

**COPYRIGHT IN THE DIGITAL AGE
WITH SPECIFIC REFERENCE TO
TECHNOLOGICAL PROTECTION
MEASURES AND THE
EFFICACY OF EXCEPTIONS**

By

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DECLARATION

I, *Deshnee Govender*, certify that the whole dissertation, unless otherwise specifically indicated to the contrary in the text, is my own work. It is submitted as the dissertation component (which counts for 50% of the degree) in partial fulfillment of the requirements for the degree of Masters of Law in the Faculty of Law, University of KwaZulu-Natal, Durban.

SIGNED AND DATED AT DURBAN ON THIS 4th DAY OF AUGUST 2005.



DESHNEE GOVENDER

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I

1.1. INTRODUCTION

Alvin Toffler¹ identified the third wave of development as the ‘Information Age’.² Many nations such as South Africa are in transition from the Industrial Age to the Information Age if they are not already harnessing the benefits associated with this revolution.³ The Information Age has transformed the notion of information as being the most fundamental key to knowledge, education, innovation, creativity, economic development and growth.⁴ It is submitted that, in present day, a greater part of information is represented or embodied in literary, musical, artistic or scientific works. These works are generally referred to as ‘products of the intellect’⁵ and are subjects of copyright.

Copyright is the legal protection⁶ that is afforded to the creator of a work,⁷ which is the product of his creative mind. It is the purpose and function of copyright legislation to grant the copyright owner⁸ the exclusive right to control the use and exploitation of his work.⁹ An act that is performed in relation to the copyrighted work without the authority

¹ Alvin Toffler is an American writer and futurist. See http://en.wikipedia.org/wiki/Alvin_Toffler (date accessed: 20 June 2005).

² This wave of development was described in his book entitled ‘The Third Wave’ (1980). The Information Age brought with it the ‘networks’. See http://www.virtualteams.com/libraray/agenet/age_sec2.htm (date accessed: 4 June 2005).

³ The first world countries such as the United States of America and Japan have already taken their places as the leading nations of the Information Age.

⁴ D de Pasquale, LED Dutra and M Ouma ‘Advanced Copyright Issues In the Digital Era’ WIPO Academy Research Paper (2000) 3 available online <http://www.wipo.int/> (date accessed: 12 November 2004). See also R L Okedji ‘Development in the Information Age: Issues in the Regulation of Intellectual Property Rights, Computer Software and Electronic Commerce’ (2004) International Centre for Trade and Sustainable Development and United Nations Conference on Trade and Development Project on IPRs and Sustainable Development Issue Paper 9 www.iprsonline.org/unctadictsd/docs/CS_Okediji.pdf (date accessed: 28 November 2004).

⁵ O H Dean *Handbook of South African Copyright Law* (2003) 1-1.

⁶ The Copyright Act 98 of 1978, as amended by the Copyright Amendment Act 56 of 1980, Act 66 of 1983, Act 52 of 1984, Act 39 of 1986, Act 13 of 1988, Act 61 of 1989, Act 125 of 1992 and the Intellectual Property Laws Amendment Act 38 of 1997 (hereinafter referred to as the ‘the Copyright Act’), regulates South African copyright law.

⁷ The Copyright Act provides protection for musical works, literary and artistic works, cinematographic films, sound recordings, broadcasts, programme-carrying signals, published editions and computer programs. (See section 2(1)(a)-(i)).

⁸ The term ‘copyright owner’ is used synonymously with the term ‘author’ within the context of the dissertation.

⁹ The exclusive rights of the copyright owner in respect of musical, literary and artistic works and cinematographic films include generally the right of reproduction, the right to publish the work if it is unpublished, the right to perform the work in public, the right to broadcast the work, the right to transmit the work in a diffusion service and the right to make an adaptation of the work (see sections 6, 7 and 8 of

of the copyright owner and which falls within the scope of any of the copyright owner's exclusive rights would constitute an infringement of copyright.¹⁰ The copyright owner's monopoly of rights is established in recognition of the basic tenets of copyright that he must receive economic benefits for his creativity and intellect and more significantly to promote his creation of further products of intellect.¹¹

The exclusive rights of the copyright owner are, however, subjected to a limited monopoly. The limitation is manifested first in the stipulation that copyright in a protected work lapses after a limited period where after the work falls into the public domain to be freely used by the public.¹² The second limitation appears in the provision that the public may perform acts, without the copyright owner's permission, in relation to a copyrighted work that falls within the exclusive control of the copyright owner.¹³ The nature and purpose of the act would excuse it as an exemption from copyright infringement.¹⁴

The underlying principle of the limitation is based on the recognition that the public has a right to make use of copyrighted works in certain circumstances without being held liable for copyright infringement.¹⁵ The legal characterization, in the Copyright Act, of the right of the public to make use of copyrighted works in circumstances that would be exempted

the Copyright Act). The exclusive rights of the copyright owner in respect of a sound recording includes the right to make a record that embodies the sound recording and the right to let or offer for hire the reproduction of the sound recording (see section 9 of the Copyright Act). The exclusive rights of the copyright owner in respect of a broadcast includes the right to reproduce the broadcast in any manner of form, the right to rebroadcast the broadcast, and the right to cause the broadcast to be transmitted in a diffusion service (see section 10 of the Copyright Act). The exclusive right of the copyright owner in respect of a programme-carrying signal includes the right to undertake or authorize the distribution of these signals (see section 11 of the Copyright Act). The exclusive right of the copyright owner in respect of a published edition entails the right to make or authorize the making of a reproduction of the edition (see section 11A of the Copyright Act). The exclusive right of the copyright owner in respect of a computer program is similar to the rights of the owner of a musical, artistic and literary work, except that the former includes a right to let or offer for hire a copy of the computer program (see section 11B of the Copyright Act). The exclusive rights of the copyright owner are examined in detail in Chapter IV.

¹⁰ The provisions relating to the infringement of copyright is contained in section 23 of the Copyright Act.

¹¹ Dean (note 5 above) 1-1.

¹² Sections 3(2) and (3) of the Copyright Act set out the duration of copyright in relation to each protected work.

¹³ These acts are recognized as exceptions to the exclusive rights of copyright owners and are contained in section 12 to section 19B of the Act.

¹⁴ Dean (note 5 above) 1-5.

¹⁵ Ibid.

from copyright infringement is fair dealing.¹⁶ It is agreed that the effective enforcement of the exclusive rights of the copyright owner is essential in the creation of further intellectual products.¹⁷ It is submitted that the enforcement of exceptions such as fair dealing is equally important, as it would promote knowledge, education and the access to information as well as the creation of intellectual products.¹⁸ The significance of the balancing of interests is accentuated both in the Universal Declaration of Human Rights, 1948¹⁹ and the International Covenant on Economic, Social and Cultural Rights, 1966.²⁰ the copyright owner has a right to the protection of his interests that arise from his product of intellect²¹ while the public has a right to participate and enjoy the intellectual works.²² It is, therefore, agreed that the economic interests of the owner to enjoy the fruits of his labour as well as the social and cultural rights of the public to enjoy the arts and be educated are consequently promoted as fundamental human rights.²³

It is widely agreed that the balance that had been struck by the system of copyright was properly maintained in the analogue world despite various challenges.²⁴ The development of the digital age, however, threatened to derail the traditional system of copyright by challenging first the effective enforcement of the exclusive rights of the copyright owner and second the application of exceptions.

¹⁶ The fair dealing exception is provided in respect of musical, literary and artistic works and is contained in section 12(1)(a) to (c) of the Copyright Act.

¹⁷ See Dean (note 5 above) 1-1, 1-2 and 1-3 where it is submitted that the establishment of a system of copyright that protects the exclusive rights of the copyright owner enables the owner to control the commercial exploitation of his work. This is referred to as the 'profit incentive', which operates as an encouragement for the copyright owner to create further works.

¹⁸ It is submitted that the balanced system of copyright encourages not only the protected copyright owner to create products of intellect but also the public by permitting them to engage in fair dealing of a protected work.

¹⁹ The Universal Declaration of Human Rights, 1948 was adopted and proclaimed by the General Assembly resolution 217 A (III) of 10 December 1948 *available online* <http://www.un.org/Overview/rights.html> (date accessed: 7 February 2005).

²⁰ The International Covenant on Economic, Social and Cultural Rights, 1966 was adopted by the General Assembly resolution 2200A (XXI) of 16 December 1966, *available online* http://www.unhchr.ch/html/menu3/b/a_cescr.htm (date accessed: 7 February 2005).

²¹ Article 27(2) of the Universal Declaration of Human Rights, 1948 and Article 15(1)(c) of the International Covenant on Economic, Social and Cultural Rights, 1966.

²² Article 27(1) of the Universal Declaration of Human Rights, 1948 and Article 15(1)(b) of the International Covenant on Economic, Social and Cultural Rights, 1966.

²³ Dean (note 5 above) 1-2.

²⁴ These challenges related to the advent of the printing press, the photocopier and computers.

The digital age represents a combination of digital technologies and the 'Information Infrastructure'.²⁵ The Information Infrastructure is an information communication technology that encompasses information in binary digits, personal computers, global computer networks and the transnational Internet.²⁶ Advances in and development of digital technologies together with the augmentation of the Internet has, at the outset, provided copyright owners with new and exhilarating opportunities to distribute their works.²⁷ The evolution of the digital age, more significantly, through the medium of the Internet, provides a foundational infrastructure for the public to access and use information to enhance their knowledge, education as well as promote innovation and economic development.²⁸

Although the expansion of the Internet promised many opportunities for copyright owners and users alike, the characteristics and potential of the Internet compounded by the advances in technologies as well as a substantial increase in the penetration of the Internet²⁹ effectively threatened the enforcement of the exclusive rights of the copyright

²⁵ Committee on Intellectual Property Rights and the Emerging Information Infrastructure *The Digital Dilemma: Intellectual Property in the Information Age* (2000) 1 available online http://books.nap.edu/html/digital_dilemma/index.html (date accessed: 12 May 2003).

²⁶ Ibid.

²⁷ The Internet is a technologically powerful intermediate means for the publication, distribution and reproduction of copyright works. The Internet enables the copyright owner to interact directly with his consumers. Digital technology facilitates the reproduction of digital works at lower costs as opposed to the analogue world. Computer networks enable cost-effective and instantaneous distribution of copyrighted works in digital form. See Committee on Intellectual Property Rights and the Emerging Information Infrastructure (note 25 above) 3-4. The global outreach of the Internet further allows for cross border distribution of the works amplifying the extraordinary nature of the Internet to create new markets for copyright owners internationally. See also Okedji (note 4 above) 3.

²⁸ The ability of the Internet to communicate information lies at the heart of education, accumulation of knowledge and most importantly economic development. See Okedji (note 4 above) 1. See also Pasquale, Dutra and Ouma (note 4 above) 3. The advent of the Internet allows for the public to access and use digital works with ease and efficiency without the imposition of time barriers: a book at the library cannot be reserved by more than one person in the analogue world, however a book available in digital form can be accessed at the same time by any number of persons. In summary, it is submitted that the Internet provides an innovative and beneficial medium for the dissemination of knowledge to the public.

²⁹ Penetration of the Internet is substantially expanding with the Computer Almanac Industry reporting in a press release dated 3 September 2004 that the global number of Internet users will be in excess of one billion in the middle of 2005. The rate of Internet penetration for South Africa is estimated to have increased to 46.8 percent over a five-year period from 2000 to 2005. 7.3 percent of the South African population, which is estimated to be in the region of 48 million in 2005, currently make use of the Internet. See Internet World Stats <http://www.internetworldstats.com/stats1.htm#africa> (date accessed: 4 April 2005).

owner.³⁰ It is agreed that the process of digitisation of copyrighted works facilitates easy, instant, cost-effective and perfect copies of these works.³¹ This effortless process encouraged unprecedented levels of copying and exploitation of copyrighted works in the digital age.³² It is submitted that the copyright owner, in the analogue world, would satisfactorily address this exploitation in terms of the right of reproduction as the right effectively provides the copyright owner with the ability to control the unauthorised copying of his works. The right of reproduction, therefore, facilitates the commercial exploitation of a protected work and is respectively considered as the most fundamental

³⁰ 'Ease of reproduction', 'ease of dissemination' and 'concentration of value' have been identified as three technical challenges to the effective enforcement of the exclusive rights of the copyright owner. See Pasquale, Dutra and Ouma (note 4 above) 5-7.

³¹ Digital content is made up of text, audio (music and speech), video (still and moving pictures), software and shape that are represented as binary digits. Copying the digital content entails capturing the description in a collection of numbers. For example, music can be copied by measuring the sound wave, pictures can be copied by measuring the colour at closely spaced dots, putting numbers in place for each dot, copying the picture by placing the appropriate dots of colour at the right places on paper or on the screen, text can be copied by means of the ASCII code that assigns code numbers to each character. Digital technologies enable quick and inexpensive reproduction of digital content. A perfect digital copy is reproduced from the original digital work enabling further reproduction of perfect unlimited copies of the work. See Committee on Intellectual Property Rights (note 25 above) 28-31. Further, the Internet has an expanded capacity for disseminating digital content and with the aid of advances in digital technology such as bandwidth the transmission of works are made easier and quicker. Global instantaneous transmissions of works can further be accomplished. See D S Marks and B H Turnball 'Technical Protection Measures: The Intersection of Technology, Law and Commercial Licenses' (1999) WCT-WPPT/IMP/3 3 presented in the WIPO Workshop on Implementation Issues of the WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT) held in Geneva on 6 and 7 December 1999 *available online* http://www.wipo.int/documents/en/meetings/1999/wct_wppt/pdf/imp99_3.pdf (date accessed: 23 November 2004). The distribution of the work in the digital environment is interrelated with a reproduction of the work, as a distribution would necessitate making a copy of the work. The dissemination of the work entails effortless activity and consequently there is no physical barrier to reproduce and distribute an unlimited number of copies. In the analogue world, the photocopier machine allows for making copies of works. The copying task requires physical copying by the user. This may be time consuming depending on the number of copies required and the effort and time to be expended would act as a deterrent to copyright infringement. The aspect in respect of concentration of value entails digital compression technologies that make possible the compression and storage of a high concentration of digital content in a fixed tangible object. Fixed objects would include compact discs and digital video discs. See Pasquale, Dutra and Ouma (note 4 above) 6, 7. Compression technologies include the MP-3 format for music and MPEG-2 format for video. See Marks and Turnball (note 31 above) 2.

³² See Committee on Intellectual Property Rights (note 25 above) 76 Chapter 2 'Intellectual Property's Canary in the Digital Coal Mine' where the music industry has been identified as the industry that has been attacked by the development of digital technologies. See also H Al-Bitar, N Bottero and F Crosetti 'The WIPO Copyright Treaty and its Implementation' WIPO Academy Research Paper (2000) 2 *available online* <http://www.wipo.int/> (date accessed: 22 November 2004) where it is submitted that 'it is now only too well known that when a copyright work ... is put into digital form it is both very easy and fast to make multiple copies of such content and to be able to manipulate that content'. It is, therefore, argued that it is conceivably possible that works represented in digital form will be subjected to a large degree of infringement in the digital environment.

right.³³ It is therefore submitted that the enforcement of this right is instrumental in the prevention of unauthorised exploitation of works in the digital environment. The difficulty, however, is in determining the extent of the application of the traditional right of reproduction to digital copyright infringements.³⁴ The most significant debate surrounding the enforcement of the application of the right of reproduction in the digital environment is whether or not the scope of the right of reproduction includes temporary acts of reproduction that are incidental, transient or an essential element in the technological process of a computer network during the transmission of works over the Internet.³⁵

The legal sanctions embodied in copyright legislation were considered inadequate and resistant to the challenges of the digital age.³⁶ Copyright owners, in the circumstances, resorted to the development of technological protection measures as a means of protecting their works from digital copyright infringement.³⁷ Technological protection measures, which protect the exclusive rights of the copyright owner, are tools that are designed to prevent or inhibit the infringement of copyright in the normal course of their operation.³⁸ These measures proved encouraging to copyright owners as they were innovative means 'to trace, monitor and control the dissemination and use of their

³³ World Intellectual Property Organisation 'Chapter 2 – Fields of Intellectual Property Protection' in *Intellectual Property Handbook: Policy, Law and Use* 2 ed (2004) WIPO Publication No. 489 (E) ISBN 92-805-1291-7 43-44 paragraph 2.183 available online http://www.wipo.int/about-ip/en/iprm/pdf/detailed_toc.pdf (date accessed: 15 February 2005).

³⁴ This issue was extensively discussed at the WIPO Diplomatic Conference on Certain Copyright and Neighbouring Rights Questions held in Geneva from 2 to 20 December 1996. The discussion of the transposition of a right of reproduction into the digital environment will be examined in Chapter II.

³⁵ The issue whether temporary acts of reproduction were included within the scope of the right of reproduction of Article 9(1) of the Berne Union was extensively debated by the various delegations at the Diplomatic Conference. This aspect is examined in Chapter II.

³⁶ Marks and Turnball (note 31 above) 1 wherein it is provided that 'legal measures alone cannot provide a viable solution' to the challenges of the digital age.

³⁷ M K Garlick 'Locking up the Bridge on the Digital Divide – A Consideration of the Global Impact of the U.S. Anti Circumvention Measures for the Participation of Developing Countries in the Digital Economy' (2004) 20 *Santa Clara Comp & High Tech L.J.* 941. See also T Heide 'Copyright, Contract and the Legal Protection of Technological Measures - Not the 'Old Fashioned Way: Providing a Rationale to the "Copyright Exceptions Interface" '(2003) 50 *Copyright Soc'y U.S.A.* 315, 317.

³⁸ A Strowel and S Dussolier 'Legal Protection of Technological Systems' (1999) WCT-WPPT/IMP/2 2 presented in the WIPO Workshop on Implementation Issues of the WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT) held in Geneva on 6 and 7 December 1999 available online http://www.wipo.int/documents/en/meetings/1999/wct_wppt/pdf/imp99_2 (date accessed: 22 January 2005).

works',³⁹ and were considered an appropriate solution to counter digital copyright infringement.⁴⁰

While the comments from Charles Clark that the 'the answer to the machine is in the machine'⁴¹ is sustainable in the digital age as technological protection measures would provide high levels of protection for copyright owners to protect their works against unauthorized exploitation,⁴² the concern was that the technological protection measure, no matter how carefully and ingeniously designed, could conceivably be susceptible to being circumvented by the effort and ingenuity of another individual.⁴³ It was, accordingly, argued that the technology itself was not sufficient.⁴⁴ In the circumstances copyright owners requested legal protection against the circumvention of these measures.⁴⁵

Further, clarification of the extent of the application of traditional exclusive rights in the digital age was required.⁴⁶ It was recognised that The Berne Convention for the Protection of Literary and Artistic Works,⁴⁷ which is the principal international convention regulating the protection of copyrighted works at an international level, needed to be reformed to meet the challenges of the digital age.⁴⁸ This state of affairs led to steps being taken at international level by the World Intellectual Property

³⁹ T C Vinje 'Copyright Imperilled' (1999) 21(4) *EIPR* 192, 196 where he refers to the comments of the Commission of the European Communities in the Green Paper on Copyright and Related Rights in the Information Society, 19 July 1995 (COM (95) 382 final).

⁴⁰ T C Vinje 'A Brave New World of Technological Protection Systems: Will There Still Be Room for Copyright' (1996) 18(8) *EIPR* 431.

⁴¹ Various scholars in their writings in this area refer to this expression by Charles Clark. See Marks and Turnball (note 31 above) 3 and Vinje (note 40 above) 431.

⁴² *Ibid.*

⁴³ *Ibid.*

⁴⁴ Marks and Turnball (note 31 above) 3.

⁴⁵ Garlick (note 37 above) 941. See also Marks and Turnball (note 31 above) 3 and Vinje (note 39 above) 197 where it is noted that these measures require legal protection.

⁴⁶ WIPO (note 33 above) 'Chapter 5 – Intellectual Treaties and Conventions on Intellectual Property' paragraph 5.217-270. The clarification of existing copyright rules and the development of new rules for the digital age was referred to by the World Intellectual Property Organisation as the 'digital agenda'.

⁴⁷ The Berne Convention for the Protection of Literary and Artistic Works of September 9, 1886, completed at PARIS on May 4, 1896, revised at BERLIN on November 13, 1908, completed at BERNE on March 20, 1914, revised at ROME on June 2, 1928, at BRUSSELS on June 26, 1948, at STOCKHOLM on July 14, 1967, and at PARIS on July 24, 1971, and amended on September 28, 1979 (hereinafter referred to as 'the Berne Convention') available online http://www.wipo.int/treaties/en/ip/berne/trtdocs_wo001.html (date accessed: 7 October 2004).

⁴⁸ See generally Pasquale, Dutra and Ouma generally (note 4 above) 4.

Organisation⁴⁹ to convene a Diplomatic Conference on Certain Copyright and Neighbouring Rights Questions. This conference resulted in the adoption of the WIPO Copyright Treaty⁵⁰ and the WIPO Performances and Phonograms Treaty.⁵¹ These treaties, as will be shown in Chapter II, extended the provisions of the Berne Convention to the digital environment and further declared novel provisions⁵² to adequately respond to the challenges of the digital age.⁵³

The key provisions adopted by the WCT relate to the application of the exclusive rights of the copyright owner, that is the rights of reproduction,⁵⁴ communication to the public⁵⁵ and distribution,⁵⁶ the enforcement of limitations of and exceptions⁵⁷ to the exclusive rights of the copyright owner and the legal protection of technological measures⁵⁸ in the digital environment. The dissertation commences with a study in Chapter II of these provisions.

The primary objective of the dissertation is to analyse the interface between the legal protection of technological measures and exceptions to copyright in the context of the requirements of Article 11 of the WCT, which establishes that contracting parties must provide, in their national laws, legal protection against the circumvention of

⁴⁹ The World Intellectual Property Organisation (hereinafter referred to as 'the WIPO') is a 'specialised' agency of the United Nations. The mission statement of the WIPO is to 'promote through international cooperation the creation, dissemination, use and protection of works of the human mind for the economic, cultural and social progress of all mankind. Its effect is to contribute to a balance between the stimulation of creativity worldwide, by sufficiently protecting the moral and material interests of creators on the one hand and providing access to the socio-economic and cultural benefits of such creativity worldwide on the other'. See WIPO (note 33 above) 'Chapter 1 – Introduction' 4-5 paragraphs 1.7 and 1.14.

⁵⁰ The WIPO Copyright Treaty, adopted in Geneva on 20 December 1996 CRNR/DC/4 (hereinafter referred to as 'the WCT' available online http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html) (date accessed: 7 October 2004).

⁵¹ The WIPO Performances and Phonograms Treaty, adopted in Geneva on 20 December 1996 CRNR/DC/5 (hereinafter referred to as 'the WPPT') available online http://www.wipo.int/treaties/en/ip/wppt/pdf/trtdocs_wo034.pdf (date accessed: 7 October 2004).

