for future developers to claim benefits from their creations. It is here that the patenting system may prove to be counter-productive as far as development of various nations is concerned. It also goes against the aspirations of open source developers that come to the is of assisting with the human progress in this regard.

Finally, article 28 of the TRIPS Agreement confers exclusive rights upon the patent holder to make, use, and sell the patented product. To this end, a state has discretion, in terms of article 30, to limit these exclusive rights taking account of the legitimate interests of third parties, which in itself may become a cause for endless debate. Therefore, once a patent for a security software program is granted, a minimum 20-year protection should be afforded to the patent-holder.[19] In other word, an absolute right of monopoly over the subject matter of the patent is afforded to the holder, who then is automatically entitled to claim compensation, as he/she deems fit, for the use of the registered patent.

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[17] Article 27 of the WTO TRIPS Agreement, http://www.wto.org/english/docs_e/legal_e/27-trips_04c_e.htm#5, states that:

> "1. Subject to the provisions of paragraphs 2 and 3, patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application. Subject to paragraph 4 of Article 65, paragraph 8 of Article 70 and paragraph 3 of this Article, patents shall be available and patent rights enjoyable without discrimination as to the place of invention, the field of technology and whether products are imported or locally produced.
>
> 2. Members may exclude from patentability inventions, the prevention within their territory of the commercial exploitation of which is necessary to protect *ordre public* or morality, including to protect human, animal or plant life or health or to avoid serious prejudice to the environment, provided that such exclusion is not made merely because the exploitation is prohibited by their law."

[18] See also in this regard *Overview: the TRIPS Agreement*, http://www.wto.org/english/tratop_e/trips_e/intel2_e.htm#patents.

[19] Article 33 of TRIPS provides that:

> "The term of protection available shall not end before the expiration of a period of twenty years counted from the filing date."

4 UNITED STATES' POSITION

The US was one of the first countries to introduce patent law to its statute books.[20] Since 1996 the US courts as well as the US Patent and Trade Mark Office (PTO) have adopted a very liberal interpretation of requirements for granting a patent for software.[21] For example, the mere fact that a computer program may be a pure mathematical algorithm would not immediately cause it to be rejected.[22] The PTO, *inter alia*, has regard to the practical application of the software, which should have physical and tangible results.

In 1998, however, the US Court of Appeals, however, went further and held that a data processing system used to implement an investment structure in connection with mutual funds could be patented.[23] The Court held that as long as software produces (i) useful; (ii) concrete, and (iii) tangible results, it could be patented. Consequently, the focus is on commercial utility of a computer program under scrutiny rather than of its technical effect.[24]

5 EUROPEAN UNION'S TURMOIL

The Convention on the Grants of European Patents 1978 (European Patent Convention or EPC), the main instrument that governs patents within the European Union, does not regard a computer program to be "industrially applicable". Since EPC came into being, however, a number of software-related patents have been granted, all of them in respect of computer-implemented inventions.[25] In other words, the emphasis is on the computer where software only plays an auxiliary role.

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[20] Rostoker MD and Rines RH (1986) *Computer Jurisprudence: Legal Responses to the Information Revolution* (Oceana Publications, Inc., New York) 41. See also Lloyd I (1997) *Information Technology Law* 2nd ed. (Butterworths, London) 246-247, 289-296.

[21] Chissick M and Kelman A (2002) *Electronic Commerce: Law and Practice* (Sweet & Maxwell, London) 163. See also Smedinghoff T ed. (1996) *Online Law: The SPA's Legal Guide to Doing Business on the Internet* (Addison-Wesley Developers Press, New York) 244-245.

[22] *US Patent and Trade Mark Office Guidelines on Patents and Software 1996*, http://www.uspto.gov/web/offices/pac/complexm/examcomp.htm, state that:

> "Office personnel will no longer begin examination by determining if a claim recites a 'mathematical algorithm.' Rather, they will review the complete specification, including the detailed description of the invention, any specific embodiments that have been disclosed, the claims and any specific utilities that have been asserted for the invention."

[23] *State Street Bank v Signature Financial*, 149 F.3d 1368 (1998).