⁵² These relate to the provisions in respect of the legal protection of technological measures (Article 11 of the WCT), electronic rights management information (Article 12 of the WCT), the right of distribution (Article 6 of the WCT) and the right of making works available to the public (Article 8 of the WCT).

⁵³ See generally WIPO Press Release No. 106, 20 December 1996 <http://www.wipo.int/documents/en/diplconf/distrib/press106.htm> (date accessed: 21 February 2005).

⁵⁴ Article 1(4) of the WCT.

⁵⁵ Article 8 of the WCT.

⁵⁶ Article 6 of the WCT.

⁵⁷ Article 10 of the WCT.

⁵⁸ Article 11 of the WCT.

technological protection measures. The principle that exceptions remain an essential element of the system of copyright and that it is fundamental to preserve the traditional copyright balance in the digital age to promote innovation, education and research underscores the dissertation. The dissertation presents that the various provisions of the WCT establish an appropriate framework for contracting parties to balance the exclusive rights of the copyright owner and the legal protection of technological measures with limitations and exceptions. It follows that a proper implementation of Article 11, within this framework, would ensure that the traditional enforcement of exceptions to copyright would be maintained in the digital environment and that any implementation, beyond this framework, could be detrimental to the enforcement of exceptions and may perhaps threaten to eviscerate the enforcement of traditional copyright exceptions, such as fair dealing.

A critical and comparative analysis of the implementation models of the provisions of Article 11 of the WCT by the United States of America⁵⁹ and the European Union⁶⁰ is undertaken in Chapter III. This chapter is structured within the main area of criticism that the nature of legal protection provided by both contracting parties extends beyond the requirements of Article 11 of the WCT and the boundaries of the system of copyright and possibly harms the enforcement of traditional copyright exceptions, thus threatening to derail the traditional system of copyright. The anti-circumvention provisions of the United States and the European Union provide legal protection to rights control measures⁶¹ and access control measures.⁶² Legal protection is further provided against the manufacture and distribution of circumvention devices. Each of these forms of protection will be examined in detail. The development of a ‘right of access’ that has been provided to the copyright owner in terms of the anti-circumvention provisions and the concept of ‘digital lock-up’ are also considered. The dissertation attempts to identify lessons to be

⁵⁹ The Digital Millennium Copyright Act Pub.L.No 105-304, 112 Stat.2860 (28 October 1998) implemented the WCT and the WPPT.

⁶⁰ The WCT was implemented by the European Union in the Directive 2001/29/EC of the European Parliament and Council of 22 May 2001 Official Journal L 167, 22/06/2001 P. 0010 – 0019.

⁶¹ A rights control measure relates a measure that is used by the copyright owner, in connection with his exclusive rights, to prevent or restrict acts that are not authorized by him or permitted by law. See Strowel and Dussolier (note 38 above) 2.

⁶² Ibid. An access control measure relates to a measure that controls the access to a work.

learned from the anti-circumvention provisions of the United States and the European Union.

The effectiveness of the South African Copyright Act⁶³ to appropriately deal with the challenges of the digital age is examined in Chapter IV of the dissertation. The application of the current right of reproduction, right of communication to the public and right of distribution in the digital environment is analysed in reference to the relevant provisions of the WCT. The issue regarding the protection of temporary acts of reproduction within the scope of the right of reproduction is also considered. The incorporation of provisions relating to the legal protection of technological measures in the Copyright Act and the interaction of this protection with the enforcement of exceptions such as fair dealing is examined within the requirements of the WCT.

The conclusion in Chapter V will illustrate that extensive copyright protection strengthened with expansive provisions relating to the legal protection of technological measures, which primarily favours the interests of the copyright owner and extends beyond the requirements of the WCT and the parameters of copyright, such as the anti-circumvention provisions of the United States and the European Union would effectively threaten the efficacy of copyright exceptions such as fair dealing. The dissertation emphasizes, on the one hand, that the implementation of provisions relating to the legal protection of technological measures is fundamental to the protection of copyrighted works in the digital age and highlights, on the other hand, that extensive provisions would diminish the balanced system of copyright. Consequently it is argued that the revision of copyright legislation for the digital age, particularly the implementation of legal sanctions against the circumvention of technological measures, must be cautiously balanced with the larger public interest to ensure the efficient access and use of copyrighted works. It is emphasized that this approach would be in compliance with the traditional principles of copyright, which underlie the Berne Convention and the WCT, that endeavor to maintain a balance between the rights of the copyright owners and the interests of the public to effectively enforce exceptions for application in the areas of innovation, education, research, access to information, economic development and growth.

⁶³ The Copyright Act 98 of 1978.

It has been identified that advances in digital technology and the Internet generated disturbing challenges to the enforcement of rights held by copyright owners and the protection of copyrighted and related works⁶⁴ in the digital age. These advanced issues questioned the enforcement of traditional copyright protection in a digital environment that was made up of binary digits, computer networks and the digital technologies.⁶⁵ It was further outlined that the scope of the provisions of the Berne Convention was insufficient to meet the challenges of the digital age.

⁶⁴ Related rights are the rights of performers, producers of phonograms and broadcasting organizations in relation to their performances, phonograms and broadcasts respectively.

⁶⁵ For example, it was unclear whether temporary copies that are stored in the random access memory of a computer or at various computer networks during the transmission of a work fell within the scope of the right of reproduction that is contained in Article 9(1) of the Berne Convention. Similarly, the application of other exclusive rights in the digital environment was questioned.

II INTERNATIONAL EFFORTS IN RESPONSE TO THE ADVANCED ISSUES OF COPYRIGHT PROTECTION IN THE DIGITAL AGE

2.1 Introduction

The issues regarding the enforcement of copyright protection have been identified in Chapter I. The complexity of the issues resulted in the Assembly and the Conference of Representatives of the Berne Union convening the Committee of Experts in 1989.⁶⁶ The main objective of the Committee of Experts was to identify whether it was necessary to begin a protocol to the Berne Convention that would clarify issues or establish new standards, which the Berne Convention did not clearly address.⁶⁷ It subsequently became essential to consult at an international level to reach consensus on a modernized legal framework of copyright for the digital age.⁶⁸ This aspect forms the focus of this chapter.

2.2 The Diplomatic Conference

In February 1996 the Committees of Experts proposed that a Diplomatic Conference be convened to negotiate suitable treaties for a possible protocol to the Berne Convention and a possible instrument to revise the provisions of the International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organisations,⁶⁹ which is the primary convention regulating the protection of the rights of performers and producers of phonograms. It was decided that the World Intellectual Property

⁶⁶ Memorandum Prepared by the Chairman of the Committees of Experts to the Basic Proposal for the Substantive Provisions of the Treaty on certain questions concerning the Protection of Literary and Artistic Works to be considered by the Diplomatic Conference CRNR/DC/4 paragraph 1 http://www.wipo.int/documents/en/diplconf/4dc_all.htm (date accessed: 21 February 2005).

⁶⁷ Ibid.

⁶⁸ WIPO (note 33 above) 'Chapter 5 – International Treaties and Conventions on Intellectual Property' 270 paragraph 5.217.

⁶⁹ The International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organisations, adopted in Rome on 26 October 1961 (hereinafter referred to as 'the Rome Convention') available online http://www.wipo.int/treaties/en/ip/rome/trtdocs_wo024.html (date accessed: 21 February 2005).

Organisation would convene in December 1996 the Diplomatic Conference on Certain Copyright and Neighbouring Rights Questions in Geneva.⁷⁰

The duty to compile ‘basic proposals’⁷¹ for discussion at the Diplomatic Conference was delegated to the Chairman of the Committees of Experts.⁷² The Chairman proposed the Basic Proposal for the Substantive Provisions of the Treaty on Certain Questions Concerning the Protection of Literary and Artistic Works⁷³ and the Basic Proposal for the Substantive Provisions of the Treaty for the Protection of the Rights of Performers and Producers of Phonograms⁷⁴ for consideration at the Diplomatic Conference.⁷⁵ These Basic Proposals were distributed in advance to delegations that would be in attendance at the Diplomatic Conference.⁷⁶ It is submitted that the Basic Proposals contained draft provisions that were intended to revise copyright protection so that the advanced copyright issues that were ignited by the development of the digital age could be responded to adequately. Subsequent to deliberation of the draft provisions of the Basic Proposals at the Diplomatic Conference, the WCT and the WPPT were adopted by international consensus in Geneva on 20 December 1996. The treaties are collectively referred as the ‘Internet Treaties’.⁷⁷

⁷⁰ Memorandum (note 66 above) paragraph 11. The Diplomatic Conference was held over the period 2 to 20 December 1996.

⁷¹ Memorandum (note 66 above) paragraph 12.

⁷² Ibid.

⁷³ Basic Proposal for the Substantive Provisions of the Treaty on Certain Questions Concerning the Protection of Literary and Artistic Works CRNR/DC/4 *available online* http://www.wipo.int/documents/en/diplconf/4dc_all.htm (date accessed: 21 February 2005).

⁷⁴ Basic Proposal for the Substantive Provisions of the Treaty for the Protection of the Rights of Performers and Producers of Phonograms for consideration at the Diplomatic Conference CRNR/DC/5 *available online* http://www.wipo.int/documents/en/diplconf/5dc_pre.htm (date accessed: 21 February 2005).

⁷⁵ The Chairman of the Committees of Experts also proposed a third basic proposal for discussion at the Diplomatic Conference: ‘The Basic Proposal for the Substantive Provisions of Databases’ See Memorandum (note 66 above) paragraph 14. The Basic Proposals were compiled by the Chairman in consultation with recommendations made during the Committees of Experts work from the preceding years. See Memorandum (note 66 above) paragraph 20.

⁷⁶ Memorandum (note 66 above) paragraph 12.

⁷⁷ International Bureau of WIPO ‘The Advantages of Adherence to the WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT)’ 2 *available online* http://www.wipo.int/copyright/activities/wct_wppt/pdf/advantages_wct_wppt.pdf (date accessed: 12 January 2005). The WCT and the WPPT were negotiated by consensus by the international community to counter the challenges of digital technology, especially the implications of the Internet to the enforcement of traditional copyright protection. They have, therefore, acquired the description of the ‘Internet Treaties’.

The Internet Treaties represent an extension of the provisions of the Berne Convention⁷⁸ and the Rome Convention.⁷⁹ They clarify the application of existing rights⁸⁰ and in some respects provide solutions to issues that are not covered by the said Conventions.⁸¹ The Internet treaties have been identified as important as they promote economic incentives for copyright owners,⁸² encourage the creation of products by providing a framework for the adequate protection of cultural works⁸³ and provide for the legal protection of technological measures that are used by copyright owners to combat piracy in the digital age.⁸⁴ It is therefore essential to examine the manner in which the WCT⁸⁵ transforms the system of copyright for the digital age. This entails an analysis of important provisions of the WCT.

2.3 Analysis of the WIPO Copyright Treaty

The parameters established by the WCT in relation to the interface between the exclusive rights of the copyright owner, the legal protection of technological measures and the enforcement of traditional exceptions in the digital environment underlie the analysis of the WCT. The first part of the analysis relates to the provisions of the WCT in respect of the exclusive rights of the copyright owner, the second part relates to the provision in respect of limitations of and exceptions to copyright and the third part relates to the establishment of a system that requires contracting parties to afford legal protection to technological measures.⁸⁶ Each section will be examined in turn.

⁷⁸ International Federation of Phonographic Industry (hereinafter referred to as the 'IFPI') 'The WIPO Treaties: Bringing Copyright into the New Millennium' www.ifpi.org/ (date accessed: 3 January 2005). The Internet Treaties extend the protection of traditional copyright works, which are recognized in Article 2 of the Berne Convention in the digital environment. See also WIPO (note 77 above) 2.

⁷⁹ WIPO (note 77 above) 2.

⁸⁰ IFPI (note 78 above) The Internet Treaties provide a framework for the enforcement of existing copyright rights in the digital environment. See also WIPO (note 77 above) 2.

⁸¹ The Internet Treaties were concluded as special agreements within Article 20 of the Berne Convention.

⁸² IFPI (note 78 above).

⁸³ Ibid.

⁸⁴ Ibid.

⁸⁵ The structure of the dissertation concentrates on the provisions of the WCT only and not the WPPT. The provisions and the controversies surrounding the implementation of the provisions of the WCT and the WPPT by contracting parties are, however, similar.

⁸⁶ Recourse is had to the record of the Diplomatic Conference, which was prepared by the International Bureau of WIPO, as a source of interpretation to clarify or confirm the meanings of the provisions of the

2.3.1 PART A: The Exclusive Rights of Copyright Owners

2.3.1.1 The Right of Reproduction

Article 7 of the Basic Proposal related to the proposed right of reproduction and provided as follows: -

(1) The exclusive right accorded to authors of literary and artistic works in Article 9(1) of the Berne Convention of authorizing the reproduction of their works shall include direct and indirect reproduction of their works, whether permanent or temporary, in any manner or form.

(2) Subject to the provisions of Article 9(2) of the Berne Convention, it shall be a matter for legislation in Contracting Parties to limit the right if reproduction in cases where a temporary reproduction has the sole purpose of making the work perceptible or where the reproduction is of a transient or incidental nature, provided that such reproduction takes place in the course of the work that is authorized by the author or permitted by law.

Article 7(1) of the Basic Proposal was controversial as it effectively classified temporary acts that are incidental or transient in nature and which occur as a result of the technological process of the computer within the ambit of an exclusive act.⁸⁷ Vinje expressed his disappointment with Article 7(1) as it had the effect of extending the scope of the restricted rights of the copyright owner to include ‘a novel right of digital usage’,⁸⁸ which would be implicated each time a work is accessed on the Internet.⁸⁹ It was argued that the protection provided in terms of Article 7(1) extended beyond the prerogatives of copyright⁹⁰ and consequently provided extensive protection to copyright owners.⁹¹ It was

WCT and to identify the main areas of concern expressed by the various delegations in respect of the adaptation of the system of copyright for the digital age .

⁸⁷ T C Vinje ‘ The New WIPO Copyright Treaty: A Happy Result in Geneva’ (1997) 19(5) *EIPR* 230, 231. See also Bitar, Botteso and Crosetti (note 32 above) 4.

⁸⁸ Vinje (note 87 above) 231. See also J Litman ‘The Exclusive Right to Read’ (1994) 13 *Cardozo Arts and Ent. L.J.* 29 where she argues that the inclusion of temporary acts of reproduction, which are part of the technological process of a computer, within the scope of the right of reproduction would effectively provide the copyright owner the ‘exclusive right to read’.

⁸⁹ Ibid.

⁹⁰ See Vinje (note 87 above) 231. See also S Fitzpatrick ‘Copyright Imbalance: U.S. and Australian Responses to the WIPO Digital Copyright Treaty (2000) 22(5) *EIPR* 214, 219 where he argues that the inclusion of temporary copies, which are made as a result of the technological process of a computer, within the right of reproduction ‘in the digital context would amount to a right to prevent use of the work “which hitherto has been seen as anathema to the fundamental principles of copyright jurisprudence” ’.

understood that this approach could affect the balancing of interests of the system of copyright.⁹²

The issue regarding the transposition of the right of reproduction into the digital environment within the context of Article 7 of the Basic Proposal was met with similar frustration at the Diplomatic Conference.⁹³ Some delegations supported Article 7(1) confirming that temporary reproductions fell within the ambit of the right of reproduction as contained in the Berne Convention⁹⁴ but requested clarification of Article 7(2) as it was not apparent whether activities such as fair use, browsing the Internet and those activities that had no economic value apart from facilitating transmission of a work were permitted,⁹⁵ others recommended that Article 7(1) should be amended to exclude, from the scope of the right of reproduction, a temporary reproduction the principal purpose of which is to perceive the work or a reproduction that is transient, incidental or an essential element in a technological process and suggested that Article 7(2) be deleted in its entirety,⁹⁶ whilst others suggested that the limitations provided for in Article 7(2) should be made mandatory thereby eradicating any issues relating to the conflict of laws which may originate as a result of some member countries enacting the limitation and others not.⁹⁷

The underlying basis of many of the delegations' concerns in adopting an appropriate right of reproduction for the digital age was first that the reproduction right in the digital

⁹¹ Fitzpatrick (note 90 above) 219.

⁹² Ibid.

⁹³ The discussion of this issue divided the floor of Main Committee I at the Diplomatic Conference and threatened to derail the adoption of the WCT. See Bitar, Bottero and Crosetti (note 32 above) 4. It is submitted that the concerns of the various delegates were similar to those expressed by scholars such as Vinje (note 87 above) 231-232 and Fitzpatrick (note 90 above) 219.

⁹⁴ International Bureau of WIPO 'Diplomatic Conference on Certain Copyright and Neighbouring Rights Questions, Geneva 1996 Summary Minutes, Main Committee I' CRNR/DC/102 *available online* <http://www.wipo.int/documents/en/diplconf/distrib/pdf/102dc.pdf> (date accessed: 29 November 2004). See paragraph 251 (Delegation of Singapore), paragraph 265 (Delegation of the United Kingdom) and paragraph 267 (Delegation of South Africa).

⁹⁵ WIPO (note 94 above) 33-36 paragraph 253 (Delegation of the European Communities), paragraph 277 (Delegation of Brazil). See Vinje (note 87 above) 232 where he submits that Article 7(2) had the effect of not permitting an exception that would exempt an online service provider that was unknowingly involved in the unauthorized transmission of copies of works.

⁹⁶ WIPO (note 94 above) 34 paragraph 257 (Delegation of Denmark).

⁹⁷ WIPO (note 94 above) 36 paragraph 267 (Delegation of South Africa).

environment should not be expanded ‘beyond its natural borders’⁹⁸ and second, interrelated with the aforementioned, was that there should be a proper balance of the interests,⁹⁹ the latter arising as a result of fear that the application of limitations of and exceptions to the right of reproduction in the digital environment may be affected.

The Chairman explained that Article 7(1) of the Basic Proposal was intended to simplify the notion that both permanent and temporary reproduction constituted reproduction within the scope of the right of reproduction contained in Article 9(1) of the Berne Convention.¹⁰⁰ The Chairman emphasized that the expression ‘in any manner or form’ reflected in Article 9(1) of the Berne Convention ‘included the storage of a work in electronic medium and the act of uploading and downloading a work to or from the memory of a computer’.¹⁰¹ The Chairman explained further that Article 7(2) of the Basic Proposal was not intended to limit the application of the general provisions relating to limitations and exceptions contained in Article 9(2) of the Berne Convention.¹⁰²

It is submitted that, following debate of the issue, Article 1(4) was adopted.¹⁰³ Article 1(4) of the WCT provides that the copyright owner’s exclusive right of reproduction in respect of literary and artistic works as provided for in Article 9 of the Berne Convention would be extended in the digital environment by virtue of the provisions of the WCT.¹⁰⁴ The agreed statement concerning article 1(4) of the WCT confirms that the right fully applies to the digital environment, in particular to the use of the works in digital form and

⁹⁸ WIPO (note 94 above) 34 paragraph 256 (Delegation of Denmark) and paragraph 259 (Delegation of Netherlands).

⁹⁹ WIPO (note 94 above) 33 paragraph 251.

¹⁰⁰ WIPO (note 94 above) 33 paragraph 248. Article 9(1) of the Berne Convention provides that authors of literary and artistic works have the exclusive right of reproducing these works in any manner or form.

¹⁰¹ WIPO (note 94 above) 32 paragraph 247.

¹⁰² WIPO (note 94 above) 33 paragraph 249. Article 9(2) of the Berne Convention provides that ‘it shall be a matter for legislation in the countries of the Union to permit the reproduction of such works in certain special cases, provided that such reproduction does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author’. Article 9(2) contains what is generally referred to as the three-step test.

¹⁰³ Consensus could not be reached on the aspect regarding the inclusion of temporary acts of reproduction within the scope of the right of reproduction at the Diplomatic Conference. Article 7 of the Basic Proposal was deleted and Article 1(4) was incorporated into the WCT.

¹⁰⁴ Article 1(4) of the WCT.

it provides further that the storage of a protected work in digital form, in an electronic medium, constitutes a reproduction within the ambit of article 9 of the Berne Convention.

Although the delegations were at variance in the adoption of the terminology as reflected in Article 7(1) and (2), it is submitted that there was a general consensus that a temporary act of reproduction does constitute a reproduction. It was generally accepted further that a temporary act of reproduction should be treated as an exception when made while engaging in a fair use of the work or browsing the Internet or when the reproduction is incidental or transient in nature and is acceptable within the provisions of Article 9(2) of the Berne Convention.¹⁰⁵ It is submitted that the concerns from the various delegations illustrate that an extensive right of reproduction, without appropriate limitations, would be detrimental to the enforcement of legitimate non-infringing activities such as fair use. It is, therefore, argued that the extension of a right of reproduction into the digital environment by South Africa must be carefully framed within the context of the system of copyright, which aims to balance the interests of the copyright owner with the interests of the larger public. This aspect is examined in further detail in Chapter IV.

2.3.1.2 The Right of Communication to the Public

The development of digital technologies and the Internet enables digital transmissions. A digital transmission is the transmission of works over computer networks such as the Internet.¹⁰⁶ As much of the content that is transmitted over the Internet is subject to traditional copyright protection it became necessary to determine how a copyright owner would maintain control of digital transmissions of his work in the digital environment thus preventing against unauthorized transmissions and exploitation of his works.

¹⁰⁵ Mr M Fisor, the Assistant Director General of WIPO, emphasized, in this regard, that Article 7(1) of the Draft Treaty clarified the scope of the right of reproduction as contained in Article 9(1) of the Berne Convention and that Article 7(2) of the Draft Treaty dealt with special cases of exceptions that would be permitted as exceptions under Article 9(2) of the Berne Convention. See WIPO (note 94 above) 37 paragraph 273.

¹⁰⁶ Pasquale, Dutra and Ouma (note 4 above) 10.

The right of communication to the public as contained in Article 10 of the Basic Proposal gained support, subject to minor amendments, from the delegations at the Diplomatic Conference.¹⁰⁷ It was acknowledged as one of the most important provisions for the digital age as ‘it governed situations which were every day phenomena in the world of communication networks’¹⁰⁸ such as the Internet. The term ‘communication’ is analogous to ‘transmission’ and the expression ‘communication to the public’ means making the work available to the public by any means or process but does not include making a work available to the public by distributing copies.¹⁰⁹

The WCT extended, in terms of the provisions of Article 8,¹¹⁰ the application of the right of communication to the public as contained in the Berne Convention¹¹¹ to those categories of work that were not covered by the provisions, that is literary and artistic works, since advances in digital technology made it possible for all types of work to be communicated in the digital environment. For example ‘literary works, including computer programs are presently the main works that are communicated over networks’¹¹² and it was, therefore, concerning that the provisions of the Berne Convention did not encompass these works.¹¹³

¹⁰⁷ WIPO (note 94 above) 41 paragraph 301 (Delegation of the United States of America), 41 paragraph 303 (Delegation of Hungary), 42 paragraphs 306-307 (Delegation of Australia) and 43 paragraph 309 (Delegation of the European Communities: the draft right of communication to the public was a reproduction of the proposal from the European Communities).

¹⁰⁸ WIPO (note 94 above) 40 paragraph 299. See also 43 paragraph 309 where the Delegation of the European Communities expressed that the right of communication to the public is the cornerstone of the ‘digital agenda’.

¹⁰⁹ Basic Proposal (note 73 above) notes 10.14. and 10.15 concerning Article 10.

¹¹⁰ Article 8 of the WCT states that ‘without prejudice to the provisions of the Articles 11(1)(ii), 11*bis*(1)(i) and (ii), 11*ter*(1)(ii), 14(1)(ii) and 14*bis*(1) of the Berne Convention, authors of literary and artistic works shall enjoy the exclusive right of authorizing any communication to the public of their works, by wire or wireless means, including the making available to the public of their works in such a way that members of the public may access these works from a place and at a time individually chosen by them’. The wording herein is very similar to the wording contained in the proposed right of communication to the public of the Basic Proposal, which is Article 10.

¹¹¹ The rights of communication to the public provided for in the Berne Convention are: (1) Article 11(1)(ii) in respect of the communication of dramatic and musical works, (2) Article 11*bis*(1)(i) and (ii) in respect of the broadcasting and rebroadcasting of literary and artistic works, (3) Article 11*ter*(1)(ii) in respect of the public recitation of literary works, (4) Article 14(1)(ii) in respect of the public performance and communication by wire of literary works and (5) Article 14*bis*(1) in respect of cinematographic works that have been adapted and reproduced. These provisions were untouched but the scope of the right was extended to include all categories of work as this was necessitated by the challenges of the digital age.

¹¹² Basic Proposal (note 73 above) notes 10.5 and 10.6 concerning Article 10.

¹¹³ *Ibid.*

The next part of the right of communication to the public relates to the making available to the public works to be accessed in an interactive network.¹¹⁴ It is, accordingly, submitted that the right of communication to the public would be implicated when a work, that is made available to the public, is accessed from a place and at a time individually chosen by a member of the public to view or listen to the contents thereof. This right is significant as it addresses the challenges of a copyright owner in the online environment of the Internet¹¹⁵ where unauthorized transmissions of works occur on a second to second basis. The right is most importantly understood as an essential means to control the digital communication of copyrighted works in the digital age and prevents against unauthorized use of works on the Internet.¹¹⁶

It is submitted that the provisions of Article 8 then effectively provide the copyright owner with the right to control the communication of all categories of works that the Berne Convention does not apply to and it guarantees an exclusive right of control in respect of online transmissions.¹¹⁷

2.3.1.3 The Right of Distribution

The right of distribution contained in Article 6 of the WCT provides the copyright owner with the exclusive right to authorize the distribution of originals and copies of works through sale or transfer of ownership.¹¹⁸ The Berne Convention does not recognize a right

¹¹⁴ Article 8 of the WCT. See Bitar, Bottero and Crosetti (note 32 above) 32.

¹¹⁵ V Van Coppenhagen 'Copyright and the WIPO Copyright Treaty, With Specific Reference to the Rights Applicable in a Digital Environment and the Protection of Technological Protection Measures' (2002) *SALJ* 429, 439 where it is submitted that the right of communication to the public is suitable for the Internet as it includes an element of interaction.

¹¹⁶ Bitar, Bottero and Crosetti (note 32 above) 10-11.

¹¹⁷ One of the concerns that was expressed at the Diplomatic Conference related to the liability of innocent online service providers that provide facilities or enable the unauthorised transmission of works over computer networks. The Agreed Statement in relation to Article 8 of the WCT clarified this concern by providing that the online service provider would not be infringing the copyright owner's right of communication to the public by providing facilities or enabling the digital transmission of works. The effect of this provision is that the free flow of information over the Internet would not be affected. It is submitted that this would promote the access of information by the public in the digital environment and it follows that the creation of intellectual products by a second generation of writers would be encouraged, provided that the ability to effectively enforce exceptions such as fair dealing is not constrained.

¹¹⁸ Article 6 of the WCT provides that: '(1) 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

of distribution¹¹⁹ and many delegations at the Diplomatic Conference supported the adoption of this exclusive right. The agreed statement to article 6 of the WCT clarifies that the expression ‘copies’ and ‘original and copies’ refers specifically to fixed copies placed into circulation as tangible objects. While the right of distribution could be extended to include the transmissions of digital content,¹²⁰ it is agreed that the right of communication to the public, as contained in Article 8 of the WCT, would appropriately and adequately apply to transmissions of digital content over the Internet as it includes an interactive element.¹²¹

2.3.2 PART B: Limitations of and Exceptions to Copyright

The delegations of the Diplomatic Conference emphasized the importance of preserving, in the digital environment, the delicate balance between the exclusive rights of the copyright owner and the interests of the public, which are incorporated in the traditional limitations and exceptions to copyright.¹²² The Delegation of India particularly highlighted that: -

the change from a physical format to a digital format should not in any way curtail the various limitations applicable to science, research, education, public interest, public lending...¹²³

or transfer of ownership’ and ‘(2) Nothing in this Treaty shall affect the freedom of Contracting Parties to determine the conditions, if any, under which the exhaustion of the right in paragraph (1) applies after the first sale or other transfer of ownership of the original or a copy of the work with the authorization of the author.’ The right of distribution was proposed as two alternatives in Article 8 of the Draft Treaty: first as a right of distribution with a right of importation and second as a right of distribution. The second alternative was favoured at the Diplomatic Conference, to the exception of the United States of America, which favoured the first alternative (see WIPO (note 94 above) 19 paragraph 148). Article 6(1) of WCT which contains the right of distribution that was eventually adopted at the Diplomatic Conference reproduces the language that was contained in paragraph (8)(1) of Alternative two contained in the Basic Proposal.

¹¹⁹ The Delegation of the European Communities suggested that the gap created by not recognizing a right of reproduction in the Berne Convention should be removed by providing for a right of reproduction within the provision of the WCT. See WIPO (note 94 above) 17 paragraph 132.

¹²⁰ Copenhagen (note 115 above) 438.

¹²¹ Ibid 439.

¹²² WIPO (note 94 above) 70 paragraph 489 where it was emphasized by the Delegation of Denmark that traditional exceptions were important to education, scientific research, library activities and the interests of persons with handicaps.

¹²³ WIPO (note 94 above) 70 paragraph 490.

The provisions relating to limitations of and exceptions to the exclusive rights of the copyright owner are contained in Article 10 of the WCT.¹²⁴ There are two elements to the provision. First, limitations of and exceptions to the exclusive rights of copyright owners may be permitted in terms of the provisions of the WCT. These limitations and exceptions must be assessed in terms of a three-step test,¹²⁵ which reproduces the provisions contained in Article 9(2) of the Berne Convention. Second, the limitations of and exceptions to the rights that are granted to the exclusive rights of the copyright owners in terms of the provisions of the Berne Convention may be permitted, subject to the three-step test.¹²⁶ The three-step test includes the following conditions: (1) the limitations and exceptions must relate to special cases (2) the limitations and exceptions must not conflict with a normal exploitation of the work and (3) the limitations and exceptions must not unreasonably prejudice the legitimate interests of the author.

The first element of the provision allows for the formation by contracting parties of new limitations and exceptions¹²⁷ while the second element of the provision allows for existing limitations and exceptions that have been considered acceptable under the Berne Convention to be applied and extended in the digital environment.¹²⁸ It is submitted that Article 10 of the WCT recognizes the necessity to enforce traditional and additional limitations and exceptions in the digital environment. Further, the Preamble of the WCT

¹²⁴ Article 10 of the WCT provides that '(1) Contracting Parties may, in their national legislation, provide for limitations of or exceptions to the rights granted to the authors of literary and artistic works under this Treaty in certain special cases that do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the author' and '(2) Contracting Parties shall, when applying the Berne Convention, confine any limitations of or exceptions to rights provided for therein to certain special cases that do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the author'.

¹²⁵ Article 10(1) of the WCT.

¹²⁶ Article 10(2) of the WCT. In terms of Article 9(2) of the Berne Convention the three-step test applies to exceptions to the right of reproduction.

¹²⁷ See agreed statements concerning Article 10 of the WCT.

¹²⁸ Ibid. See also WIPO (note 94 above) 69 paragraph 485 where the Chairman, in addressing the Diplomatic Conference on the nature and scope of Article 12 of the Basic Proposal which related to limitations and exceptions, emphasized that 'the important limitations and exceptions that were considered acceptable under the Berne Convention would still be permissible under the new Treaty, for example when relating to education, scientific research, the need for the general public for information to be made available in libraries and persons with a handicap that prevented them from using ordinary sources of information'.

emphasizes the importance of preserving the traditional system of copyright in the digital age by recognizing:-

the need to maintain a balance between the rights of authors and the larger public interest, particularly education, research and access to information, as reflected in the Berne Convention.

The aspect of limitations and exceptions will be discussed to a further extent in the next section.

2.3.3 PART C: Obligations Concerning Technological Protection Measures

2.3.3.1 The Advantages of Extending Legal Protection to Technological Measures

The general concept of technological protection measures has been discussed.¹²⁹ The consideration of the adoption of an appropriate provision regarding the obligations of contracting parties in respect of the legal protection of technological protection measures was another controversial issue,¹³⁰ which was intensely discussed at the Diplomatic Conference.¹³¹ Scholars¹³² recognize, on the one hand, that effective legal protection of technological measures would act as deterrent to the circumvention of such measures.¹³³ Consequently the protection of copyrighted works against infringement in the digital environment could be effectively enforced.¹³⁴ While the legal protection of technological measures is considered advantageous in the prevention of digital copyright infringement, scholars¹³⁵ also highlight, on the other hand, that ‘copyright remains a powerful mechanism to control copyright infringement’¹³⁶ in the digital environment. To this end, it is argued that an individual responsible for circumvention for infringing purposes of a technological measure that protects the exclusive rights of the copyright owner would be

¹²⁹ See Chapter I.

¹³⁰ Vinje (note 87 above) 234.

¹³¹ Vinje (note 87 above) 235.

¹³² Vinje (note 39 above) 198, 200 and Marks and Turnball (note 31 above) 5.

¹³³ Ibid.

¹³⁴ Ibid.

¹³⁵ Vinje (note 39 above) 200. Copenhagen (note 115 above) 445.

¹³⁶ Ibid.

liable for copyright infringement¹³⁷ and could face an award of damages¹³⁸ against him and the possibility of criminal liability.¹³⁹ Consequently, it is questioned whether the prohibition against the circumvention of technological measures is necessary.¹⁴⁰

While it is recognized that the legal remedies available to a copyright owner, in terms of the existing copyright legislation, would be available to the copyright owner to combat digital copyright infringement, it is agreed that copyright legislation that is supplemented with provisions that prohibit the circumvention of technological measures would discourage individuals from engaging in unlawful infringing activities¹⁴¹ as such individuals would not only be faced with the prospect of liability in respect of copyright infringement but also in respect of the circumvention of technological measures.¹⁴² It is submitted that this powerful combination would inevitably result in a substantial reduction in digital copyright infringement. The consideration of the adoption of a provision regarding the legal protection of technological measures at the Diplomatic Conference will be considered next.

2.3.3.2 The Formulation of Article 11 of the WCT

The Chairman of the Committees of Experts formulated Article 13 of the Basic Proposal that addressed the issue of obligations of contracting parties relating to the legal protection of technological measures. Article 13 of the Basic Proposal was based, with

¹³⁷ Copenhagen (note 115 above) 445.

¹³⁸ See section 24 of the Copyright Act.

¹³⁹ See section 27 of the Copyright Act.

¹⁴⁰ Copenhagen (note 115 above) 445.

¹⁴¹ Vinje (note 39 above) 198, 200.

¹⁴² Ibid.

modifications, on the proposals received from the United States ¹⁴³ and the European Community.¹⁴⁴ Article 13 of the Basic Proposal provided that:-

(1) Contracting Parties shall make unlawful the importation, manufacture or distribution, of protection-defeating devices, or the offer or performance of any service having the same effect, by any person knowing or having reasonable grounds to know that the device or service will be used for, or in the course of, the exercise of rights provided under this Treaty that is not authorized by the rightholder or the law.

(2) Contracting Parties shall provide for appropriate and effective remedies against the unlawful acts referred to in paragraph (1).

(3) As used in this Article “protection-defeating device” means any device, product or component incorporated into a device or product, the primary purpose or primary effect of which is to circumvent any process, treatment, mechanism or system that prevents or inhibits any of the acts covered by the rights under this Treaty.

The participating delegations disapproved of the inclusion of Article 13 of the Basic Proposal.¹⁴⁵ The wording of Article 13 was problematic¹⁴⁶ and the discussions of the delegations exposed various concerns¹⁴⁷ regarding the abuse of technological protection measures by copyright owners: first, although there was a knowledge requirement on the part of a manufacturer, liability could be imposed on the manufacturer of devices that has significant non-infringing purposes if he had reason to know that ‘one of the thousand devices he had produced’¹⁴⁸ would be used for infringing the exclusive rights of the copyright owner, second, technological measures could constrain access to works in the

¹⁴³ Vinje (note 87 above) 235. The proposal from the United States received criticism as it applied an unrestricted prohibition on devices that have the primary purpose or effect of circumventing technological protection measures rather than analytically applying the prohibition to devices that were designed for circumventing technological measures for infringing purposes only. It is agreed the effect of such a widespread prohibition would have been destructive of the system of copyright. The proposal had the further effect of imposing liability on a manufacturer of a device even in circumstances where he had no knowledge that the device would be used for infringing purposes.

¹⁴⁴ Vinje (note 87 above) 235. The proposal from the European Community also contained an across-the-board prohibition on circumvention devices. The proposal was, therefore, also controversial, the only difference being that the European Community imposed a knowledge requirement on the manufacturer. See also WIPO (note 94 above) 75 paragraph 515.

¹⁴⁵ WIPO (note 94 above) 75-76 paragraph 517 (Delegation of Ghana), 76 paragraph 519 (Delegation of South Africa), 77 paragraph 521 (Delegation of Nigeria) and 78 paragraph 526 (Delegation of Singapore).

¹⁴⁶ Ibid.

¹⁴⁷ WIPO (note 94 above) 76 paragraph 518 (Delegation of the Republic of Korea).

¹⁴⁸ Vinje (note 87 above) 234.

public domain¹⁴⁹ and third technological measures may affect the balancing of the rights of copyright owners with the interests of the public¹⁵⁰ With regard to the latter concern, Vinje draws on the European scholars' views 'that a provision on technical protection systems such as Article 13 would have risked effectively rewriting the various existing exceptions out of the applicable copyright/author's rights laws'.¹⁵¹

Notwithstanding the above concerns, there was a general consensus¹⁵² at the Diplomatic Conference that the legal protection of technological measures was important in the digital age to protect against digital copyright infringement.¹⁵³ Consequentially, the delegations generally favoured the inclusion of a provision regarding the legal protection of technological measures.¹⁵⁴ Various amendments to Article 13 were suggested to eradicate the aforementioned concerns.¹⁵⁵ Most significantly, the delegation of South Africa recommended that the obligation of contracting parties should simply be the provision of adequate legal protection and effective legal remedies against the circumvention of technological measures.¹⁵⁶ The extent of the protection was further defined by the delegation in terms of a systematic characterization that technological measures should have the following three characteristics: first, that they should be effective technological measures, second, that they should be used by copyright owners in connection with the exercise of their rights under the WCT and third, that they should restrict acts which were not authorized by the copyright owners or not permitted by

¹⁴⁹ WIPO (note 94 above) 77 paragraph 523 (Delegation of Canada) and 80 paragraph 536 (Delegation of Australia).

¹⁵⁰ WIPO (note 94 above) 77 paragraph 523 (Delegation of Canada), 78 paragraph 526 (Delegation of Singapore), 79 paragraph 529 (Delegation of the European Communities recognizing the importance of preserving the balance of the rights of copyright owners and the interests of the public when affording legal protection to technological protection measures) and 80 paragraph 535 (Delegation of the United Kingdom recognizing that Article 13 may affect legitimate activities).

¹⁵¹ Vinje (note 87 above) 234.

¹⁵² WIPO (note 94 above) 77 paragraph 523 (Delegation of Canada), 80 paragraph 535 (Delegation of the United Kingdom) and 81 paragraph 540 (Delegation of Hungary).

¹⁵³ Ibid.

¹⁵⁴ WIPO (note 94 above) 75 paragraph 518 (Delegation of the Republic of Korea), 76 paragraph 519 (Delegation of South Africa), 77 paragraph 523 (Delegation of Canada), 77-78 paragraph 525 (Delegation of the United States), 78 paragraph 526 (Delegation of Singapore), 79 paragraph 531 (Delegation of Jamaica), 79-80 paragraph 532 (Delegation of New Zealand), 80 paragraph 535 (Delegation of the United Kingdom), 80 paragraph 536 (Delegation of Australia) 81 paragraph 539 (Delegation of Germany) and 80 paragraph 540 (Delegation of Hungary).

¹⁵⁵ WIPO (note 94 above) 123 paragraph 823.

¹⁵⁶ WIPO (note 94 above) 76 paragraph 519.

law.¹⁵⁷ The Diplomatic Conference adopted the amendment suggested by the delegation of South Africa, which is set out in Article 11 of the WCT and reads as follows:-

Contracting Parties shall provide adequate legal protection and effective legal remedies against the circumvention of effective technological protection measures that are used by authors in connection with the exercise of their rights under this Treaty or the Berne Convention and that restrict acts, in respect of their works, which are not authorized by the authors concerned or permitted by law.

The scope of the protection required by contracting parties in the implementation of Article 11 of the WCT will be considered next.

2.3.3.3 The Scope of Protection of Article 11

The provisions of Article 11 require contracting parties to provide legal protection against the circumvention of technological measures that:-

- are effective;¹⁵⁸
- are used by copyright owners to exercise their copyright rights in relation to the protected copyrighted work;¹⁵⁹ and
- restrict acts that are not authorized by copyright owners or permitted by law.¹⁶⁰

Each of these elements will be discussed in turn.

2.3.3.3.1 ‘Effective technological protection measures’

Dr I Kerr, A Maurushat and C S Tacit confirm that the WCT does not provide any guidance in relation to the meaning of the word ‘effective’ in this context¹⁶¹ and suggest that ‘one relatively uncontroversial conclusion that can be drawn from the presence of the

¹⁵⁷ Ibid.

¹⁵⁸ Dr I Kerr, A Maurushat and C S Tacit – NelliganO’Brien Payne Lawyers ‘Technological Protection Measures: Part II The Legal Protection of Technological Measures’ (2003) 7 *available online* www.pchgc.ca (date accessed: 4 March 2005).

¹⁵⁹ Ibid.

¹⁶⁰ Ibid.

¹⁶¹ Kerr, Maurushat and Tacit (note 158 above) 7.

word ‘effective’ in these provisions is that not every technological protection measure is subject to legal protection’.¹⁶² The word ‘effective is clearly meant to limit the parameters of the legal protection afforded to technological protection measures’.¹⁶³

2.3.3.3.2 ‘Used by authors to exercise copyright rights’

Kerr, Maurushat and Tacit provide a simple interpretation of this phrase that the technological protection measure must be used by the copyright owner in association with the rights afforded to him by copyright legislation,¹⁶⁴ for example to exercise control over the distribution, communication to the public and the reproduction of his works.¹⁶⁵

2.3.3.3.3 ‘To restrict acts in respect of their works which are not authorized by the author concerned or permitted by law’

It has been established in this section that the scope of the legal protection of a technological measure is linked to the protection of copyright. It is submitted that it follows that a technological measure will be protected, within the context of Article 11, if it protects an exclusive act of the copyright owner that the user is not permitted to exercise as the act has not been authorized by the copyright owner or is not recognized as an exception. Thus the technological measure must protect the contents of the work against copyright infringement. It is submitted further that the corollary of this interpretation is that legal protection against the circumvention of a technological measure will not be required where the circumvention is for purposes of exercising a legitimate use such as the fair use exception to the exclusive rights of the copyright owner.

Kerr, Maurushat & Tacit argue that a literal interpretation of the first and second elements suggest that ‘technological protection measures must restrict acts that are

¹⁶² Kerr, Maurushat and Tacit (note 158 above) 8.

¹⁶³ Ibid.

¹⁶⁴ Ibid.

¹⁶⁵ These are the exclusive rights of the copyright owner and relate specifically to the protection of copyright rights.

protected by copyright law in order to qualify for legal interpretation pursuant to Article 11 of the WCT'.¹⁶⁶ Kerr, Maurushat & Tacit, however, argue further that Article 11 of the WCT provides contracting parties with an indeterminate measure of flexibility that could perhaps lead to the interpretation that legal protection should be extended to technological protection measures that prevent access to copyrighted works.¹⁶⁷ It is submitted that this interpretation would clearly extend the scope of protection beyond the boundaries of copyright legislation, as the system of copyright does not afford a copyright owner the exclusive right to control access of his work. It is submitted further this interpretation would contradict the general objectives of the WCT, which aims to maintain the application of the traditional system of copyright in the digital environment by protecting copyright owners and the greater interests of the public equally.¹⁶⁸

It is submitted that had it been the intention of the WCT to extend protection beyond the borders of copyright legislation then it would have been expressly provided. It is, accordingly, agreed that the extent of protection of technological measures provided for in Article 11 WCT thus primarily corresponds to the extent of protection provided by copyright legislation.¹⁶⁹ The nature of legal protection that is required, in the framework of Article 11, against the circumvention of these technological measures will be examined next.

2.3.3.4 The Nature of Legal Protection of Article 11

Article 11 provides that contracting parties must afford 'adequate legal protection against the circumvention of technological protection measures'. It is argued that adequate legal protection against the circumvention of technological protection measures could be

¹⁶⁶ Kerr, Maurushat & Tacit (note 158 above) 9.

¹⁶⁷ See also Kerr, Maurushat & Tacit (note 158 above) 9 where it is noted that scholars such as J de Werra have interpreted Article 11 to extend to the protection of access control measures.

¹⁶⁸ It is argued in further detail in Chapter III that a form of protection of this nature would result in extensive protection being afforded to the copyright owner to the detriment of the enforcement of exceptions to the exclusive rights of the copyright owner.