[24] *VICOM's Application* [1987] 2 *EPOR*, 74 at 77. See also Chissick M and Kelman A (2002) *Electronic Commerce: Law and Practice* (Sweet & Maxwell, London) 164; Lloyd I (1997) *Information Technology Law* 2nd ed. (Butterworths, London) 246-247, 257-264.

[25] Kroes QR ed. (2003) *E-business Law of the European Union* (Kluwer Law International, The Hague) 11.

In 2002, to clarify the position, the European Parliament and Council issued a Proposal for a Directive on the subject.[26] The Proposal seeks to implement article 27(1) of the WTO TRIPS Agreement and its requirements. Technical contribution is thus a prerequisite for the registration of the patent. In other words, under the current European system, a patent may not be granted unless the software produces a "technical effect".[27] For example, if a business method of producing more rubber stamps per hour is only possible where a computer program is implemented on the machine regulating the production line, such software is patentable. Computer programs, which do not comply with this requirement, are nonetheless regarded as literary works and are protected by copyright in terms of the European Union (EU) Council Directive dated 14 May 1991.[28]

Copyright, in turn, provides for a "fair dealing" exception, which has evident benefits for promoting creativity. First, in the EU, use of the copyrighted work is allowed not only for academic research, but also for commercial research.[29] Secondly, most of the time software, especially in the field of information and computer security, is created for a specific platform (e.g. Windows). Without knowing the exact functional requirements, it would be difficult, if not impossible for the developer to produce a highly compatible and/or reliable (new) product.[30] Finally, software is written in a limited number of languages and programmers usually prefer one to the other. Should the requirement (that the final product must not substantially similar to the original work)[31] be adhered to, fair dealing exception would loose its purpose for existence sue to inherent limitations of computer languages.

Recently, however, certain stakeholders,[32] interested in monopolising the EU market for software, have been encouraging and even openly lobbying for introduction of a patenting system

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[26] Proposal for a Directive of the European Parliament and of the Council of 20 February 2002 on the Patentability of Computer-implemented Inventions, OJ C 151 E, 25 June 2002, reproduced in Kroes QR ed. (2003) E-business Law of the European Union (Kluwer Law International, The Hague) 79-82.

[27] Chissick M and Kelman A (2002) *Electronic Commerce: Law and Practice* (Sweet & Maxwell, London) 163-164. See for example, the following decisions of the United Kingdom's Patent Office refusing applications for patents on the basis of the lack of technical contribution of the invention: *IBM United Kingdom Limited, Frederick C Mintzer and Others (BL O/210/04)*, dated 14 July 2004, http://www.patent.gov.uk/patent/legal/decisions/2004/o21004.pdf; *Neal William Macrossan (BL O/078/05)*, dated 22 March 2005, http://www.patent.gov.uk/patent/legal/decisions/2005/o07805.pdf; *eSpeed, Inc (BL O/276/04)*, dated 09 September 2004, http://www.patent.gov.uk/patent/legal/decisions/2004/o27604.pdf; *Neal Solomon's Application (BL O/195/04)*, dated 07 July 2004, http://www.patent.gov.uk/patent/legal/decisions/2004/o19504.pdf; *John Francis Regan (BL O/030/04)*, dated 02 February 2004, http://www.patent.gov.uk/patent/legal/decisions/2004/o03004.pdf.

[28] Council Directive 91/250/EEC of 14 May 1991on the Legal Protection of Computer Programs, OJ L 122, 17 May 1991, reproduced in Kroes QR ed. (2003) E-business Law of the European Union (Kluwer Law International, The Hague) 233-237.

[29] Oppenheim C (1999) "Copyright II: Copyright and the Internet" in Liberty ed. (1999) *Liberating Cyberspace: Civil Liberties, Human Rights and the Internet* (Pluto Press, London) 135-136.

[30] Lloyd I (1997) *Information Technology Law* 2nd ed. (Butterworths, London) 321.

[31] Lloyd I (1997) *Information Technology Law* 2nd ed. (Butterworths, London) 323.