¹⁶⁹ K J Koelman 'A Hard Nut to Crack: The Protection of Technological Protection Measures' (2000) 22(6) *EIPR* 272.

provided in three forms within the context of Article 11.¹⁷⁰ The first form limits the scope of the prohibition to an act of circumvention of the technological protection measure.¹⁷¹ The second form aims at the prohibition of the preparatory acts to circumvention. The preparatory acts would include the manufacture, importation and distribution of devices or the provision of services that would facilitate the circumvention of technological protection measures.¹⁷² This is usually referred to as the anti-trafficking provision. The third form extends the prohibition to both acts of circumvention and the trafficking in circumvention devices.¹⁷³

The forms of legal protection that could fall within the scope of Article 11 have been classified. The relevant issue that follows is to determine which form of legal protection the provisions of Article 11 of the WCT require contracting parties to implement. It has been argued that the WCT does not expressly state whether legal protection should be provided against the act of circumvention or to devices that are manufactured and distributed to circumvent the technological measure.¹⁷⁴ In fact, it has been argued that Article 11 is silent on the issue altogether.¹⁷⁵ It is convincingly argued by others, however, that Article 11 clearly refers to the act of circumvention and not to the manufacture and distribution of circumvention devices.¹⁷⁶

Dean Marks and Bruce Turnbull argue that it would be insufficient to implement an approach that prohibits an act of circumvention only.¹⁷⁷ It is argued further by these scholars that it would be more appropriate to extend the prohibition to devices that are designed to circumvent technological protection measures.¹⁷⁸ Vinje, on the other hand,

¹⁷⁰ Kerr, Maurushat and Tacit (note 158 above) 10.

¹⁷¹ Ibid.

¹⁷² Ibid.

¹⁷³ Ibid.

¹⁷⁴ Strowle and Dussolier (note 38 above) 6 where it is argued that Article 11 does not direct how the protection should be arranged and which acts should be prohibited. See also Kerr, Maurushat and Tacit (note 158 above) 10 where it is argued that Article 11 of the WCT has given contracting parties the freedom to formulate the nature of the protection.

¹⁷⁵ Marks and Turnbull (note 31 above) 6.

¹⁷⁶ Vinje (note 87 above) 235. See also Koelman (note 169 above) 272.

¹⁷⁷ Marks and Turnbull (note 31 above).

¹⁷⁸ Ibid.

strongly advocates for an approach that sanctions an act of circumvention only.¹⁷⁹ He believes that a prohibition that extends to devices or preparatory acts might eviscerate the enforcement of exceptions to the rights of copyright owners.¹⁸⁰

Marks and Turnball forcefully argue for the implementation of rigid anti-circumvention legislation.¹⁸¹ It is argued by these scholars that the formulation of any possible exceptions to the general rule against circumvention should be ‘narrowly crafted and restricted to special cases that do not defeat the normal functioning and application of protection technologies.’¹⁸² They argue further that as technological measures are unable to distinguish between circumvention that is infringing or non-infringing, it would be more appropriate to apply exceptions to the anti-circumvention legislation in terms of a defined individual conduct.¹⁸³

It is submitted that Marks and Turnball do not appear to demonstrate significant concern for the adverse consequences that a strong all-encompassing circumvention prohibition may have on the system of copyright.¹⁸⁴ While they provide a model for the application of exceptions to the prohibition on acts of circumvention, they simultaneously remain forceful that the prohibition of circumvention-defeating devices should remain firm and not be weakened.¹⁸⁵ It is submitted that approach then, by implication, appears to argue against the ban on circumvention devices being lifted in certain circumstances. The basis of their reasoning seems to be that the manufacture and distribution of the circumvention devices, notwithstanding the fact that they have the ability to circumvent for legitimate

¹⁷⁹ Vinje (note 39 above) 197. See also Vinje (note 87 above) 235 where it is submitted that other areas that may be affected by a device prohibition are legitimate dual use technology and works in the public domain.

¹⁸⁰ Ibid.

¹⁸¹ Ibid.

¹⁸² Marks and Turnball (note 31 above) 9.

¹⁸³ Ibid. Marks and Turnball draw on the anti-circumvention provisions of the United States Digital Millennium Copyright Act and the exceptions provided therein. They express the view that the narrow exceptions provided to the prohibition of the circumvention of access controls aim to preserve a balance and prevent the exceptions from ‘nullifying’ the anti-circumvention legislation.

¹⁸⁴ Ibid. Marks and Turnball argue that the use of technological measures has to date not displayed that fair use exceptions are restricted and that they will have such an effect in the future.

¹⁸⁵ Ibid. Marks and Turnball argue that ‘because devices and services, by their very nature, cannot be restricted to particular uses, exceptions to anti-circumvention laws do not appear well suited to devices and services’.

purposes, should be banned as they could be used for infringing purposes.¹⁸⁶ They argue that this would effectively undermine anti-circumvention legislation.¹⁸⁷

It is submitted that the rigid approach preferred by Marks and Turnball would potentially threaten the delicate balance of the system of copyright. This effect is illustrated in the example that follows. A technological measure that is, for example, engaged by a copyright owner to protect his work from infringing uses could also prevent legitimate non-infringing uses, such as fair dealing for educational purposes. An activity could be infringing in certain circumstances but permitted as a legitimate non-infringing exception in other circumstances. A technological measure cannot, therefore, be designed to distinguish infringing conduct from non-infringing conduct and is, in the circumstances, blind as to which conduct is infringing or non-infringing. The user's right to use the work, in these circumstances, for fair dealing purposes would be compromised. It is submitted that, in terms of the approach submitted by Marks and Turnball, there would no lawful circumvention device available to facilitate circumvention of the technological measure. It would be immaterial that this conduct is exempted from the prohibition against the circumvention of the technological measure or that it is recognized as a traditional exception to the exclusive rights of the copyright owner as the equipment that is required to facilitate the exception would be prohibited.

It is agreed that infringement would be effectively minimized should the nature of the legal protection apply to the manufacture and distribution of circumvention devices, as the source that facilitates the infringement would be eliminated.¹⁸⁸ It is, however, recognized that an all-encompassing approach of this nature¹⁸⁹ could conceivably have a profound effect on the delicate balance of the system of copyright.¹⁹⁰ It is submitted that

¹⁸⁶ Ibid. Marks and Turnball argue that circumvention devices or services are incapable of distinguishing between uses that are permitted (such as exceptions) and uses that not permitted by copyright law.

¹⁸⁷ Ibid.

¹⁸⁸ Marks and Turnball (note 31 above) 6.

¹⁸⁹ Marks and Turnball (note 31 above) 9-10 where it is argued that the prohibition of circumvention devices must extend to all devices.

¹⁹⁰ The effect that an all-encompassing approach as suggested by Marks and Turnball (see note 189) on the enforcement of exceptions such as fair dealing will be examined in detail in Chapter III. Suffice to say, for the purposes of this section, that the prohibition of circumvention of all devices would also cover the manufacture and distribution of circumvention devices that would facilitate non-infringing legitimate

the WCT would never have intended to sanction an approach that may eradicate the application of exceptions such as fair dealing. Vinje fittingly summarises the nature of protection required under Article 11 in the following statement:-

This provision has the great advantage of applying to the act of circumvention, rather than to the manufacture or distribution of the device used to engage in the circumvention. This focus on acts facilitating infringement follows the tradition of copyright law, and avoids the problems inherent in any provision focusing instead on devices. In particular, it avoids threatening legitimate dual-use technology, diminution of the public domain and evisceration of copyright exceptions. By assuring that the sphere of application of the circumvention provision corresponds to that of copyright infringement, the Copyright Treaty preserves the delicate copyright balance.¹⁹¹

Although Article 11 does not expressly provide for the manner in which contracting parties must arrange the legal protection of technological measures, considering the general objectives of the WCT and drawing on the various concerns highlighted by delegations at the Diplomatic Conference and scholars alike that technological protection measures may be abused by copyright owners to the detriment of the system of copyright, it is agreed that the nature of legal protection required by Article 11 of the WCT applies to the act of circumvention.¹⁹²

It is submitted that contracting parties are obligated, in the context of Article 11 of the WCT, to provide adequate legal protection against the circumvention of technological protection measures that are used by copyright owners, in relation to their copyrighted works, to prevent or restrict their exclusive rights or acts that are not permitted by law. It is, therefore, understood that the circumvention of technological measures that protect the rights of the copyright owner must be prohibited if it is conducted for the purposes of committing infringement of copyright. It follows from this classification that the circumvention of technological measures for the purposes of engaging in fair use of the work must be permitted.

purposes such as fair use. If the manufacture of the device is prohibited, there would be no equipment available to circumvent technological protection measures and as such the enforcement of exceptions such as fair use would be restricted.

¹⁹¹ Vinje (note 87 above) 235.

¹⁹² Vinje (note 87 above) 235. See also Koelman (note 169 above) 272.

While it has been established that the nature of the provision of Article 11 requires that contracting parties provide protection against the act of circumvention of a technological measure for infringing purposes, it has also been acknowledged that legal protection against circumvention devices would be beneficial to the fight against digital copyright piracy. It is, accordingly, argued that contracting parties should perhaps implement the legal protection of technological measures to include the prohibition against circumvention devices. It is, however, agreed, that a provision of this nature must be cautiously drafted to exclude only circumvention devices that are manufactured and distributed for the purposes of facilitating the infringement of copyright.¹⁹³ It is submitted that a minimalist approach such as this would ensure that the effective enforcement of exceptions would be maintained and would accordingly comply with the general objectives of the WCT.¹⁹⁴ The possibility that the legal protection should perhaps be extended to circumvention devices will be discussed in further detail in Chapter III.

2.4 Conclusion

It is submitted that the aforementioned analysis of the provisions of the WCT demonstrates that protection of the exclusive rights of the copyright owner against copyright infringement in the digital age is important. First, the provisions of the WCT clarifies that the application of the right of reproduction, which is accepted as the most fundamental right as it provides the copyright owner with the ability to control the economic exploitation of his works, fully applies to the digital environment and includes the storage of works in digital form in an electronic medium such as the Internet. Most significantly, the negotiations at the Diplomatic Conference confirm that extensive protection would inhibit the effective enforcement of limitations of and exceptions to the exclusive rights of the copyright owner. Second, the provisions of the WCT appropriately modified the application of the right of communication in the digital environment. It is agreed that this right is perhaps the key element in the copyright owner's ability to control digital transmission of works over the Internet. Third, the provisions of the WCT

¹⁹³ Vinje (note 87 above) 235. The all-encompassing approach suggested by Marks and Turnball in respect of the prohibition of circumvention devices must be avoided.

¹⁹⁴ This aspect will be studied in further detail in Chapter III.

developed a right of distribution for the copyright owner to maintain control in the digital environment over the distribution of fixed copies of his works that are circulated as physical objects.

The WCT simultaneously states that the enforcement of limitations of and exceptions to the exclusive rights of the copyright owner in the digital age are equally important. It is submitted that the provisions of the WCT, supplemented by the preamble, illustrate the WIPO's commitment to preserve the traditional enforcement of limitations and exceptions, particularly in the interests of education, research and access to information.

It is submitted that the provisions of the WCT similarly recognize that the legal protection against the act of circumvention of technological measures, which are used by copyright owners to protect their works against copyright infringement, for infringing purposes is essential. The preamble of the WCT establishes that it is essential that the delicate balance between the rights of the copyright owner and the interests of the public to exercise exceptions such as fair dealing must be preserved while providing for the protection of technological measures. It is submitted that the WCT appropriately establishes a framework for contracting parties to balance the technological provisions with the enforcement of exceptions.

It follows from the above that the implementation by contracting parties of the provisions of the WCT in respect of the exclusive rights of the copyright owner and the technological protection measures must be carefully balanced to ensure that the application of traditional exceptions such as fair dealing is not restricted. It has been outlined in this chapter that the protection of exclusive rights and technological protection measures that extend beyond the boundaries of copyright law could be detrimental to the system of copyright. The next chapter examines the controversial implementation models of the provisions of Article 11 by the United States and the European Union and the effect that these models could have on the interests of the public to access information and to enforce exceptions for fair dealing purposes such as education or research.

III THE LEGAL PROTECTION OF TECHNOLOGICAL MEASURES IN THE UNITED STATES OF AMERICA AND THE EUROPEAN UNION: AN ANALYSIS OF THE IMPLEMENTATION OF ARTICLE 11 OF THE WIPO COPYRIGHT TREATY IN THE DIGITAL MILLENNIUM COPYRIGHT ACT AND THE EUROPEAN COPYRIGHT DIRECTIVE

3.1 Introduction

It has been established that the use of technological protection measures is a valuable key for copyright owners to counter massive copyright infringement in the digital age.¹⁹⁵ It has further been acknowledged that these measures require legal protection¹⁹⁶ to ensure first that they are respected and second to deter circumvention of these measures for the purposes of committing an act of copyright infringement.¹⁹⁷ To this end it has been recognized that the implementation of Article 11 of the WCT, which requires contracting parties to provide adequate legal protection against the circumvention of technological measures, is essential. Many contracting parties have to date implemented the WCT.¹⁹⁸ The implementation models of the United States and the European Union have attracted dramatic responses, particularly the controversial provisions on the legal protection of technological measures that have been reported to extend beyond the scope of the protection that has been provided in Article 11 of the WCT. This chapter undertakes a critical examination, in the context of the requirements of Article 11, of each of the implementation models of the United States and the European Union to determine the effect that the protection provided has on the enforcement of traditional exceptions to the exclusive rights of the copyright owner.

¹⁹⁵ See Chapter I and II.

¹⁹⁶ See Chapter II.

¹⁹⁷ Marks & Turnball (note 31 above) 3.

¹⁹⁸ The WCT has, at 1 August 2004, been implemented by 53 countries (statistics obtained from http://www.wipo.int/treaties/en/statistics/StatsResults.jsp?treaty_id=16&lang=en) and the WPPT has been implemented by 51 countries (statistics obtained from http://www.wipo.int/treaties/en/statistics/StatsResults.jsp?treaty_id=20) (date accessed: 1 August 2005).

The adverse implications that extensive prohibitions on circumvention devices, narrowly crafted exceptions to the circumvention prohibition, a ‘right of access’ and ‘digital lock’ could have on the enforcement of exceptions such as fair dealing underlies the analysis. A comparative analysis between the provisions of the United States and the European Union is incorporated in the examination to identify challenging areas and lessons for South Africa when ratifying the WCT. Further, a discussion on alternative approaches that respect the traditional system of copyright is discussed to a certain extent. Part A, which relates to the analysis of the anti-circumvention provisions of the United States follows.

3.2 PART A: Implementation of Article 11 of the WCT by the United States: The Digital Millennium Copyright Act, 1998

3.2.1 Introduction

On 28 October 1998 the United States President Bill Clinton signed into legislation the Digital Millennium Copyright Act¹⁹⁹ to revise the Copyright Act²⁰⁰ to respond to the challenges of the digital age and to implement the provisions of the WCT and the WPPT. The DMCA consists of five titles.²⁰¹ Title I ‘WIPO Copyright and Performances and Phonograms Treaties Implementation Act of 1998’, implements the Internet treaties.²⁰² The most controversial aspect of the implementation by the United States is of Article 11

¹⁹⁹ The Digital Millennium Copyright Act Pub.L.No. 105-304, 112 Stat.2860 (28 October 1998) (hereinafter referred to as ‘the DMCA’) available online <http://thomas.loc.gov/cgi-bin/query/F?c105:1:/temp/~c105pesfeB:e11559:/> (date accessed: 21 February 2005).

²⁰⁰ The Copyright Act of 1976, Title 17 United States Code available online http://www4.law.cornell.edu/uscode/html/uscode17/usc_sup_01_17.html (date accessed: 4 November 2004).

²⁰¹ The Digital Millennium Copyright Act of 1998 U.S. Copyright Office Summary (December 1998) 1 available online <http://www.copyright.gov/legislation/dmca.pdf> (date accessed: 21 February 2005). Title I relates to ‘The WIPO Copyright and Performances And Phonograms Treaties Implementation Act of 1998’, Title II relates to the ‘Online Copyright Infringement Liability Limitation Act’, Title III relates to the ‘Computer Maintenance Competition Assurance Act’, Title IV relates to miscellaneous provisions in respect of the United States Copyright Office, distance education, exception to copyright, the making of ephemeral recordings, webcasting of sound recordings on the Internet and collective bargaining and Title V relates to the ‘Vessel Hull design Protection Act’.

²⁰² Ibid.

of the WCT that requires contracting parties to provide adequate legal protection against the circumvention of technological measures.²⁰³

2.2.2 Summary of the Anti-Circumvention and Anti-Trafficking Provisions of section 1201 of the DMCA

Section 1201 of the DMCA²⁰⁴ regulates the provisions relating to the legal protection of technological measures. First, the provision of section 1201(a)(1)(A) prohibits the circumvention of a technological measure that effectively controls access to a work. A technological protection measure which, in the ordinary course of its operation, requires the application of information, or a process or a treatment, with the authority of the copyright owner to gain access to a work, ‘effectively controls access to a work’.²⁰⁵ Within the framework of this provision, circumvention of a technological measure is defined as the descrambling of a scrambled work, decrypting of an encrypted work or otherwise to avoid, bypass, remove, deactivate, or impair a technological measure, without the authority of the copyright owner.²⁰⁶

The second form of protection is contained in section 1201(a)(2). In terms of this provision, the manufacturing, importing, offering to the public, providing or otherwise trafficking in any technology, product, service, device, component, or part thereof that first, is primarily designed or produced for the purpose of circumventing a technological measure that effectively controls access to a work that is protected in terms of Title 17,²⁰⁷ or second, has only a limited commercially significant purpose or use other than to circumvent such an access control measure,²⁰⁸ or third, is marketed with knowledge for use in circumventing such an access control measure.²⁰⁹

²⁰³ See generally J C Cohen ‘WIPO Copyright Treaty Implementation in the United States: Will Fair Use Survive’ (1999) 21(5) *EIPR* 236, Pamela Samuelson ‘Intellectual Property and the Digital Economy: Why the Anti-Circumvention Regulations Need to be Revised’ (1999) 14 *Berkeley Tech L.J.* 519.

²⁰⁴ Section 103 amended Title 17 of the United States Code by adding Chapter 12. This chapter is titled ‘Copyright Protection and Management Systems’ and contains the provisions of section 1201.

²⁰⁵ section 1201(a)(3)(B).

²⁰⁶ section 1201(a)(3)(A).

²⁰⁷ section 1201(a)(2)(A).

²⁰⁸ section 1201(a)(2)(B).

²⁰⁹ section 1201(a)(2)(C).

The third form of protection is contained in section 1201(b)(1). In terms of this provision the manufacturing, importing, offering to the public, providing or otherwise trafficking in any technology, product, service, device, component, or part thereof that first, is primarily designed or produced for the purpose of circumventing a technological measure that effectively protects a copyright owner's right under Title 17 in a work,²¹⁰ or second, has only a limited commercially significant purpose or use other than to circumvent such a rights control measure,²¹¹ or third, is marketed with knowledge for use in circumventing such a measure.²¹² A technological measure 'effectively protects a right of a copyright owner', if in the ordinary course of its operation, it prevents, restricts, or otherwise limits the exercise of a right of a copyright owner under Title 17.²¹³ The circumvention of such a technological measure in this context is defined as avoiding, bypassing, removing, deactivating, or otherwise impairing a technological measure.²¹⁴

It is accordingly submitted that the provisions of section 1201 establish the following three forms of protection in respect of technological measures:-

- legal protection against the circumvention of access control technological measures,
- legal protection against the trafficking of devices or services that facilitate the circumvention of access control technological measures, and
- legal protection against the trafficking of devices or services that facilitate the circumvention of rights control technological measures.

It is evident that the anti-circumvention legislation distinguishes between access control measures and rights control measures. Each of the aforementioned provisions of section 1201 of the DMCA will be discussed in turn.

²¹⁰ section 1201(b)(1)(A).

²¹¹ section 1201(b)(1)(B).

²¹² section 1201(b)(1)(C).

²¹³ section 1201(2)(B).

²¹⁴ section 1201(2)(A).

3.2.3 Analysis of the Effect of Section 120(a)(1)(A): Legal Protection of Access Control Measures

3.2.3.1 The General Scope of the Right of Access

Professor Jane C Ginsburg defines an ‘access right’ as ‘the right to control the manner in which members of the public apprehend the work’.²¹⁵ She suggests that the justification for the United States Congress providing an access right in the DMCA could be attributed to the change in the economics of exploiting works in the digital environment.²¹⁶ It has been established that advances in digital technology facilitated exploitation of copyrighted works on a higher level.²¹⁷ It became almost too simplistic to make pirated copies of works that were of a high quality.²¹⁸ Consequently, copyright owners witnessed a shift in power in their ability to protect their copyright rights in the digital age.²¹⁹ Professor Ginsburg argues that the evolution of an access right would counter this primary form of exploitation of copyrighted works in the digital age.²²⁰ She believes that this right is ‘a necessary and integral component of copyright law...’²²¹. She does, however, submit that this right should ‘be subject to limitations and exceptions analogous to those that constrain ‘copy’ right’.²²² It is however submitted that it is questionable whether the legal protection of this right, even with exceptions, would respect the boundaries of copyright and its delicate balance.

It appears that the DMCA, by prohibiting the circumvention of access control measures under section 1201(a)(1)(A), has generated a new right of access for the copyright owner.²²³ The balance of control seems to be moving back to copyright owners as they

²¹⁵ J C Ginsburg ‘From Having Copies to Experiencing Works: the Development of an Access Right in U.S. Copyright Law’ (2000) 7 *Col Law School Pub Law & Legal Theory Working Paper Number 8* available online http://papers.ssrn.com/paper.taf?abstract_id=222493 (date accessed: 20 January 2005).

²¹⁶ J C Ginsburg ‘Copyright Legislation for the Digital Millennium’ (1999) 23 *C-VLA Journal of Law & the Arts* 137 available online <http://cyber.law.harvard.edu/property00/alternatives/reading3.html> 4 (date accessed: 2 March 2005). See also Ginsburg (note 215 above) 10.

²¹⁷ See Chapter I.

²¹⁸ Ginsburg (note 215 above) 2.

²¹⁹ Ginsburg (note 215 above) 1-2.

²²⁰ Ginsburg (note 216 above) 2, Ginsburg (note 215 above) 1, 8.

²²¹ Ginsburg (note 215 above) 16-17.

²²² Ginsburg (note 215 above) 3.

²²³ Ginsburg (note 216 above) 2.

can now in terms of an access measure control the manner in which a user perceives the protected work, which entails viewing, reading and listening to the contents of the work.²²⁴ The protection may even restrict the user from making a physical copy of the contents of the work.²²⁵ An access control measure would, apart from controlling access to a work, also effectively control the use and enjoyment of the work.²²⁶

Despite the fact that an access control measure may provide a means for copyright owners to effectively control exploitation and infringements of digital copyrighted works, various concerns have arisen from scholars in respect of extending legal protection to access control measures.²²⁷ Scholars are of the view that the legal protection of access control measures grants to the copyright owner a 'new de facto' right.²²⁸ It is submitted that these concerns are compelling as this new right now enables the copyright owner to control access, a freedom that is not normally granted to him by the traditional system of copyright. It is submitted that the copyright owner's authority would be unprecedented to the system of copyright, which does not impede on the user's ability to use and enjoy the contents of the work, a copy of which he legitimately obtained. The scope of section 1201(a)(1)(A) of the DMCA, which effectively provides the copyright owner with a right of access, will be examined to establish the challenges that this new form of protection presents to the system of copyright.

²²⁴ Ginsburg (note 215 above) 2.

²²⁵ Ibid.

²²⁶ Ginsburg (note 215 above) 7. It is submitted that the position in the analogue world is different. Once a user purchases a copyrighted work, copyright does not empower the copyright owner to control the user's use and enjoyment of the work. A user may view the contents of the analogue copy of the work infinitely but an access control measure such as a pay per listen system may restrain the number of times a user can listen to the work. See Koelman (note 169 above) 276 regarding pay per use systems.

²²⁷ See Samuelson (note 203 above). See also L Lessig 'The Law of the Horse: What Cyberlaw Might Teach' The Berkman Centre for Internet and Society at Harvard Law School 501, 537 available online <http://cyber.law.harvard.edu/publications> (date accessed: 10 January 2005) and S Dusollier 'Electrifying the Fence: The Legal Protection of Technological Measures' (1999) 21(6) *EIPR* 285, 291.

²²⁸ Dusollier (note 227 above) 291. See also Koelman (note 169 above) 276 and Garlick (note 37 above) 959.

3.2.3.2 The Nature and Scope of the Legal Protection of section 1201(a)(1)(A): Prohibition of Acts of Circumvention

The provisions of the DMCA regarding the legal protection of access control measures have been criticized as it exceeds the scope of protection required by Article 11 of the WCT.²²⁹ Although Professor Ginsburg demonstrates optimism in the advantages of recognizing such a right, she also questions whether the provisions of the DMCA provide excessive protection to the copyright owner.²³⁰ Professor Ginsburg distinguishes between two notions of access: ‘access to a work’²³¹ and ‘access to a copy of a work’.²³² The latter addresses the notion of access within the context of the traditional copyright system.²³³ This access is analogous to the copyright owner’s right to distribute copies of the work.²³⁴ The former relates to access within the framework of section 1201(a)(1)(A) of the DMCA.²³⁵ The nature of access that is protected by the provisions of the above section is separate from the ‘right of a copyright holder’²³⁶ that is protected by the provisions of section 1201(b).²³⁷ Professor Ginsburg agrees that this form of protection goes beyond traditional copyright prerogatives²³⁸ and expands the exclusive rights of the copyright owner to control the ‘use’ of his work.²³⁹ Scholars argue that section 1201(a)(1)(A) impacts on the enforcement of exceptions to copyright such as fair use.²⁴⁰ This argument will be considered in the next sub-section.

²²⁹ Vinje (note 39 above) 205. See also Samuelson (note 203 above) 519, 522, 562-563 and Garlick (note 37 above) 959.

²³⁰ Ginsburg (note 216 above) 11.

²³¹ Ginsburg (note 216 above) 3.

²³² Ibid.

²³³ Ibid.

²³⁴ Ibid.

²³⁵ Ibid.

²³⁶ Ibid 4.

²³⁷ Ibid.

²³⁸ Ibid 2.

²³⁹ Ibid 4.

²⁴⁰ Lessig (note 227 above) 537. See also Garlick (note 37 above) 955-959 and Cohen (note 203 above) 240.

3.2.3.3 Exceptions to Section 1201(a)(1)(A)

One of the primary concerns is that access control measures will permit copyright owners to digitally lock-up their works.²⁴¹ Scholars²⁴² argue that this digital lock-up would have the effect of constraining or even preventing users from exercising traditionally accepted exceptions to the exclusive rights of the copyright owner.²⁴³ While other scholars²⁴⁴ convincingly argue that access control measures would not affect the enforcement of exceptions such as fair use, as this issue only becomes applicable after access to a protected work has been legitimately obtained,²⁴⁵ it is submitted that the access control payment system that appears to be promoted by section 1201(a)(1)(A) of the DMCA²⁴⁶ would affect a user's ability to freely access protected information for fair use purposes.

It is submitted further that the user would effectively, in terms of section 1201(a)(1)(A), be prohibited from circumventing the access control measure to engage in the fair use of the contents of the protected information. It is agreed that there is merit in the argument that fair use does not, in the traditional sense, permit a user to break into a library to steal a book.²⁴⁷ By the same analogy fair use would not allow the user in the digital environment to circumvent an access control measure that protects the contents of a copyrighted work. It is, however, argued that the user of the book at the library would not be subject to a payment system that allows him access. It is submitted that this arrangement operates on the traditional understanding that the system of copyright does not provide the copyright owner with the ability to control or even prevent access to his works. To this end, it is submitted that section 1201(a)(1)(A) extends beyond the

²⁴¹ J H Cohen 'Some Reflections on Copyright Management Systems and Laws Designed to Protect Them'(1997) 12 *Berkeley Tech.L.J.* 161.

²⁴² Heide (note 37 above) 324. See generally Garlick (note 37 above). See also Cohen (note 203 above) 237 where she argues that the general effect of the DMCA is likely to narrow the scope of privileged uses such as fair use.

²⁴³ Ibid.

²⁴⁴ Ginsburg (note 215 above) 11.

²⁴⁵ Ibid.

²⁴⁶ Garlick (note 37 above) 577 where it is submitted that it appears that Congress has endorsed a pay-per-use system through the strict technological protection provisions of the DMCA.

²⁴⁷ Samuelson (note 203 above) 539 where she draws on the comments from the copyright industries, particularly the Association of America Publishers, which forcefully represented that 'the fair use doctrine has never given anyone a right to break other laws for the stated purpose of exercising the fair use privilege...'.

parameters of traditional copyright and that the digital-lock up that it permits restricts the enforcement of fair use exceptions by the greater public.²⁴⁸ Moreover, it is agreed that the digital-lock up mechanism of 1201(a)(1)(A) of the DMCA could have disastrous consequences for access to information by developing countries as it facilitates the expansion of the digital divide²⁴⁹ between the ‘haves’ and the ‘have nots.’²⁵⁰ Hiba A Bitar, Nicola Bottero and Francesca Crosetti submit in their discussion of this issue, in the context of the DMCA, that:-

It is indeed evident that to limit the right to access a work coincides with limiting the right of the public to derive facts or ideas from the work in question. Only those who are willing to pay have the opportunity to access the work. This situation puts in danger the effectiveness of the fair use doctrine.²⁵¹

It is therefore submitted that fair use exceptions to copyright that would advance the areas of education, knowledge, research and participation in the digital economy, by developing countries through the benefits of the information infrastructure, would be significantly threatened by the consequences of the access control provisions of section 1201(a)(1)(A). The provisions of section 1201(a)(1)(A) are, however subject to a list of exceptions. These exceptions will be examined in the next sub-section to determine whether the circumvention of access control measures for the purposes of engaging in traditional copyright exceptions have been preserved.

In response to the merit in the arguments raised by the public interest groups²⁵² of the effect that section 1201(a)(1)(A) may have, the United States Congress negotiated exceptions to the prohibition of the circumvention of access control measures as there were clearly non-infringing purposes for circumventing technological measures. The final

²⁴⁸ This submission is made in the understanding that under-privileged users who do not have the means to pay to access the work, which is only available in digital form, would be affected in their ability to exercise fair use exceptions in relation to the contents of the protected work.

²⁴⁹ See Garlick (note 37 above) 945 where he defines the ‘digital divide’ as ‘the gap between those who can effectively access and use new information and communication tools, such as the Internet, and those who cannot’.

²⁵⁰ Garlick (note 37 above) 943. See also Okedji (note 4 above) 11 for a general discussion on the effect of expansive copyright and ‘para-copyright’ laws such as the DMCA on the digital divide and access to information.

²⁵¹ Bitar, Bottero and Crosetti (note 32 above) 16

²⁵² Samuelson (note 203 above) 542. See also Vinje (note 39 above) 202.

text of the DMCA provides exemptions for nonprofit libraries, archives and educational institutions,²⁵³ law enforcement, intelligence and other government activities,²⁵⁴ reverse engineering of computer programs,²⁵⁵ encryption research²⁵⁶, the protection of minors,²⁵⁷ the protection of personally identifying information,²⁵⁸ and security testing.²⁵⁹ The relevant exceptions will be discussed in turn.

3.2.3.3.1 Non-Profit Libraries, Archives and Educational institutions

A non-profit library, archives or educational institution is exempted from circumventing an access control measure in order to gain access to a commercially exploited copyrighted work for the sole purpose of making a determination in good faith of whether to obtain a copy of that work.²⁶⁰ Consequently the provision is generally referred to as the ‘shopping privilege’.²⁶¹ The provision does not clarify whether it is permissible to manufacture and distribute circumvention devices that would facilitate the operation of the exception.²⁶² It is submitted that this shortfall recognizes one of the uncertainties of the anti-circumvention provisions of the DMCA. The provision could, however, by implication be understood to permit the manufacture and distribution of devices enabling circumvention for the purposes of this section.²⁶³ In any event it appears that the interpretation is insignificant as the beneficiaries of this exception argue that the exemption is insignificant in so far as copyright owners would ensure that the copyrighted work, which is protected by an access control measure, is made available to potential consumers to access without any difficulty.²⁶⁴

²⁵³ Section 1201(d).

²⁵⁴ Section 1201(e).

²⁵⁵ Section 1201(f).

²⁵⁶ Section 1201(g).

²⁵⁷ Section 1201(h).

²⁵⁸ Section 1201(i).

²⁵⁹ Section 1201(j).

²⁶⁰ Section 1201(d).

²⁶¹ Samuelson (note 203 above) 540. See also Garlick (note 37 above) 954.

²⁶² Vinje (note 39 above) 204.

²⁶³ Ibid.

²⁶⁴ Ibid. See also Samuelson (note 203 above) 541.

3.2.3.3.2 Law Enforcement, Intelligence and other Government Activities

This exception²⁶⁵ allows for the manufacture and distribution of devices that are designed to circumvent access control and rights control technological measures²⁶⁶ for any lawfully authorized investigative, protective, information security or intelligence activity that is conducted by an officer, agent or employee of the United States.

3.2.3.3.3 Reverse engineering

This exception²⁶⁷ permits a person who has lawfully obtained the right to use a copy of a computer program to circumvent the access control measure that prevents the access of such computer program. The sole purpose of the circumvention must be to identify and analyse elements of the program that are necessary to achieve interoperability of a computer program that has been created independently with other computer programs. The exception further permits the manufacture and distribution of devices that are designed to circumvent access control and rights control technological measures that protect the contents of a computer program for the purposes of this exception.²⁶⁸ This provision, unlike the one relating to library, archives and educational institutions legitimizes the development and production of devices that are required to facilitate the circumvention of technological measures to benefit from this exception.

3.2.3.3.4 Encryption research

Encryption research²⁶⁹ is defined in the legislation as ‘activities that are necessary to identify flaws and vulnerabilities of encryption technologies²⁷⁰ applied to copyrighted works’.²⁷¹ These activities are permitted, within the framework of this exception, if they

²⁶⁵ Section 1201(e).

²⁶⁶ This is an exemption from section 1201(a)(2) and section 1201(b).

²⁶⁷ Section 1201(f).

²⁶⁸ This is an exemption from section 1201(a)(1)(A), section 1201(a)(2) and section 1201(b).

²⁶⁹ The exception in respect of encryption research is set out in section 1201(g).

²⁷⁰ Section 1201(g)(1)(B) defines encryption technologies as the ‘scrambling and descrambling of information using mathematical formulas or algorithms’.

²⁷¹ section 1201(g)(1)(A).

are conducted with the intention of advancing the state of knowledge in the field of encryption or to assist in developing encryption products.²⁷² Both the act of circumvention of an access control measure and the manufacture and distribution of devices that are designed to facilitate the circumvention for the purposes of performing good faith encryption research as prescribed in this provision are permitted.²⁷³ It is agreed that Congress effectively promotes innovation and the advancement of knowledge in the field of encryption research by implementing this exception.²⁷⁴ The exception has, however, been criticized by the encryption research community as they fear that the ‘procedures and limitations imposed by the exception would have a chilling effect on encryption research’.²⁷⁵

It is agreed that the aforementioned exceptions promote innovation, education and research.²⁷⁶ They do, however, respond primarily to concerns from the computer and software industries that section 1201(a)(1)(A), if left unqualified, would affect certain legitimate non-infringing uses.²⁷⁷ Vinje traces the formulation of these exceptions to the powerful lobbying of these industries:-

the breadth of the exception turned on lobbying power; the security testing exception is more comprehensive than the privacy one because the banks and accounting firms pushing for the security testing exception had more political clout than the public interest groups concerned about privacy. Public interest groups concerned about the effect of Section 1201 on copyright limits and exceptions generally did not have sufficient lobbying power, in the face of an intense and lavishly financed campaign by the copyright industry, to achieve the introduction of a general “infringement” limitation on section 1201.²⁷⁸

In the circumstances Congress formulated a system of narrowly crafted exceptions²⁷⁹ and ignored other legitimate exceptions for the circumvention of access control measures and the manufacture and distribution of devices designed for circumventing access control

²⁷² Ibid.

²⁷³ This is an exemption from section 1201(a)(1)(A) and section 1201(a)(2).

²⁷⁴ Vinje (note 39 above) 203.

²⁷⁵ Ibid.

²⁷⁶ Garlick (note 37 above) 943-944.

²⁷⁷ Samuelson (note 203 above) 541-542 where she refers to the concerns of the various industries and the Commerce Committee.

²⁷⁸ Vinje (note 39 above) 205.

²⁷⁹ Samuelson (note 203 above) 538. See also Garlick (note 37 above) 954.

measures for these legitimate purposes.²⁸⁰ The current exceptions, most significantly, do not correlate to traditionally recognized exceptions to copyright.²⁸¹ It is therefore submitted that the DMCA does not, in terms of this provision, maintain the traditional balancing of interests of the system of copyright. There remained, however, optimism that the rulemaking proceeding which is contained in section 1201(a)(1)(C) would change this effect. Section 1201(a)(1)(C) will be examined next.

3.2.4 The Rulemaking Proceeding of section 1201(a)(1)(C)

Library and educational lobby groups expressed their concerns that section 120 might impair the enforcement of fair use exceptions, which could be detrimental to the areas of education, knowledge and access to information.²⁸²

The United States Congress acknowledged the concerns relating to the harmful effect that the provisions of section 1201(a)(1)(A) might have on fair uses of copyrighted works and on the general access to information and accordingly suspended the operation of this provision for a period of two years.²⁸³ To facilitate the underlying reasons for the said suspension, the Librarian of Congress was directed to conduct a rulemaking procedure that required him to exempt certain classes of work where the users are, or will likely be, adversely affected by the act of circumvention prohibition.²⁸⁴ It was generally understood that additional exceptions, which might eliminate the consequences of section 1201(a)(1)(A), could be introduced. The rulemaking procedure was recognized as:

a safety valve to monitor the effects of the statutory prohibition on circumvention of access controls and to ensure that the balance copyright law achieves between owners and users is equitably preserved.²⁸⁵

²⁸⁰ Samuelson (note 203 above) 543-544 and Vinje (note 39 above) 203.

²⁸¹ Ginsburg (note 215 above) 14 where she states that the list of exemptions is not 'coextensive with the exceptions to copyright protection set forth with respect to traditional rights under copyright' See also Heide (note 37 above) 327.

²⁸² Samuelson (note 203 above) 559.

²⁸³ Vinje (note 39 above) 204. See also Samuelson (note 203 above) 559-561. Section 1201(a)(1) provides that the prohibition contained therein shall be suspended with immediate effect for a period of two years.

²⁸⁴ Section 1201(a)(1)(C).

²⁸⁵ Comments of the Library Association on Exemptions to Prohibition on Circumvention Measures before the Copyright Office Library of Congress Docket No. RM 2002-4 available online <http://www.copyright.gov/1201/2003/comments/033.pdf> (date accessed: 4 January 2005).

It was, accordingly, anticipated that the procedure would facilitate the provision of additional exceptions that addressed circumstances where it is found that users of particular classes of work are, or will likely be, restricted in their ability to access and use the work. Thus the effect of section 1021(a)(1)(A) on legitimate non-infringing uses such as fair use would be removed.²⁸⁶ There remained, however, concerns²⁸⁷ that this procedure might not remedy the imbalance.²⁸⁸ In this regard, Julie Cohen argues that the development of exemptions, if any, are likely to be narrowly crafted fair use exceptions.²⁸⁹ She is of the view that the lobbying of copyright industries would largely influence the process.²⁹⁰ It was indicated in this chapter that the lobbying of these industries resulted in the United States Congress adopting a DMCA with anti-circumvention provisions, which Samuelson describes as ‘unpredictable, overbroad, and maximalist’.²⁹¹ Whether the rulemaking procedure would result in the adoption of exceptions that dealt appropriately with limitations of and exceptions to copyright however remained to be discovered.

The Librarian’s determination had to be based on the recommendation of the Register of Copyright who is required to consult with the Assistant Secretary for Commissions and Information of the Department of Commerce.²⁹² In conducting his rulemaking the Librarian is directed to study (1) the availability of copyrighted works for use,²⁹³ (2) the availability of works for use for non-profit archival, preservation and educational purposes,²⁹⁴ (3) the impact of the prohibition on circumvention of technological measures has on criticism, comment, news reporting, teaching, scholarship or research²⁹⁵ and (4) the effect of the circumvention of technological measures has on the market for or value of copyrighted works.²⁹⁶ To date two rulemaking proceedings have been conducted. The

²⁸⁶ Cohen (note 203 above) 237.

²⁸⁷ Cohen (note 203 above) 238.

²⁸⁸ Ibid.

²⁸⁹ Ibid.

²⁹⁰ Ibid.

²⁹¹ Samuelson (note 203 above) 533.

²⁹² section 1201(a)(1)(C).

²⁹³ section 1201(a)(1)(C)(i).

²⁹⁴ section 1201(a)(1)(C)(ii).

²⁹⁵ section 1201(a)(1)(C)(iii).

²⁹⁶ section 1201(a)(1)(C)(iv).

Librarian's determination in respect of each proceeding will be examined next to establish whether any traditional copyright exceptions were recognized as exceptions to the provisions of section 1201(a)(1)(A) thereby remedying the general effect of the section on the system of copyright.

3.2.4.1 The First Rulemaking Proceeding

The Librarian determined in the initial rulemaking proceeding that non-infringing users of two classes of work would be exempted from the provision that prohibits the circumvention of an access control measure.²⁹⁷ These classes of works included literary works, including computer programs and databases, protected by access control mechanisms that fail to permit access because of malfunction, damage, or obsolescence and compilations consisting of lists of websites blocked by filtering software applications.²⁹⁸

3.2.4.2 The Second Rulemaking Proceeding

In the second rulemaking proceeding, the Librarian introduced exceptions for four classes of work, which included compilations consisting of lists of Internet locations blocked by commercially marketed filtering software applications that are intended to prevent access to domains, websites or portions of websites, but not including lists of Internet locations blocked by software applications that operate exclusively to prevent receipt of e-mail,²⁹⁹ computer programs protected by dongles that prevent access due to malfunction or damage and which are obsolete,³⁰⁰ computer programs and video games distributed in formats that have become obsolete and which require the original media or hardware as a

²⁹⁷ Exemption to the Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies Federal Register vol 65 no. 209 October 27 2000 64555- 64574 *available online* <http://www.copyright.gov/fedreg/2000/65fr64555.html> (date accessed: 4 January 2005).

²⁹⁸ Ibid. These exceptions took effect when the suspension of section 1201(a)(1) was uplifted on 28 October 2000. The duration of the exceptions is not permanent but would be applicable to users of the exempted classes of works for the following three years. See section 1201(a)(1)(B).

²⁹⁹ This exception was recognized as being similar the class of work exempted in the initial rulemaking.

³⁰⁰ This exception was also recognized as being similar the class of work exempted in the initial rulemaking.

condition of access and literary works distributed in ebook format when all existing ebook editions of the work (including digital text editions made available by the authorized entities) contain access controls that prevent the enabling of screen readers to render the text into a ‘specialized format’.³⁰¹

3.2.4.3 The Shortfalls of the Rulemaking Proceedings

It is agreed that the exemptions developed by the Librarian in the aforementioned rulemaking proceedings do not have any relationship to the traditional copyright exceptions to the exclusive rights of the copyright owner.³⁰² In the circumstances it is submitted that the process has not yet addressed the concerns regarding the impact of section 1201(a)(1)(A) on the enforcement of exceptions such as fair use. It is submitted that the process might never modify the DMCA to recognize legitimate non-infringing exceptions such as fair use exceptions to the provisions of section 1201(a)(1). The Librarian’s refusal to accept certain proposals as exceptions to section 1201(a)(1)(A) in, for example, the second rulemaking proceeding confirms this concern. Various proposals were considered during the second rulemaking proceeding. The following proposals deserve mention:-

(1) that all works should be exempted for non-infringing uses such as fair use and private use: this proposal was rejected as ‘class of works’ was not specified as required by the provisions of section 1201(a)(1)(B).³⁰³

(2) that several including per se educational fair use works and fair use works should be exempted: this proposal was rejected as the provisions of section 1201(a)(1)(B) did not permit a ‘use-based or user-based’ categorization. It was further stated that the

³⁰¹ Exemption to the Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies Federal Register vol 68 no. 211 October 31 2003 62011-62018 *available online* <http://www.copyright.gov/fedreg/2003/68fr2011.html> (date accessed: 4 January 2005).

³⁰² Heide (note 37 above) 326.

³⁰³ Exemption to the Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies (note 301 above) 62014.

examination in the section required evidence that users of class of works are or will likely be adversely affected.³⁰⁴

While the aforementioned proposals were determined by the Librarian of Congress to be broad and lacking conformity with the requirements of section 1201(a)(1)(B),³⁰⁵ it is submitted that they reflected significant legitimate non-infringing reasons for circumventing access control measures that are, or will likely be, adversely affected by the prohibition in section 1201(a)(1)(A). The rejection of the aforementioned proposals demonstrates that the requirements³⁰⁶ of this section are overreaching and strict.³⁰⁷ First, the exemption must apply to a particular class of work that is being adversely affected by the prohibition of the circumvention of access control measures.³⁰⁸ A user would potentially be restricted by the access prohibition in relation to the use of the work and not the class of the work.³⁰⁹ It is agreed that the determination of whether or not an exemption is appropriate should be judged according to the nature of the use and the circumstances surrounding the use and not the ‘class of work’.³¹⁰ Second, there must be evidence that users ‘are, or likely to be adversely affected in their ability to make non-infringing use’ of the particular class of work.³¹¹ In this regard the position of the United States Copyright Office regarding the burden of proof has been criticized,³¹² as it requires the proponent of a prospective exemption to provide evidence ‘that actual harm exists or that it is likely to occur’ during the following three years.³¹³ It is thus agreed that a

³⁰⁴ Ibid 62014-62015.