[32] Unknown (2005) "Software patents: European Commission negates democracy by declining European Parliament's request for a restart", 28 February 2005, http://www.nosoftwarepatents.com/phpBB2/viewtopic.php?t=407.

for all computer programs on the EU level.[33] To date, there is still a deadlock over whether the system should be brought into operation with the European Commission reportedly declining the European Parliament's request for a restart of the legislative process on the controversial software patent Directive.[34]

6 SOUTH AFRICAN POSITION

Computer program cannot be patented in terms of South African law. Section 25(2)(f)[35] of the Patents Act 57 of 1978 expressly excludes software from the definition of invention capable of being afforded a status of a patent.[36]

In actual fact, the legislature went as far as to instead explicitly afford copyright protection to computer programs in terms of section 2(1)(i)[37] of the Copyright Act 98 of 1978 (Act). Section 11B of the Act spells out the nature of copyright in computer programs. In particular, any adoption (including modification) of software is prohibited. What is unfortunate, however, is that section 12 of the Act does not include an exception for the purposes of commercial research. This means that programmers are prohibited to use Open Source for purposes other than academic research and private use as provided for in section 12 and 19 of the Act. On the other hand, the creator of a specific original[38] software application based on open source is properly protected against any possible violation of his/her rights with regard to the product.

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[33] http://www.nosoftwarepatents.com/en/m/intro/index.html.

[34] Unknown (2005) "Software patents: European Commission negates democracy by declining European Parliament's request for a restart", 28 February 2005, http://www.nosoftwarepatents.com/phpBB2/viewtopic.php?t=407. See also Unknown (2005) "The basics", http://www.nosoftwarepatents.com/en/m/basics/index.html.

[35] Section 25(2)(f) of the Patents Act 57 of 1978, in relevant part, provides that:

> "Anything which consists of–
> . . . .
> (f) a program for a computer . . .
> . . . .
> shall not be an invention for the purposes of this Act."

[36] See also Klopper HB and Van der Spuy PdW (2003) *the Law of Intellectual Property: Introduction, Copyright, law of Competition, Trade Marks, Inventions, Designs, Plant Breeders' Rights* (University of Pretoria, Pretoria) 274-275.

[37] Section 2(1)(i) of the Copyright Act 98 of 1978 provides that:

> "Subject to the provisions of this Act, the followig works, if they are original, shall be eligible for copyright–
> . . . .
> (i) computer programs."

[38] Hofman J (1999) *Cyberlaw: A Guide for South Africans' Doing Business Online* (Ampersand Press, Johannesburg) 85-86.

Unlike the US and the EU, South Africa is still to witness litigation over possible infringement of rights deriving from copying of a computer code.[39] This said, all would turn on the question of whether the copied portion of the code was substantial enough[40] in the eyes of the presiding judge. If so, the owner who is found to be the original holder of the copyright (i.e. who created it first) will be vindicated. Thus, it is now appropriate to draw the following conclusion.

All of the above-mentioned principles of various legal systems and regimes must be put into perspective keeping the current state of technological development in South Africa in mind. At the moment, there is a number of initiatives in South Africa, which actively promote open source software, because it is believed to be capable to assist the nation to bridge the digital divide that currently exists in this country. *Translate.org*,[41] for example, is a non-profit organisation producing Free and Open Source software that aims of enabling as well as empowering South Africans.[42] Open source software has also been used for establishing new businesses,[43] improving them,[44] and for generally cutting the expenditure.[45]

Broadening the definition of innovation in the context of software may have its serious negative effects for South Africa. At the initial stage, authors in general, and software developers in particular, would possibly be encouraged to employ their talents for the sake of the humanity's progress.[46] As the time passes by, however, less latitude would be available to them due to ever-increasing number of patent granted by the state.[47] Patent race that would inevitably follow for the

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[39] Marshall A (2005) "Code borrowing and copyright" April 2005, *De Rebus*, http://www.derebus.org.za/archives/2005Apr/articles/code.htm.

[40] See *St Leger and Viney (Pty) Ltd v Smuts* 379 JOC (T).

[41] http://www.translate.org.za/ accessed on 15 February 2005. Other entities committed to promotion of Open Source software in South Africa are Shuttleworth Foundation, HP and the CSIR. See in this regard Unknown (2005) "Go Open Source ready to take South Africa forward - Consortium brings Open Source to the masses", 04 February 2005, http://www.csir.co.za/plsql/ptl0002/PTL0002_PGE038_ARTICLE?ARTICLE_NO=7179688.

[42] Pick 'n Pay, a South African supermarket chain, has also become involved in a similar project. See Unknown (2005) "Pick 'n Pay opens up network to open source computer labs", 14 February 2005, http://www.tectonic.co.za/view.php?id=412.