³⁰⁵ Ibid see generally section B ‘Other Exemptions Considered, But Not Recommended’ 62014-62018.

³⁰⁶ Section 1201(a)(1)(B).

³⁰⁷ See generally the Comments of the Library Association (note 285 above) and Garlick (note 37 above) 956.

³⁰⁸ Copenhagen (note 115 above) 448 where she questions whether it is appropriate for the exemption system to be based on ‘classes of work’.

³⁰⁹ Garlick (note 37 above) 956-957 where he argues that this requirement is structurally problematic as it requires the exemption to be determined in relation to a class of work and not in reference to the use of the work or the class of the user such as students or academics.

³¹⁰ Ibid 957. See the excerpt regarding the criticism of this requirement by the Association American Universities.

³¹¹ Section 1201(a)(1)(B).

³¹² Comments of the Library Association (note 285 above) 3 drawing on the position of the Register of Copyright regarding the burden of proof that is required for a class of work to be exempted from the prohibition. The Library Association has criticized this standard of proof as it is not reflected in the requirements of the section and further it invalidates the purpose of the rulemaking mechanism.

³¹³ Ibid.

proponent requesting an exemption from the prohibition in section 1201(a)(1)(A) must produce evidence, indicating detriment to the user, of a high level.³¹⁴ It is, accordingly, agreed that the mechanism of section 1201(a)(1)(C) is defective in its ‘structure and operation’³¹⁵ and that the extreme requirements of the section facilitates the curtailment of legitimate copyright exceptions to the access prohibition. It is submitted that the rejections and determinations made by the Librarian to date indicate that the circumvention of access control measures to engage in fair use of the contents of works for education and research have been precluded.

A further deficit of the rulemaking proceeding is that while the authority granted to the Librarian of Congress permits him to provide for additional exceptions, it does not allow him to provide for exceptions to the anti-trafficking provisions that would allow the production of devices that would be necessary to achieve the purpose of the additional exceptions.³¹⁶ The privilege granted to the Librarian has in fact been criticized as being ‘meaningless’.³¹⁷ It is therefore submitted that users will be unable to benefit from an exemption that has been introduced under the rulemaking proceeding as there might be no tools available to enable the circumvention of the access control measure and users would generally look for assistance and equipment that enable circumvention, as they do not possess the ingenuity required to circumvent.³¹⁸

3.2.5. Analysis of the Effect of Section 1201(a)(2) and Section 1201(b): Legal Protection against the Trafficking in Circumvention Devices

3.2.5.1 The Nature and Scope of the Anti-Trafficking Provisions

It has been identified in this chapter that the anti-trafficking provisions of the DMCA are broad and offer extensive protection to copyright owners against the manufacture and

³¹⁴ Ibid. See also Garlick (note 37 above) 956-957.

³¹⁵ Comments of the Library Association (note 285 above) 2. See also Garlick (note 37 above) 956.

³¹⁶ Vinje (note 45 above) 204.

³¹⁷ Samuelson (note 203 above) 560. B W Esler ‘Protecting the Protection: A Trans-Atlantic Analysis of the Emerging Right to Technological Self Help’ (2003) 43 *IDEA: The Journal of Law and Tech* 553, 574.

³¹⁸ Koelman (note 169 above) 274.

distribution of circumvention technologies. Scholars argue that the exact scope of the protection is unclear.³¹⁹ It has not been specifically stated whether it is permissible to manufacture and distribute devices that would facilitate the circumvention of technological measures for legitimate non-infringing uses of works.³²⁰ In the circumstances the difficulty was in establishing whether the anti-trafficking provisions of the DMCA would have an effect on the fair use of works.³²¹

The prohibition prescribed by the section 1201 applies to any device that is ‘primarily designed or produced for the purpose of circumventing’,³²² an access control measure that ‘effectively controls access to work’,³²³ or a copy control measure that ‘effectively protects the right of a copyright owner’.³²⁴ The United States Congress, in formulating the anti-trafficking provisions, selected ‘circumvention’ as the criterion for determining whether the device is prohibited in terms of section 1201(a)(2) and section 1201(b).³²⁵ It is, accordingly, submitted that a device or service will fall prey to the protective net of the anti-trafficking provisions provided that the device or service is intended to circumvent a technological measure that is protected within the framework of section 1201. While a strict interpretation³²⁶ of the anti-trafficking provision leads to the conclusion that a circumvention device would be prohibited even if it was intended to facilitate legitimate non-infringing purposes, scholars³²⁷ anticipated that the Courts would restrict the extensive scope of the legislation in recognition of the importance of conserving legitimate fair uses of works in the digital age.³²⁸ An analysis of the interpretation of the anti-trafficking provisions by the Courts will be undertaken next.

³¹⁹ Samuelson (note 203 above) 547.

³²⁰ Ibid.

³²¹ Cohen (note 203 above) 237-238. It is reiterated that the anti-circumvention provisions of the DMCA does not prohibit the circumvention of a rights control measure. A user would, therefore, require a circumvention device or circumvention services to facilitate circumvention of the rights control measure for the purposes of fair use.

³²² Section 1201(a)(2)(A) and Section 1201(b)(1)(A).

³²³ Section 1201(a)(2)(A).

³²⁴ Section 1201(b)(1)(A).

³²⁵ See Samuelson (note 203 above) 534 where it is submitted that the anti-device provisions of section 1201 both regulate protection against technologies with ‘circumvention-enabling capabilities’.

³²⁶ Ibid 548-549.

³²⁷ Ibid 519. See also Cohen (note 203 above) 240.

³²⁸ Ibid.

3.2.5.2 Interpretation of the Anti-Trafficking Provisions by the Courts

The case of *Sony Corporation of America v Universal City Studios, Inc*³²⁹ was decided prior to the enactment of the DMCA. It is noteworthy to mention as the Supreme Court enunciated the principle that a manufacturer would not be held liable for contributory infringement for the sale of equipment that is ‘capable of substantial non-infringing uses’.³³⁰

In the case of *Universal City Studios, Inc v Shawn C Reimerdes*³³¹ the plaintiff instituted action in terms of the DMCA. The case concerned section 1201(a)(2), which related to the prohibition of trafficking in technology that was designed for the purpose of circumventing an access control measure.³³² Plaintiffs’ movies that were contained on digital versatile discs were protected from being copied by a content scramble system, which is an encryption system. The defendant Internet web-site owners posted on their web site for downloading decryption computer software that enabled the decryption of plaintiffs encrypted movies. The District Court held first, that the content scramble system constituted a technological measure that effectively controlled access to a copyrighted work in terms of section 1201(a)(2)(A),³³³ second, that it was unquestionable that the decryption software fell within the ambit of section 1201(a)(2) as it was a technology that circumvented a technological access control measure³³⁴ and third, that that the defendant violated the section 1201(a)(2) of the DMCA that prohibited the trafficking in technology, which facilitates the circumvention of technological access control measures.³³⁵

The defendants contended that the DMCA could not be interpreted to restrain fair uses of copyrighted works and, therefore, argued that their activities constituted fair use under

³²⁹ *Sony Corporation of America v Universal City Studios, Inc* 464 U.S. 417 (1984).

³³⁰ *Ibid* 442.

³³¹ *Universal City Studios, Inc v Shawn C Reimerdes* 111 F.Supp.2d 294 (S.D.N.Y. 2000).

³³² *Ibid* 295.

³³³ *Ibid* 318.

³³⁴ *Ibid* 317.

³³⁵ *Ibid* 319.

the Copyright Act as they provided a means for enabling fair use of encrypted movies.³³⁶ The District Court recognized that an access control measure such as the content scramble system would prevent unlawful as well as lawful uses of copyrighted works.³³⁷ It held, however, that the possibility that computer software, which was posted on a website for downloading, could be used for non-infringing fair uses of copyrighted works was not a defense to the prohibition of trafficking in circumvention technologies that facilitate the circumvention of access control measures.³³⁸ The Court specifically stated that the provisions of the DMCA did not provide that the fair use defense could be used and that the defendants were not being sued for copyright infringement but for the violation of the anti-trafficking provisions of the DMCA.³³⁹

It is submitted that this judgment clearly illustrates that section 1201(c)(1) of the DMCA, which aims to balance copyright defenses such as fair use with the provisions relating to the legal protection of technological protection measures, is ineffective. It indicates, further, that a defense to copyright infringement is not available as a defense to the act of circumvention of an access control measure.

Another significant aspect that the case dealt with was in relation to the enforceability of the principle enunciated in the *Sony Corporation v Universal City Studios, Inc*³⁴⁰ case.³⁴¹ The District Court held in this regard that the principle was not applicable to the determination of whether the trafficking in technology, which defeated access control measures for non-infringing fair uses, violated the provisions of the DMCA.³⁴² The important excerpts of the judgment are as follows:-

Sony involved a construction of the Copyright Act that has been overruled by the later enactment of the DMCA to the extent of any inconsistency between Sony and the new statute.³⁴³

³³⁶ Ibid 304.

³³⁷ Ibid 322.

³³⁸ Ibid 322.

³³⁹ Ibid 322.

³⁴⁰ *Sony v Universal* (note 329 above).

³⁴¹ *Universal City v Reimerdes* (note 331 above) 323.

³⁴² Ibid 323.

³⁴³ Ibid 323.

A given device or piece of technology might have a *substantially non-infringing use* and ... be immune from attack under Sony's construction of the Copyright Act-but nonetheless still be subject to suppression under Section 1201.³⁴⁴

It is submitted that the aforementioned excerpts from the judgment confirm that even if the manufacture of a circumvention device or technology is designed for a non-infringing purpose, the Courts would recognize the manufacture of such a device as a violation of the anti-trafficking provisions of the DMCA, as such device effectively enables the circumvention of a technological protection measure. It is submitted, further, that the Courts effectively confirm the strict interpretation of section 1201(a)(2) and section 1201(b) of the DMCA, which effectively prohibits the manufacture and distribution of circumvention devices that would facilitate non-infringing purposes such as fair use. This decision thus confirms that the device would be prohibited if it has a circumventing purpose.

The concluding remarks of the court relating to the manufacture and distribution of circumvention devices of rights control measures in the case of *United States of America v Elcom Ltd*³⁴⁵ summarizes the scope of the anti-trafficking provisions fittingly: 'all tools that enable circumvention of use restrictions are banned, not merely those that prohibit infringement'.³⁴⁶

It is evident from the analysis of the aforementioned cases that the Courts have interpreted the anti-trafficking provisions to the detriment of the enforcement of traditional copyright exceptions such as fair use. Section 1201(a)(2) and section 1201(b) of the DMCA, supplemented by the tendency of the Courts to outlaw all circumvention devices, effectively precludes the manufacture and distribution of fundamental tools that

³⁴⁴ Ibid where the District Court quotes the case of *RealNetworks Inc v Streambox* 2000 U.S. Dist. LEXIS 1889 (W.D.Wash.Jan.18, 2000) which confirmed that the DMCA does not use the 'substantial non-infringing' test that was used in the *Sony v Universal* case (see note 329 above). See also Elser (note 317 above) 582.

³⁴⁵ *United States of America v Elcom Ltd* 203 F. Supp. 2d 1111 (N.D. Cal. 2002).

³⁴⁶ Ibid 1124.

would be necessary to surmount technological protection measures for fair use purposes.³⁴⁷ This aspect is discussed in further detail in the next section.

3.2.6 The Interface between the Legal Protection of Technological Measures in Section 1201 and Traditional Exceptions to Copyright

3.2.6.1 The Preservation of Exceptions to Copyright: The Relation between Section 1201(c)(1) and Section 1201(a)(1)(A)

Section 1201(c)(1) of the DMCA expressly provides that the anti-circumvention and anti-trafficking provisions shall not affect any rights, remedies, limitations or defenses to copyright infringement, including fair use. It is agreed that this provision would, by interpretation, appear to permit the circumvention of an access control measure for the purposes of fair use of the contents of the work.³⁴⁸ However, as discussed above,³⁴⁹ many representatives of the copyright industries were of the view that the doctrine of fair use does not justify the violation of section 1201(a)(1)(A).³⁵⁰ It is submitted that, in terms of this view, the circumvention of an access control measure to exercise a fair use of the contents of the work would not be allowed. Scholars,³⁵¹ however, submit that it appears from section 1201(a)(1)(A) read together with section 1201(c)(1) that the circumvention of an access control measure, which protects a copyrighted work that has been lawfully obtained, would be permissible for the purposes of engaging in fair use of the contents of that work.³⁵²

It is submitted that while the aforementioned interpretation of section 1201(c)(1) is reasonable, it has already been established that the anti-circumvention provision in respect of an access control measure does not contain any exceptions that permit the circumvention of such a measure for legitimate copyright and other non-infringing uses. It is submitted that this deficit may perhaps be interpreted to mean that the United States

³⁴⁷ Manufacturers would be discouraged from inventing such devices in fear of violating the anti-circumvention legislation.

³⁴⁸ Samuelson (note 203 above) 539-540.

³⁴⁹ See Chapter III paragraph 3.2.3.3.

³⁵⁰ Samuelson (note 203 above) 539-540.

³⁵¹ Ibid.

³⁵² Ibid.

Congress never intended to permit the enforcement of exceptions to copyright to the application of section 1201(a)(1)(A). It is submitted, further, that even if the provision of section 1201(c)(1) could conceivably be applied to overcome the effect of section 1201(a)(1)(A), the next issue to be determined is whether the consequences of the anti-trafficking provisions would inhibit the enforcement of this section.

3.2.6.2 The Relation between Section 1201(c)(1) and Sections 1201(a)(2) and 1201(b)

It has been established that devices, which even facilitate legitimate non-infringing uses such as fair use, would be prohibited. Consequently, even if section 1201(c)(1) permits the circumvention of an access control measure to enable fair use of the contents of the protected work, it is submitted that section 1201(a)(2) and section 1201(b) outlaws the manufacture and distribution of the very device that would facilitate such circumvention. In the circumstances, section 1201(c)(1) cannot be reconciled with the effects of the anti-trafficking provisions. It is submitted that this assessment establishes that the general objective of the provisions of section 1201(c)(1) to promote the enforcement of exceptions such as fair is codified in principle only and is accordingly a legal fiction.

3.2.7 The Relation between Rights Control Measures and Exceptions to Copyright

Although the scope of the anti-circumvention provisions does not extend to an act of circumvention in respect of a measure that protects the rights of copyright owners, the legislative process does indicate that such a prohibition was proposed in the draft bill.³⁵³ This prohibition was removed as a result of the lobbying of the library and education representatives who declared concerns that the extension of an anti-circumvention prohibition to the act of circumvention of rights control measures would have disastrous implications for the enforcement of fair uses in the digital age.³⁵⁴ It is submitted that this omission from the DMCA is, however, insignificant as the anti-trafficking provisions of section 1201(b) clearly run counter to the expedient enforcement of the exceptions to

³⁵³ Vinje (note 39 above) 202.

³⁵⁴ Ibid. See also N Braun 'The Interface Between the Protection of Technological Measures and the Exercise of Exceptions to Copyright and Related Rights: Comparing the Situation in the United States and the European Community' (2003) 25(11) *EIPR* 496, 497.

copyright such as fair use. It has been established that section 1201(b) effectively outlaws the only tools that would enable the circumvention for legitimate non-infringing purposes of a technological measure that has been deployed to protect the rights of the copyright owner. This analysis illustrates that the provisions of section 1201(c)(1) and the objective of omitting an act of circumvention violation of a rights control measure cannot be reconciled with the prohibitions contained in the section 1201(b).

3.2.8 Summary of the Impact of the Anti-Circumvention and Anti-Trafficking Provisions of the DMCA on the Delicate Balance of the System of Copyright

It has been identified that the United States Congress attempted to draft a statute that preserved the enforcement of exceptions to copyright.³⁵⁵ Although many scholars are in agreement that the anti-circumvention and anti-trafficking provisions of the DMCA are dangerous to the system of copyright³⁵⁶ some scholars believe that the general purpose of the legislation achieves a balanced result³⁵⁷ and that the provisions should not be replaced.³⁵⁸ While cognizance must be taken of the fact that the DMCA does, in principle, represent an effort made by the United States Congress to balance the interests of copyright industries³⁵⁹ with the academic, library and consumer groups,³⁶⁰ it is agreed that the analysis of the various provisions of section 1201 and the practical enforcement thereof confirms that the copyright industries, which argued for extensive protection to cover all acts of circumvention and circumvention devices, were acceded to.³⁶¹

The purpose of the anti-circumvention and anti-trafficking provisions of the DMCA was intended to bring to an end to or minimize digital copyright piracy and encourage copyright owners to communicate their works to the public in digital content and on the

³⁵⁵ These attempts were clear in (1) not prohibiting the act of circumvention of a rights control measure, (2) requiring a rulemaking proceeding to be undertaken every three years to consider the possibility of additional exceptions to the prohibition of an act of circumvention to access control measures and (3) the provisions of section 1201(c).

³⁵⁶ Samuelson (note 203 above) 562.

³⁵⁷ J Band 'The Digital Millennium Copyright Act: A Balanced Result' (1999) 21(2) *EIPR* 92.

³⁵⁸ J M Besek 'Anti-circumvention Laws and Copyright: A Report from the Kernochan Center For Law, Media and the Arts' (2004) 27 *Colum J.L. & Arts* 385, 390.

³⁵⁹ This would include authors, producers and publishers alike.

³⁶⁰ Cohen (note 203 above) 236.

³⁶¹ *Ibid.*

Internet.³⁶² It is submitted, however, that the forceful provisions of the DMCA primarily extinguish the enforcement of exceptions to copyright, with the result that the delicate balance of the system of copyright has been diminished. It is, submitted, further that this consequence is reinforced by the interpretations of the provisions of the DMCA by the Courts.

3.2.9 Conclusion: The Deficiencies of Section 1201

It has been identified that the DMCA effectively prohibits an act of circumvention in respect of a technological measure that controls access to a copyrighted work as well as devices or services that circumvent technological measures that control access to a copyrighted work and the rights of copyright owners.³⁶³ It has also been established that it is irrelevant whether the circumvention of the technological measure or the circumvention device facilitates non-infringing legitimate uses such as exceptions to copyright.³⁶⁴

Apart from the controversial aspects relating to the introduction of a right of access identified and discussed above,³⁶⁵ it has also been established that the exceptions to the prohibition in respect of an access control measures are narrowly crafted and do not address traditional exceptions to copyright.³⁶⁶ In the circumstances, it is submitted that the circumvention of an access control measure to enforce exceptions to copyright such as fair use is prohibited. Samuelson argues that the provisions of the DMCA should be revised to supplement the narrow exceptions with a 'general purpose or other legitimate reasons' exception.³⁶⁷ This approach would ensure that acts of circumvention for non-infringing legitimate purposes such as exceptions to copyright would be permitted.³⁶⁸

³⁶² Garlick (note 37 above) 943,950.

³⁶³ See Chapter III paragraphs 3.2.2, 3.2.3 and 3.2.5.

³⁶⁴ See Chapter III paragraphs 3.2.5 and 3.2.6.

³⁶⁵ See Chapter III paragraphs 3.2.2 and 3.2.3.

³⁶⁶ See Chapter III sub-section 3.2.3.3.

³⁶⁷ Samuelson (note 203 above) 563.

³⁶⁸ Ibid 546, 563.

It is argued that the more simplistic approach would have been for the DMCA to comply with the provisions of the WCT, which requires contracting parties to provide legal protection of technological measures that protect the exclusive rights of the copyright owner and applies to an act of circumvention that violates an exclusive right of the copyright owner and thus constitutes an infringement of copyright.³⁶⁹ It is submitted that this approach would have eradicated the problems associated with extending the protection to an access control measure and would specifically relate to the protection and infringement of copyright. It is submitted, further, that this approach would have ensured the effective application of traditional copyright law in the digital age without imposing any threats to the diminution of the delicate copyright balance.

While the provisions of the WCT do not require contracting parties to extend protection against circumvention devices, it has been identified that the prohibition would be advantageous to the copyright owner's dilemma in the digital age.³⁷⁰ The inherent problem with the anti-trafficking provisions of the DMCA, however, is that they do not contain an infringement criterion.³⁷¹ In the circumstances, the anti-trafficking provisions effectively harm exceptions to copyright such as fair use.³⁷² Samuelson argues that a 'predictable, minimalist, consistent and simple legal rule'³⁷³ prohibiting the manufacture and distribution of 'technology intentionally designed or produced to enable copyright infringement'³⁷⁴ would have eradicated the dangers that the present anti-trafficking provisions currently present.

In summation it is agreed that the provisions of the DMCA should be revised.³⁷⁵ It is submitted that the legal protection of access control measures must be removed. It is submitted that this would eliminate the consequences of providing the copyright owner with extensive protection, which expands beyond the parameters of copyright, and would effectively promote access to information by the public and facilitate the enforcement of

³⁶⁹ Ibid 521.

³⁷⁰ See Chapter II.

³⁷¹ Samuelson (note 203 above) 533. See also Vinje (note 39 above) 205.

³⁷² Samuelson (note 203 above) 519, 548-549, 573.

³⁷³ Ibid 533.

³⁷⁴ Samuelson (note 203 above).

³⁷⁵ Ibid 533. See also Vinje (note 39 above) 205.

copyright exceptions such as fair use for the purposes of education and research. It is agreed that the legal protection of rights control measures against circumvention and the legal protection against the trafficking in circumvention devices must be amended to include an infringement criterion.³⁷⁶ It is submitted that this would ensure that the system of protection prohibits conduct that violates the exclusive rights of the copyright owner and the device that facilitates the infringing conduct. It follows from this submission that the circumvention of rights control measures to facilitate legitimate non-infringing conduct such as copyright exceptions would be permitted as the equipment that would be required to enforce the exception would be available. It is submitted that the above revisions would ensure compliance with the provisions of the WCT³⁷⁷ and would restore the delicate balance of the system of copyright. The next section undertakes a comparative analysis of the implementation model of the provisions of Article 11 of the WCT by the European Union.

³⁷⁶ Ibid.

³⁷⁷ It has been acknowledged that Article 11 of the WCT only relates to an act of circumvention. It has further been identified that the extension of the protection to circumvention devices would, if carefully formulated within the parameters of the WCT and the boundaries of copyright, be beneficial to combating the infringement of copyright.