[43] Unknown (2005) "Open source telephony slashes costs", 26 January 2005, http://www.tectonic.co.za/view.php?id=407.

[44] Unknown (2005) "Industry Network Chooses Open Source", 26 January 2005, http://allafrica.com/stories/200501260448.html.

[45] Unknown (2005) "Firms look to open source to cut costs", 11 February 2005, http://www.itweb.co.za/sections/software/2005/0502111140.asp?A=LIN&S=Open%20Source&O=FPT.

[46] Smedinghoff T ed. (1996) *Online Law: The SPA's Legal Guide to Doing Business on the Internet* (Addison-Wesley Developers Press, New York) 250.

[47] Baumer D and Poindexter JC (2002) *Cyberlaw and E-commerce* (McGraw-Hill, Boston) 320.

ultimate purpose of hurting one's competitors would undermine even the best intentions of the legislature.[48]

7 CONCLUSION

The question of open source as a tool for development has recently re-entered the scene of legal and political debate in the EU. As seen above and in the light of the fact that a number of developing countries, such as Peru[49] and Brazil,[50] are promoting the use of open source, it would make little sense for South Africa to fall into the patent system's trap, which will cause more damage to its economy than could possibly anticipated.[51] Moreover, promotion of open source without statutory restrictions goes hand-in-hand with copyright's philosophy of facilitating research and improvements in the sphere of computer programs.[52] In the long run, the digital divide would be narrowed quicker is the legal system of a developing country keeps software patents out.

8 REFERENCES

International instruments

The Berne Convention for the Protection of Literary and Artistic Work, http://www.wipo.int/treaties/en/ip/berne/trtdocs_wo001.html

The WIPO Copyright Treaty, http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html

The WIPO Patent Law Treaty, http://www.wipo.int/treaties/en/ip/plt/pdf/trtdocs_wo038.pdf

The WTO TRIPS Agreement, http://www.wto.org/english/docs_e/legal_e/27-trips.doc

Legislation

The Copyright Act 98 of 1978

The Patents Act 57 of 1978

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[48] See in this regard criticism levelled against the US patent system for software in Van Dyke R (2003) "E Wars — Episode One: The Patent Menace", *Computer Law Review and Technology Journal*, Vol 7, 2003, 91, at 106. The liberal manner in which patents are granted in the US for almost anything under the Sun was also criticised in McMillan R (2005) "IBM exec: US could learn from EU, China patent policy", 07 April 2005, http://www.computerworld.com.au/index.php/id;1022433378;fp;16;fpid;0.

[49] Unknown (2005) "Peruvian Congressman refutes Microsoft's "Fear, Uncertainty and Doubt" (F.U.D.) concerning free and open source software", http://www.opensource.org/docs/peru_and_ms.php.

[50] Benson T (2005) "Free software finds large ally in Brazil", *The New York Times*, 17 April 2005, at 7.

[51] Consider, for example, the recently ended battle of the South African government with pharmaceutical giants, when the former tried to make anti-retroviral drugs more readily available in the context of existing patents.

[52] See Unknown (2005) "Free software in Africa - 2005 a year for real growth", 11 January 2005, http://www.tectonic.co.za/view.php?id=399.

Cases

eSpeed, Inc (BL O/276/04), dated 09 September 2004, http://www.patent.gov.uk/patent/legal/decisions/2004/o27604.pdf

Lotus Development Corporation v. Borland International, Inc., the *amicus* curiae brief, http://www.eff.org/legal/cases/Lotus_cases/compsci_1095_supct_amicus.brief

IBM United Kingdom Limited, Frederick C Mintzer and Others (BL O/210/04), dated 14 July 2004, http://www.patent.gov.uk/patent/legal/decisions/2004/o21004.pdf

John Francis Regan (BL O/030/04), dated 02 February 2004, http://www.patent.gov.uk/patent/legal/decisions/2004/o03004.pdf

Neal Solomon's Application (BL O/195/04), dated 07 July 2004, http://www.patent.gov.uk/patent/legal/decisions/2004/o19504.pdf

Neal William Macrossan (BL O/078/05), dated 22 March 2005, http://www.patent.gov.uk/patent/legal/decisions/2005/o07805.pdf