3.3 Part B: Implementation of Article 11 Of The WCT by the European Union - The European Parliament and Council Directive of 22 May 2001 on the Harmonisation Of Certain Aspects of Copyright and Related Rights in the Information Society

3.3.1 Introduction

On 22 June 2001 the European Union adopted the European Parliament and Council Directive on the Harmonisation of Certain Aspects of Copyright and Related Rights in the Information Society.³⁷⁸ The purpose of the Directive is to harmonise members' differing legislation relating to copyright and related rights in order to facilitate the establishment of an internal market and the institution of a system that would ensure that competition in the market is not distorted³⁷⁹ and to further prepare the European Union for ratification and implementation of the provisions of the WCT and WPPT that respond to the threats of digital copyright piracy.³⁸⁰ The European Union at present consists of 25 members.³⁸¹ To date seventeen members have implemented the Directive.³⁸²

It has been suggested that the Directive closely mirrors the controversial provisions of the DMCA.³⁸³ The areas of concern are analogous to that of the DMCA. In fact critics³⁸⁴ have argued that the provisions of the Directive are more restrictive than the controversial provisions of the DMCA.³⁸⁵ The most significant controversy is the effect of the

³⁷⁸ Directive 2001/29/EC of the European Parliament and Council of 22 May 2001 Official Journal L 167, 22/06/2001 P. 0010 – 0019 (hereinafter referred to as 'the Directive') available online <http://europa.eu.int> (date accessed: 7 January 2005).

³⁷⁹ See Recital 1 of the Directive.

³⁸⁰ See Recital 15 of the Directive.

³⁸¹ The member states of the European Union are: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, The Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, United Kingdom. Information obtained from http://en.wikipedia.org/wiki/Eu_memebr_states (date accessed: 14 February 2005).

³⁸² U Gasser and M Girsberger 'Transposing the Copyright Directive: Legal Protection of Technological Measures in EU Member States A Genie Stuck in the Bottle?' (2004) *Berkman Publication Series* No. 8 available online <http://cyberlaw.law.harvard.edu/publications> (date accessed: 7 January 2005). Of the 17 members that have implemented the Directive, 3 of them have not formally implemented the Directive.

³⁸³ Dr M Kretschmer 'Digital Copyright: The End of an Era' (2003) 1 www.cippm.org.uk (date accessed: 22 November 2004). M Broersma 'Europe Heading down DMCA route, warns think tank' <http://news.zdnet.co.uk/business/legal/0,39020651,39116390,00.htm> (date accessed: 16 April 2005)

³⁸⁴ See J Leyden 'Alan Cox attacks the European DMCA' <http://www.theregister.co.uk> (date accessed: 16 April 2005).

³⁸⁵ Ibid.

provisions relating to the implementation of Article 11 of the WCT on the traditional system of copyright.³⁸⁶ Article 6 of the Directive regulates the legal protection of technological measures within the European Union. The sections that follow will examine Article 6 in detail to determine the relation between the legal protection of technological measures and the enforcement of traditional exceptions to copyright such as fair use. This part of the study, similar to Part A, essentially investigates, in the context of the WCT, whether the balancing of interests in the traditional system of copyright has been preserved by the technological protection provisions of the Directive.

3.3.2 Summary of the Anti-Circumvention and Anti-Trafficking Provisions of the Directive: Article 6(1) and Article 6(2)

The provisions of Article 6 oblige member states to provide adequate legal protection against the circumvention of any effective technological measures³⁸⁷ as well as the manufacture, importation, distribution, sale, rental, advertisement for sale or rental, or possession for commercial purposes of devices, products or components or the provision of services.³⁸⁸ It is submitted that the Directive, in effect, prohibits acts of circumvention of technological measures and the trafficking in circumvention devices and services.

A technological measure is defined as any technology, device or component which, in the normal course of its operation, is designed to prevent or restrict acts, in relation to protected works, that are not authorized by the copyright owner.³⁸⁹ A technological measure is ‘effective’ within the framework of the protection provided in the Directive where the ‘use of a protected work ... is controlled by application of an access control or protection process, such as encryption, scrambling or other transformation of the work or other subject matter or a copy control mechanism, which achieves the protection objective’.³⁹⁰

³⁸⁶ See Braun (note 354 above) 498.

³⁸⁷ Article 6(1).

³⁸⁸ Article 6(2).

³⁸⁹ Article 6(3).

³⁹⁰ Article 6(3).

3.3.3 Analysis of the Legal Protection against the Act of Circumvention of Technological Measures

While an interpretation of the definition would, by implication, require member states to provide protection in respect of a rights control measure only as this measure would be designed to prevent or restrict acts that are not permitted by the copyright owner or provided by the law,³⁹¹ the definition does not expressly distinguish between the protection of an ‘access control’ and a ‘rights control’ measure.³⁹² The Directive does, therefore, not clarify whether circumvention must be prohibited by member states in respect of access control measures.³⁹³ It is submitted that this arrangement is contrary to the provisions of the DMCA, which offers a clear distinction between the two forms of technological measures and accords protection to both forms of measures.³⁹⁴

It has been convincingly argued that the Directive does not extend protection to an access control measure, as an access right does not fall within the exclusive rights of a copyright owner.³⁹⁵ Nora Braun appropriately submits, however, that a proper interpretation of the language expressed in the definition of a technological measure which specifically refers to an ‘access control’ combined with the objective of the Directive decisively resolves the uncertainty created by Article 6(3).³⁹⁶ It is submitted that the Directive, like the DMCA, consequentially extends protection to an access control measure that is deployed by a copyright owner to control the use of a copyrighted work, notwithstanding that the protection extends beyond the prerogatives of copyright. It is submitted, however, that the Directive, unlike its counterpart, prohibits the circumvention of a rights control measure as well. In this regard it has been established that the exclusion of rights control measures from the anti-circumvention provisions of the DMCA is insignificant.³⁹⁷

³⁹¹ Braun (note 354 above) 498-499.

³⁹² Ibid. See also Gasser and Girsberger (note 382 above) 9.

³⁹³ Ibid.

³⁹⁴ Section 1201(a)(1) prohibits the circumvention of access control measures, section 1201(a)(2) and 1201(b) respectively prohibit the manufacture and distribution of devices that are designed to circumvent both access control measures and rights control measures.

³⁹⁵ Braun (note 354 above) 498 where she draws on the argument raised by the Nordic Countries that ‘Art 6(3) excludes “access control” technology as such technology does not necessarily prevent an act that would constitute an infringement of copyright or related rights’.

³⁹⁶ Braun (note 354 above) 498-499.

³⁹⁷ See Chapter III Part A.

3.3.4 Analysis of the Legal Protection against the Trafficking in Circumvention Devices

It has been established that the Directive affords protection to both ‘access control’ and ‘rights control’ measures. Member states are thus required to protect copyright owners against the manufacture and distribution of devices and services that are (1) promoted, advertised or marketed for the purpose of circumvention,³⁹⁸ or (2) have only a limited commercially significant purpose or use other than to circumvent,³⁹⁹ or (3) are primarily designed, produced, adapted or performed for the purpose of enabling or facilitating the circumvention of a rights control measure or an access control measure.⁴⁰⁰ Apart from the fact that the prohibition in the Directive contains a knowledge requirement on the part of the manufacturer,⁴⁰¹ the criteria adopted to determine the prohibition of devices or technology is similar to the anti-trafficking provisions of the DMCA. It is submitted that the determination of unlawfulness of the circumvention device, similarly, focuses on ‘circumvention’ alone rather than ‘circumvention for infringing purposes’. In this regard, it is submitted that the formulation of this provision is contrary to the comments made by the Delegation of the European Community at the Diplomatic Conference where it was underscored that the prohibition of the circumvention of technological measures must be linked to the infringement of the copyright rights.⁴⁰²

3.3.5 The Interface Between the Legal Protection of Technological Measures and Exceptions to Copyright

It has been established that acts of circumvention in respect of access control and rights control measures as well as the trafficking in circumvention devices that enable such circumvention is prohibited under the Directive.⁴⁰³ The crucial question is the extent to which the prohibitions impact on the enforcement of legitimate non-infringing activities such as exceptions to copyright. The definition of technological measures appears to

³⁹⁸ Article 6(2)(a).

³⁹⁹ Article 6(2)(b).

⁴⁰⁰ Article 6(2)(c).

⁴⁰¹ Article 6(1). See Kerr, Maurushat and Tacit (note 158 above) 45.

⁴⁰² WIPO (note 94 above) 79 paragraph 529.

⁴⁰³ Chapter III Part B paragraphs 3.3.2, 3.3.3 and 3.3.4.

provide that the circumvention of an access or rights control measures would be permitted to enforce exceptions to copyright as these activities are ‘provided by law’.⁴⁰⁴ In the same way circumvention devices that would facilitate non-infringing legitimate uses such as exceptions to copyright also appear to be excluded from the anti-trafficking provisions.⁴⁰⁵ It is submitted that this interpretation is, at first glance, in parity with the primary goal of the WCT, which emphasizes the need to preserve the delicate balance between the rights of copyright owners and the interests of the public. The provisions of Article 5 and Article 6(4) of the Directive, however, confound this interpretation.⁴⁰⁶ Each will be examined in turn.

3.3.5.1 Article 5: Limitations of and Exceptions to Copyright

Article 5 of the Directive regulates the provisions relating to limitations of and exceptions to the copyright owner’s rights of reproduction,⁴⁰⁷ communication to the public and making available to the public.⁴⁰⁸ Article 5 is made up of a long list of exhaustive exceptions.⁴⁰⁹ In the circumstances member states may not introduce additional exceptions.⁴¹⁰ The digital age has the tendency to explode with new technologies, which would require novel uses.⁴¹¹ The closed list of exceptions in Article 5 prevents members from introducing new exceptions to suit these changes.⁴¹² It is submitted that this direction thus ignores Article 10 of the WCT, which allows for the formulation of new limitations and exceptions that are appropriate to the digital network environment.⁴¹³

It is noted that the only instance where the Directive deals with the application of existing limitations and exceptions is under Article 5(3)(o). The continued application by member

⁴⁰⁴ Esler (note 317 above) 596-597.

⁴⁰⁵ Ibid.

⁴⁰⁶ Esler (note 317 above) 597.

⁴⁰⁷ Article 2 of the Directive relates to the reproduction right that it requires Members States to transpose into their national laws.

⁴⁰⁸ Article 3 relates to the right of communication to the public of works and the right of making available to the public other subject matter that it requires Member States to transpose into national legislation.

⁴⁰⁹ Recital 32 to the Directive. See also Kretschmer (note 383 above) 6.

⁴¹⁰ Ibid. See also Esler (note 317 above) 598.

⁴¹¹ Kretschmer (note 383 above) 6.

⁴¹² Ibid.

⁴¹³ Article 10(1) of the WCT and Agreed Statement concerning Article 10.

states of existing limitations and exemptions is, however, restricted to cases of ‘minor importance’ and the uses must further relate to analogue uses that do not affect the free circulation of goods and services within the European Union. Although the Directive recognizes existing exceptions and limitations under Article 5(3)(o), it is argued that as the enforcement thereof is restricted to the analogue environment, the Directive fails to give meaning to the provisions of the WCT, which provides for existing limitations and exceptions, which are considered acceptable under the Berne Convention, to be extended and applied into the digital environment.⁴¹⁴

The Directive, most significantly, leaves the transposition of exceptions into national law to the discretionary powers of the individual member states. The Directive also provides for conditions that must be satisfied in order for member states to grant exceptions and limitations in terms of Article 5.⁴¹⁵ The conditions restate the three-step test of the Berne Convention.⁴¹⁶ The discretionary power does not extend to Article 5(1), which provides a mandatory obligation for member states to exempt certain acts of reproduction from the right of reproduction. The aforementioned exception is significant as it addresses an essential issue of the digital age by appropriately providing that member states are required to limit the scope of the right of reproduction in relation to temporary copies to the certain circumstances.

The full implications of Article 5, through the discretionary powers granted, however indicates that the Directive inadequately motivates member states to preserve exceptions to copyright in the digital age. This is contrary to objectives of the Directive. Article 5 has been criticized in its entirety.⁴¹⁷ It is argued that the Directive should have adopted an approach that would have compelled member states to first, carry forward existing exceptions to the digital age, second, implement the listed exceptions and third, provide them with the flexibility to introduce suitable exceptions, subject to the provisions of

⁴¹⁴ Article 10(2) of the WCT and Agreed Statement concerning Article 10.

⁴¹⁵ Article 5(5) of the Directive.

⁴¹⁶ Ibid.

⁴¹⁷ B Hugenholtz ‘Why the Copyright Directive is Unimportant, and Possibly Invalid’ (2000) 4 *available online* <http://www.ivir.nl/publications/hughenoltz/opinion-EIPR.html> 4 (date accessed: 11 February 2005).

Article 10 of the WCT, which would be conducive to promoting, for example, access to information in the digital age.

3.3.5.2 Analysis of the Mechanism of Article 6(4)

Article 6(4) of the Directive endeavors to clarify the interaction between the legal protection of technological measures and the efficacy of exceptions.⁴¹⁸ The provisions of Article 6(4) concentrate on circumstances where beneficiaries of certain exemptions are constrained in their ability to exercise exceptions as a result of technological measures that have been deployed by the copyright owner to protect the contents of the work.⁴¹⁹ This provision provides as follows:-

Notwithstanding the legal protection provided for in paragraph 1, in the absence of voluntary measures taken by rightholders, including agreements between rightholders and other parties concerned, Member States shall take the appropriate measures to ensure that rightholders make available to the beneficiary of an exception or limitation provided for in national law in accordance with Article 5(2), (2)(c), 2(d), 2(e) 3(a),(3(b) or 3(e) the means of benefiting from that exception or limitation, to the extent necessary to benefit from that exception or limitation and where that beneficiary has legal access to the protected work or subject-matter concerned.

A Member State may also take such measures in respect of a beneficiary of an exception or limitation provided for in accordance with Article 5(2)(b), unless reproduction for private use has already been made possible by rightholders to the extent necessary to benefit from the exception or limitation concerned and in accordance with the provisions of Article 5(2)(b) and (5), without preventing rightholders from adopting adequate measures regarding the number of reproductions in accordance with these provisions.

The technological measures applied voluntarily by rightholders, including those applied in implementation of voluntary agreements, and technological measures applied in implementation of the measures taken by Member States, shall enjoy the legal protection provided for in paragraph 1.

The provisions of the first and second paragraphs shall not apply to works or other subject matter made available to the public on agreed contractual terms in such a way that members of the public may access them from a place and at a time

⁴¹⁸A M Casellati 'The Evolution of Article 6.4 of the European Information Society Copyright Directive' (2001) 24 *Columbia VLA J.L. & Arts* 369, 374.

⁴¹⁹ Braun (note 354 above) 499.

individually chosen by them.”

3.3.5.2.1 The Relationship between the Legal Mechanism of Article 6(4) and the Enforcement of Exceptions to Copyright: sub-paragraph 2 of Article 6(4)

Article 6(4) obliges members to ensure that copyright owners make their works available to beneficiaries of certain public policy exceptions to enable them to benefit from the purpose of the exemptions. These include:-

- (1) reproduction resulting from a photographic technique or a similar process.⁴²⁰
- (2) reproduction made by publicly accessible libraries, educational establishments or museums.⁴²¹
- (3) reproduction made by broadcasting organizations for ephemeral recordings.⁴²²
- (4) reproduction of broadcasts made by social institutions such as hospitals and prisons.⁴²³
- (5) reproduction or communication to the public for the sole purpose of illustration for teaching or scientific research.⁴²⁴
- (6) reproduction or communication to the public for the benefit of disabled persons.⁴²⁵
- (7) reproduction or communication to the public for public security or reporting of administrative, parliamentary or judicial proceedings.⁴²⁶

This paragraph provides that the ‘anti-circumvention rule,’⁴²⁷ that is the act of circumvention of the technological protection measure, provided for in Article 6(1) shall not be applicable within the context of this provision. Article 6(4) imposes an obligation on members to take necessary measures to ensure that beneficiaries benefit from the objectives of the exceptions only in respect of a person who conducts the act of circumvention.

⁴²⁰ Article 5(2)(a).

⁴²¹ Article 5(2)(c).

⁴²² Article 5(2)(d).

⁴²³ Article 5(2)(e).

⁴²⁴ Article 5(3)(a).

⁴²⁵ Article 5(3)(b).

⁴²⁶ Article 5(3)(e).

⁴²⁷ Casellati (note 418 above) 377.

Members are required to intervene only in the event that voluntary measures between copyright owners and other parties are absent.⁴²⁸ It has been argued that the provision effectively promotes the copyright owner's freedom to contract with other parties,⁴²⁹ which could effectively challenge the enforcement of fair use exceptions⁴³⁰ and the ability to protect the balancing of interests of the system of copyright.⁴³¹ The intervention by members to promote the objectives of Article 6(4) is further conditional upon the beneficiary of the exemption having obtained legal access and that the use is limited to the extent necessary to benefit from the exception.⁴³²

The Directive fails to afford direction as to what the notion of 'voluntary measures' is.⁴³³ It is however agreed that voluntary measures would essentially require the deployment of technological measures that are designed to interact with legitimate exceptions and thus permit, without difficulty, the beneficiary of the exemption to make legitimate uses of the contents of the protected work.⁴³⁴ Recital 51 of the Directive, although it provides minimal guidance, indicates that voluntary measures would include agreements between copyright owners and other parties. The uncertainty regarding the scope Article 6(4) is further complicated as the Directive does not articulate the nature of the agreement that is required within the context of Article 6(4).⁴³⁵ It is appropriately argued that the 'reference to agreements ...envisages licensing agreements and particular laws to ensure the availability of works for public purposes'.⁴³⁶

⁴²⁸ Article 6(4).

⁴²⁹ Casellati (note 418 above) 377 where it is argued that the Article 6(4) 'increases freedom of contract between copyright owners and other parties concerned. This policy will encourage rightholders to conclude these agreements in order to avoid the intervention of Member States'. This policy is controversial as copyright owners have the ability to unilaterally formulate standard form contracts that may still restrain the ability of users to exercise exceptions. See also Kerr, Maurushat and Tacit (note 158 above) 47.

⁴³⁰ Esler (note 317 above) 601-602 where he argues that the voluntary measures requirement of Article 6(4) 'envisions collusion among rights holders and others to standardize (and hence limit) the technological means available for consumers to exercise exceptions under Article 5 of the Directive'.

⁴³¹ See Kerr, Maurushat and Tacit (note 158 above) 47 where they comment on the unlikelihood of achieving a balance in a situation where the 'bargaining power of the parties is disparate'.

⁴³² Casellati (note 418 above) 378.

⁴³³ Hugenholtz (note 417 above) 3.

⁴³⁴ Copenhagen (note 115 above) 444 where it is submitted that this phrase appears to envisage 'technologies that are sufficiently transparent to permit easy access for lawful uses'.

⁴³⁵ Hugenholtz (note 417 above) 3.

⁴³⁶ Copenhagen (note 115 above) 444.

It is argued that the importation of rational explanations for the expressions reflected in the Directive does not resolve the complications associated therewith as the problems keep treading between the lines. For example, the Directive establishes a mandatory mechanism within Article 6(4) for members to transpose into their national laws. This mechanism aspires to respect the boundaries of the copyright system in attempting to strike a balance between the legal protection of technological measures and the exercise of limitations and exceptions that are contained in the Directive.⁴³⁷ It is argued that the Directive itself, however, disappointingly fails to facilitate the process forcefully: apart from the aforementioned difficulties, the Directive does not address what ‘appropriates measures’⁴³⁸ must be taken by members to ensure that copyright owners make available to beneficiaries the means to enable them to benefit from the exceptions contained in the Directive and further, it neglects to meticulously explain the nature of the ‘means’ copyright owners should supply to make possible the benefit of the exception.⁴³⁹

A strict interpretation of Article 6(4) would lead to the conclusion that members’ obligations are restricted to the aforementioned exceptions.⁴⁴⁰ It is, therefore, understood, that members must intervene and facilitate circumvention in a circumstance where, for example, a disabled person is restricted in his ability to make reproductions of the contents of a copyrighted work as the copyright owner has not taken the necessary voluntary measures to ensure that the technological measure deployed to protect the work allows him to benefit from the exemption in respect of disabled persons.⁴⁴¹ It is submitted that the same interpretation would apply to the other six exemptions. It follows from the interpretation of Article 6(4) that circumvention would not be facilitated in respect of exceptions listed in Article 5 but which are not listed in Article 6(4).⁴⁴² It is submitted that members are, accordingly, not required to intervene and facilitate the circumvention

⁴³⁷ Gasser & Girsberger (note 382 above) 10 and Braun (note 354 above) 500.

⁴³⁸ Hugenholtz (note 417 above) 3.

⁴³⁹ Casellati (note 418 above) 399.

⁴⁴⁰ Esler (note 317 above) 603 where it is submitted that Article 6(4) must be seen as a limiting provision and that it is meant to restrict members from intervening in respect of all exceptions.

⁴⁴¹ Article 6(4) read with Article 5(3)(b).

⁴⁴² Article 6(4) read with Article 5(2)(a),(2)(c),(2)(d),(2)(e),(3)(a) and (3)(e). See also Esler (note 317 above) 601 where it is submitted that a possible interpretation of the Directive is that the exceptions listed in Article 6(4) would constitute a basis for circumventing technological protection measures.

of a technological measure to ensure that the beneficiaries of exceptions, which are incorporated into national legislation but excluded from the scope of Article 6(4), benefit from the exemptions.

Further, while members are obliged to intervene in respect of the aforementioned exceptions they are at liberty to decide whether or not to incorporate these exceptions into their national legislation.⁴⁴³ In the circumstances members' capacities to intervene to ensure that the beneficiaries of the aforementioned exceptions benefit from the permitted uses is dependant upon whether they have implemented the exceptions into legislation.⁴⁴⁴

The effect of Article 6(4) in preventing members from adopting a flexible approach, within the context of the Article 6(4) mechanism, to preserve the delicate balance of the system of copyright can be illustrated as follows: the reproduction of a work for fair use purposes by the press⁴⁴⁵ is excluded from the mechanics of Article 6(4). If a copy control measure thus prevents the press from copying a work that is the subject of copyright, the circumvention of the control measure by the press is prohibited under Article 6(1) and second, the circumvention device that would be required by the press to circumvent the control measure is outlawed in terms of Article 6(2), notwithstanding the fact that the circumvention device would enable fair use. It is submitted that the dilemma would, further, be aggravated as the member is not obliged to intervene and guarantee that the press would benefit from the exception, notwithstanding that it is an exception that has been adopted in its legislation. The implications would be the same for the other exemptions that have been excluded from the scope of Article 6(4).

3.3.5.2.2 Private Copying: sub-paragraph 2 of Article 6(4)

The provisions of this sub-paragraph provide members with a discretionary power to transpose into their national legislation a system that requires them to take measures to

⁴⁴³ This is a result of the discretionary power provided to members in Article 5.