State Street Bank v Signature Financial, 149 F.3d 1368 (1998)

St Leger and Viney (Pty) Ltd v Smuts 379 JOC (T)

VICOM's Application [1987] 2 *EPOR*, 74 at 77

Books

Baumer D and Poindexter JC (2002) *Cyberlaw and E-commerce* (McGraw-Hill, Boston)

Chissick M and Kelman A (2002) *Electronic Commerce: Law and Practice* (Sweet & Maxwell, London)

Fitzgerald B and Bassett G (2002) *Legal Issues Relating to Free and Open Source Software*, (Queensland University of Technology School of Law, Australia), http://opensource.mit.edu/papers/opensourcelawbook.pdf

Hofman J (1999) *Cyberlaw: A Guide for South Africans' Doing Business Online* (Ampersand Press, Johannesburg)

Klopper HB and Van der Spuy PdW (2003) *the Law of Intellectual Property: Introduction, Copyright, law of Competition, Trade Marks, Inventions, Designs, Plant Breeders' Rights* (University of Pretoria, Pretoria)

Kroes QR ed. (2003) *E-business Law of the European Union* (Kluwer Law International, The Hague)

Lloyd I (1997) *Information Technology Law* 2nd ed. (Butterworths, London)

Rostoker MD and Rines RH (1986) *Computer Jurisprudence: Legal Responses to the Information Revolution* (Oceana Publications, Inc., New York)

Smedinghoff T ed. (1996) *Online Law: The SPA's Legal Guide to Doing Business on the Internet* (Addison-Wesley Developers Press, New York)

Articles

Benson T (2005) "Free software finds large ally in Brazil", *The New York Times*, 17 April 2005, 7

Marshall A (2005) “Code borrowing and copyright” April 2005, *De Rebus*, http://www.derebus.org.za/archives/2005Apr/articles/code.htm

McMillan R (2005) “IBM exec: US could learn from EU, China patent policy”, 07 April 2005, http://www.computerworld.com.au/index.php/id;1022433378;fp;16;fpid;0

Oppenheim C (1999) “Copyright II: Copyright and the Internet” in Liberty ed. (1999) *Liberating Cyberspace: Civil Liberties, Human Rights and the Internet* (Pluto Press, London) 135-136.

Unknown (2005) “Firms look to open source to cut costs”, 11 February 2005, http://www.itweb.co.za/sections/software/2005/0502111140.asp?A=LIN&S=Open%20Source&O=FPT

Unknown (2005) “Go Open Source ready to take South Africa forward - Consortium brings Open Source to the masses”, 04 February 2005, http://www.csir.co.za/plsql/ptl0002/PTL0002_PGE038_ARTICLE?ARTICLE_NO=7179688

Unknown (2005) “Industry Network Chooses Open Source”, 26 January 2005, http://allafrica.com/stories/200501260448.html

Unknown (2005) “Open source telephony slashes costs”, 26 January 2005, http://www.tectonic.co.za/view.php?id=407

Unknown (2005) “Peruvian Congressman refutes Microsoft's "Fear, Uncertainty and Doubt" (F.U.D.) concerning free and open source software”, http://www.opensource.org/docs/peru_and_ms.php

Unknown (2005) “Pick ‘n Pay opens up network to open source computer labs”, 14 February 2005, http://www.tectonic.co.za/view.php?id=412

Unknown (2005) “Software patents: European Commission negates democracy by declining European Parliament's request for a restart”, 28 February 2005, http://www.nosoftwarepatents.com/phpBB2/viewtopic.php?t=407

Unknown (2005) “The basics”, http://www.nosoftwarepatents.com/en/m/basics/index.html

Van Dyke R (2003) “E Wars — Episode One: The Patent Menace”, *Computer Law Review and Technology Journal*, Vol 7, 2003, 91

Miscellaneous

http://www.nosoftwarepatents.com/en/m/intro/index.html

http://www.translate.org.za/

http://www.uspto.gov/web/offices/pac/complexm/examcomp.htm

http://www.wipo.int/about-ip/en/patents.html

http://www.wto.org/english/tratop_e/trips_e/intel2_e.htm#patents

http://www.istl.org/05-spring/article2.html#4

http://www.dir.state.tx.us/standards/srrpub09.htm