⁴⁴⁴ W Basler 'Technological Protection Measures in the United States, the European Union and Germany: How Much Fair Use Do We Need in the "Digital World"?' (2003) 8(13) *Virginia Journal Of Law & Technology*, 16.

⁴⁴⁵ Article 5(3)(c).

ensure that the means to benefit from the exemption relating to a reproduction made by a person for private use as contained in Article 5(2)(b) is provided.⁴⁴⁶ This exemption is referred to as the ‘private copying exception’.⁴⁴⁷ The Directive qualifies a member’s ability to provide the necessary means should such a system be incorporated into its legislation: the member is required to provide the means necessary for the exercise of the exception if the reproduction for private use has not already been made possible by the copyright owner to the extent necessary to benefit from the exception.⁴⁴⁸

The negotiation process regarding the contents of Article 5(2)(b) is significant to mention to understand the different management of the relationship between technological protection measures and private copying. The draft proposals indicated a tendency to implement a distinction between analogue and digital copying.⁴⁴⁹ The primary basis for this distinction appears to have resulted from concerns that digital private copying was extensive, more significant than analogue private copying and it was expected to have an economic impact on copyright owner’s interests as well as the development of the information society.⁴⁵⁰

The issue could, however, not be resolved and in the circumstances Article 5(2)(b) left the issue to be decided by members whether or not to include in their national legislation a private copying exception to the right of reproduction.⁴⁵¹ The Directive, further, does not distinguish in Article 5(2)(b) between analogue private copying and digital private copying.⁴⁵² Recital 38 to the Directive does, however, appear to facilitate members’ implementation of an analogue private copying exception⁴⁵³ by providing that ‘due account should be taken of the differences between digital and analogue private copying and a distinction should be made in certain respects between them’.⁴⁵⁴

⁴⁴⁶ Article 6(4).

⁴⁴⁷ Casellati (note 418 above) 379.

⁴⁴⁸ Article 6(4).

⁴⁴⁹ Casellati (note 418 above) 379-386.

⁴⁵⁰ Ibid. These concerns are confirmed in Recital 38 of the Directive.

⁴⁵¹ Recital 38 of the Directive.

⁴⁵² Casellati (note 418 above) 382.

⁴⁵³ Ibid where it is submitted that ‘the combination of Article 5(2)(b) and Recital 38 empowers a Member State to decide only to allow the analog, and not the digital, private copying exception’.

⁴⁵⁴ Recital 38 of the Directive.

3.3.5.2.3 Legal Protection of Voluntary Measures taken by Copyright Owners: sub-paragraph 3 of Article 6(4)

This subparagraph provides that the technological measures⁴⁵⁵ that are applied voluntarily by copyright owners, or in the implementation of the measures enforced by members will benefit from the legal protection provided for in Article 6(1).⁴⁵⁶

3.3.5.2.4 The Relationship between Copyright Law, the Legal Protection of Technological Measures and Contract Law: sub-paragraph 4 of Article 6(4)

This sub-paragraph of Article 6(4) regulates the interaction between copyright, technological protection measures and contract.⁴⁵⁷ It provides that the first and second sub-paragraphs of Article 6(4) does not apply to works made available to the public in on agreed contractual terms that enables members of the public to access them from a place and at a time individually chosen by them.⁴⁵⁸ This paragraph reflects the new right contained in Article 3(2) of the Directive, which relates to the exclusive right of the copyright owner to authorize the making available to the public, by wire or wireless means, in such a way that members of the public may access them from a place and at a time individually chosen by them.⁴⁵⁹ It is understood that the phrase ‘in such a way that members of the public may access them from a place and at a time individually chosen by them’ embraces the interactive nature of the Internet.⁴⁶⁰ It is submitted that the provision contained in this sub-paragraph effectively prevents members from taking appropriate measures to ensure that the beneficiaries benefit from the public policy exceptions and the private copying exception in the environment of the Internet, where the works have been made available in terms of contractual agreements. This provision essentially privileges contract law over copyright law while it conversely restricts members from

⁴⁵⁵ Casellati (note 418 above) 386. This refers to the ‘circumvention tools’ voluntarily provided by copyright owners or, in their absence, by members in the enforcement of measures required in Article 6(4).

⁴⁵⁶ Ibid.

⁴⁵⁷ Ibid.

⁴⁵⁸ Article 6(4).

⁴⁵⁹ Article 6(4).

⁴⁶⁰ Copenhagen (note 115 above) 444-445.

intervening.⁴⁶¹ It is submitted that the restriction on members' abilities to intervene could have overwhelming consequences for the system of copyright.

Alvise M Casellati submits, in determining the meaning of this sub-paragraph, that Recital 53 of the Directive, which was adopted to clarify the relationship between copyright law and contract law confuses the process of interpretation as it 'suggests the possibility that on-demand services could not be governed by contractual arrangements'.⁴⁶² It is further stated that such an interpretation would suggest that a 'click-on license would not be considered a contractual arrangement',⁴⁶³ and it could never have been the intention of the Directive to exclude electronic contracts from the scope of such arrangements.⁴⁶⁴ It is accordingly submitted that contractual arrangements would include electronic contracts.

Having established the aforementioned, it is submitted that the expression 'agreed contractual terms' contained in paragraph 6 of Article 6(4) is considerably misleading, as electronic contracting would conceivably envisage standard form contracts that consist of predetermined, unfair and complicated terms and conditions that unanimously favour the interests of the copyright owner thus undermining or possibly even negating the enforcement of fair use exceptions by the other party to the contract.⁴⁶⁵ Casellati, however, advocates that as the sub-paragraph refers to 'agreed contractual terms ...consumers will be protected from unfair adhesion contracts'.⁴⁶⁶

⁴⁶¹ Casellati (note 418 above) 392.

⁴⁶² Ibid 388.

⁴⁶³ Ibid.

⁴⁶⁴ Ibid.

⁴⁶⁵ The complex situation that a user who is the subject of a contract of this nature is illustrated as follows: the user is not only prevented from enjoying the benefits of exceptions to copyright by the contractual terms but he is further restricted in his ability to do so, albeit that he has legitimate access to the contents of the work, as a result of a technological measure that the copyright owner has deployed to protect the contents of his work. The copyright owner has, moreover, not provided the user with the circumvention tools to enable him to enjoy the benefit of the exception. Unlike the beneficiaries of the seven public policy exemptions and the private copying exception that benefit from the mechanism provided for in sub-paragraph 1 of Article 6(4) which enable them to exercise the exception, this sub-paragraph restricts members from intervening.

⁴⁶⁶ Casellati (note 418 above) 389. It is submitted in this regard that an unassuming user who lawfully obtains access to the contents of a work in terms of a non-negotiable electronic contract would probably not appreciate the significance of the prejudice caused by the unfair terms on his ability to, for example, make a

The consequences of this paragraph-privileging contract over copyright could significantly prejudice the enforcement of traditional exceptions in the digital age.⁴⁶⁷ Copyright owners have, in terms of this sub-paragraph, the dual benefit of contract law and the legal protection of technological measures which members are not authorized to defeat for the purposes of enabling beneficiaries to enforce exceptions. This sub-paragraph further amplifies concerns noted by scholars of the negative impact of electronic contracts on exceptions such as fair use in the digital environment,⁴⁶⁸ particularly the Internet.

The Directive, in terms of sub-paragraph 1 of Article 6(4), promotes the use of contractual agreements by the copyright owner with regard to the aforementioned exemptions. Members are obliged to intervene in terms of the requirements of sub-paragraph 1 in the absence of voluntary measures by copyright owners, clearly indicating the preference of contract law over copyright law. The Directive further increases electronic contracting and excludes member states from intervening in terms of sub-paragraph 4 of Article 6(4). In light of the above analysis it is agreed that the Directive has the effect, in the context of Article 6(4), of establishing a general principle that contract law will overcome copyright law in the digital age.⁴⁶⁹

3.3.6. Conclusion

The mechanism of Article 6(4) has received approval as compared to the provisions of the DMCA as it establishes a system whereby copyright owners would make works more accessible to permit fair uses of protected works.⁴⁷⁰ It has also been identified as a means to resolve the conflict between the legal protection of technological measures and the enforcement of exceptions.⁴⁷¹

private analogue copy of the contents of the work. In the circumstances, it is most likely that he will not pursue litigation proceedings to ensure that he obtains a copy of the work.

⁴⁶⁷ Kerr, Maurushat and Tacit (note 148 above) 47.

⁴⁶⁸ Copenhagen (note 115 above) 445.

⁴⁶⁹ Casellati (note 418 above) 391.

⁴⁷⁰ Basler (note 444 above) 1.

⁴⁷¹ Braun (note 354 above) 499.

It is submitted that the mechanism provides an innovative means to overcome the problems identified in respect of the interaction between the legal protection of technological measures and exceptions to copyright, as it requires constructive steps to be taken by the member and the copyright owner to ensure that the effective enforcement of an exception to copyright. It is, however, agreed that the mechanism of Article 6(4) is flawed.⁴⁷² The provisions of Article 6(4) have been criticized as being complicated and ambiguous with the practical enforceability of the mechanism being questioned.⁴⁷³ First, the obligations of members to intervene are not extended to the provisions of Article 6(2). Braun concludes that, in not extending the scope of Article 6(4) to the provisions of Article 6(2), the Directive effectively restricts members from introducing any exceptions to the anti-trafficking provisions.⁴⁷⁴ It is submitted that the implication of this omission is that, although members are required to intervene to ensure the protection of certain exceptions to copyright, members are not given the authority to facilitate the manufacture of circumvention devices which have been outlawed in terms of Article 6(2) but which would be required to enforce the exception. In the circumstances, the effectiveness of the mechanism depends on a powerful implementation by members that would provide the means to compel copyright owners:-

to permit the exercise of the excepted use...Otherwise “the user cannot be provided with a device which enables the circumvention of the technological measure” because these devices remain outlawed.⁴⁷⁵

It is submitted that the analysis of the provisions of Article 6(4) reflects an inadequate attempt to reconcile the enforcement of exceptions to copyright with the legal protection of technological measures. While the purposes of the mechanism introduced in Article 6(4) is commendable, it is agreed that the collective effect of the provisions of Article 6(4) and Article 5 of the Directive, as discussed in this chapter, unquestionably facilitates the destabilization of the balance that has been maintained by the traditional system of

⁴⁷² See generally Casellati (note 418 above).

⁴⁷³ Ibid. See also Esler (note 317 above) 602.

⁴⁷⁴ Braun (note 354 above) 499.

⁴⁷⁵ Basler (note 444 above) 16.

copyright in the analogue environment. Scholars have even gone to the extent of disapproving completely of Article 6(4).⁴⁷⁶

The mechanism of Article 6(4) has been criticized as being far more restrictive than the provisions of the DMCA.⁴⁷⁷ In this regard it has been argued⁴⁷⁸ that the provisions of the DMCA are flexible as it has the ability, in terms of the rulemaking proceeding, to permit additional exceptions to the act of circumventing an access control measure and may accordingly address the restriction on fair use periodically.⁴⁷⁹ The mechanism of Article 6(4), on the other end, restricts members' abilities to intervene in respect of specific exceptions.⁴⁸⁰ In this regard, it has been identified⁴⁸¹ that the development of copyright exceptions, in terms of the rulemaking proceeding of the DMCA, to the circumvention of access control measures is codified in principle only. It is, therefore, submitted that both the implementation models of Article 11 of the DMCA and the Directive effectively constrain the enforcement of exceptions such as fair use, the potential evisceration of exceptions and the demise of the balance of the traditional system of copyright in the digital age. The implementation models of the DMCA and the Directive clearly extend beyond the requirements of the WCT and the prerogatives of copyright law. They demonstrate that the adoption of extensive protection for copyright owners would be detrimental to the traditional system of copyright. They illustrate, more specifically, that the extensive legal protection of technological protection measures could be destructive to the efficacy of exceptions to copyright such as fair use. Section 1201 of the DMCA and Article 6(4) of the Directive represent conspicuous models of what not to do in the digital age to ensure that the system of traditional copyright and hence exceptions such as fair use is preserved.

The next chapter examines the South African Copyright Act, its ability to meet the challenges of the digital age and the desirability to modify.

⁴⁷⁶ Esler (note 317 above) 602

⁴⁷⁷ Casellati (note 418 above) 400.

⁴⁷⁸ Ibid.

⁴⁷⁹ Ibid.

⁴⁸⁰ Ibid.

⁴⁸¹ See Chapter III Part A.

IV COPYRIGHT LAW IN SOUTH AFRICA

4.1 Introduction

It has been identified that the digitization of copyrighted works and the potential of digital technologies and computer networks such as the Internet to facilitate unauthorized reproduction and distribution of works has inundated the international community with complex issues surrounding the effective enforcement of traditional copyright legislation in the digital environment.⁴⁸² The dissertation first, presented the discussions of various nations at the Diplomatic Conference, which was convened by the WIPO to reform international copyright rules that would respond appropriately to the advanced issues of the digital age,⁴⁸³ second, evaluated significant provisions of the WCT, which was adopted at the Diplomatic Conference to modify as well as add new copyright rules that were considered fundamental in the protection of copyright in the digital environment⁴⁸⁴ and third, examined the implementation models of Article 11 of the WCT by the United States and the European Union.⁴⁸⁵

Apart from the aforementioned nations, various other contracting parties determined that their national copyright laws were inadequate and failed to effectively protect copyrighted works and accordingly ratified the WCT.⁴⁸⁶ South Africa is one of the contracting parties to the WCT thus indicating that the participating delegation considered that the South African Copyright Act⁴⁸⁷ required revision to respond to the advanced digital challenges. South Africa has, however, not yet ratified the said treaty. Thus this part of the study considers the sustainability of the current Copyright Act in the digital age.

⁴⁸² See Chapter I.

⁴⁸³ See Chapter II.

⁴⁸⁴ Ibid.

⁴⁸⁵ See Chapter III.

⁴⁸⁶ See WIPO Treaties Statistics (note 198 above).

⁴⁸⁷ The Copyright Act 98 of 1978, as amended by the Copyright Amendment Act 56 of 1980, Act 66 of 1983, Act 52 of 1984, Act 39 of 1986, Act 13 of 1988, Act 61 of 1989, Act 125 of 1992 and the Intellectual Property Laws Amendment Act 38 of 1997 (hereinafter referred to as the 'the Copyright Act').

Following the adoption of the WCT at the Diplomatic Conference and in the year 2000 the South African Department of Communications recognized, in its Green Paper on Electronic Commerce,⁴⁸⁸ that the current legislation protecting intellectual property in South Africa was not equipped to deal with the advanced issues of the digital age.⁴⁸⁹ The Green Paper, more significantly, identified that the Internet distorted the traditional theories upon which the current South African copyright legislation is based.⁴⁹⁰ The Department of Communications accordingly recommended that it is imperative to formulate a system of legislation that would respond appropriately to developments in technologies, the advent of the Internet and which would offer adequate protection of rights in the digital environment.⁴⁹¹

4.2 Analysis of the Copyright Act

An examination of the provisions of the Copyright Act relating to the right of reproduction, the right of communication to the public, the right of distribution, limitations and exceptions and copyright infringement, will be undertaken to determine the extent of application of the various provisions of the Copyright Act in the digital age. The analysis will make reference to the corresponding provisions of the WCT to establish whether the revised and new digital standards contained in the WCT would clarify the enforcement of existing provisions of the Copyright Act in the digital environment. A possible implementation model of Article 11 of the WCT by South Africa will also be considered with reference to the problematic features of the implementation models of the United States and the European Union.

⁴⁸⁸ The Green Paper of the Department of Communications, Republic of South Africa (2000) (hereinafter referred to as 'the Green Paper').

⁴⁸⁹ Ibid.

⁴⁹⁰ Ibid.

⁴⁹¹ The Green Paper (note 488 above) Chapter 6 'Intellectual Property Rights and E-Commerce'.

4.2.1 Scope of Copyright Protection

In order for a work to qualify for copyright protection, it must be original.⁴⁹² The work has to further be written down, recorded, represented in digital data or signals or otherwise reduced to a material form.⁴⁹³ This requirement of reduction to material form does not apply to a broadcast or programme-carrying signal.⁴⁹⁴ A broadcast will be subject to copyright protection once it is broadcast⁴⁹⁵ and a programme-carrying signal once it is transmitted.⁴⁹⁶ There are no formal requirements for copyright to subsist in a work.⁴⁹⁷ In the circumstances copyright subsists automatically provided that the aforementioned requirements are met.⁴⁹⁸

4.2.2 The Exclusive Rights of Copyright Owners

The Copyright Act grants the copyright owner a number of exclusive rights, which have been outlined in Chapter I. South Africa is a signatory to the WCT and WPPT, as discussed above, but is yet to ratify these treaties. Implementation of the Internet Treaties would have far reaching consequences for the participation of South Africa in global e-commerce as copyright has been recognized as the key to e-commerce.⁴⁹⁹ The WCT requires contracting parties to expand rights of copyright owners to the digital environment.

4.2.2.1 The Right of Reproduction

It has been established that the extension of the copyright owner's right of reproduction to the digital age is fundamental in the prevention of unauthorized uses of digital

⁴⁹² Section 2(1).

⁴⁹³ Section 2(2).

⁴⁹⁴ Ibid.

⁴⁹⁵ Section 2(1)(2A).

⁴⁹⁶ Ibid.

⁴⁹⁷ Dean (note 5 above) 1-4.

⁴⁹⁸ Ibid.

⁴⁹⁹ Okedji (note 4 above). See also Garlick (note 37 above) 944-945.

works.⁵⁰⁰ As South Africa has not yet implemented Article 1(4) of the WCT, which extends the application of the right of reproduction to the digital environment, the primary inquiry is the nature of application of the right of reproduction, as contained in the Copyright Act, to the transmission of digital works over the Internet. The right of reproduction in relation to a literary or musical work or broadcast is defined in section 1 to include reproduction in the form of a record or a cinematographic film. Further, a record is defined in section 1 as any disc, tape, perforated role or other device in or on which sounds or data or signals representing sounds, are embodied or represented so as to be capable of being automatically reproduced or performed therefrom. It is agreed that the latter definition appears to include the storage of work in digital form in an electronic medium⁵⁰¹ as the phrase ‘other device’ would include an electronic medium’ as reflected in the agreed statement to Article 1(4) of the WCT.

Having recognized that the right of reproduction would apply in the digital environment, the secondary query is extent of its application. In other words, the issue is the extent of protection that the copyright owner would be afforded in the digital environment in terms of the right of reproduction. The expression ‘sounds’ or ‘signals representing sounds’ relates to the storage of sound while the expression ‘data’ seems to relate the representation of information operated by a computer program⁵⁰² on a computer storage device. It is not explicitly clear from the definition of record whether the storage of all types of work in digital form in or on an electronic medium would be covered.⁵⁰³ It is accordingly agreed that the definition of record does not cover the storage of all types of work in digital form.⁵⁰⁴

⁵⁰⁰ See Chapter I.

⁵⁰¹ R de Villiers ‘Chapter 2: Copyright and the Internet’ in R buys (ed) *CyberLaw@SA II The Law of Internet in South Africa* 2 ed (2004) 46-47.

⁵⁰² The Cassell Pocket English Dictionary (1995) defines data as ‘the information operated on by a computer program.’

⁵⁰³ de Villiers (note 501 above) 9 where it is submitted that ‘the definition of a record seems to be limited in its application to sound reproduction and although computer storage devices will clearly fall within such definition it is therefore not in itself sufficient to cover other types of work’.

⁵⁰⁴ Ibid.

It is submitted that it is thus unclear whether the right of reproduction includes, for example, the storage of text or images in electronic mediums. The right of reproduction does, however, provide that the copyright owner has the exclusive right to reproduce the work in ‘any manner or form’.⁵⁰⁵ It is agreed that this expression is wide enough to include within the ambit of the right of reproduction, the representation of all types of work in digital form in or on electronic mediums,⁵⁰⁶ which the definition of record does not provide.

It is submitted further that the right of reproduction does not expressly address the controversial issue as to whether or not temporary or ephemeral copies are included within its ambit. It is, however, agreed that the expression ‘in any manner or form’ is wide enough to include, within the ambit of the right of reproduction, direct or indirect reproductions of copyrighted works that are of a temporary nature.⁵⁰⁷ It is significant to mention that the delegation of South Africa submitted at the Diplomatic Conference that Article 7(1) of the Basic Proposal, which provided that temporary acts of reproduction were included within the ambit of the right of reproduction, was declarative of South African legislation.⁵⁰⁸ It is submitted that the right of reproduction would thus seem to include temporary acts of reproduction that are made by online service providers to facilitate the transmission of works over the Internet to users, temporary acts of reproduction that are a part of the technological process of the computer, temporary acts of reproduction that are made to facilitate legitimate non-infringing activities permitted by the Copyright Act such as fair use and temporary acts of reproduction that are made while browsing the Internet.

Some of the delegations at the Diplomatic Conference had difficulties with the protection of temporary acts of reproduction in certain cases, as they feared that such protection would interfere with the balancing of interests and inhibit lawful uses such as fair use of

⁵⁰⁵ See sections 6(a), 7(a), 8(a), 10(a) and 11B(a) of the Copyright Act.

⁵⁰⁶ de Villiers (note 501 above) 47.

⁵⁰⁷ Ibid.

⁵⁰⁸ WIPO (note 94 above) 36 paragraph 267.

copyrighted works.⁵⁰⁹ There was, however, a general understanding that all temporary acts of reproduction should fall within the ambit of the right of reproduction as contained in the Berne Convention.⁵¹⁰ The delegations argued, however, that the right of reproduction should be subject to appropriate limitations that would exclude from the scope of the right, reproductions that are made for fair use purposes or those which were facilitative in nature or which had no economic importance.⁵¹¹

It has been identified that direct or indirect digital reproductions of works that are stored in or on electronic mediums such as the interactive computer network of the Internet, whether the reproduction is permanent or temporary, would fall within the ambit of the right of reproduction.⁵¹² This analysis indicates that the scope of the current right of reproduction is sufficiently applicable to the digital environment. It is accordingly submitted that the copyright owner would be able to exercise control of this fundamental right in the digital environment to combat the unauthorized exploitation of works. It is, however, recommended that the right of reproduction should be extended and that the scope of the protection should be clarified in clear and express terms, within the framework of the WCT,⁵¹³ to fully apply to the digital environment.

Taking into consideration the concern expressed by various delegations at the Diplomatic Conference that an extensive right of reproduction, without appropriate limitations, might affect the balance of interests and more significantly the rights of users to engage in fair use activities, it is submitted that the right of reproduction should further be limited in its application to temporary acts of reproduction. The implementation models of the WCT from various countries illustrate that temporary acts of reproduction are expressly

⁵⁰⁹ WIPO (note 94 above) 33 paragraph 251 (Delegation of Singapore), 35 paragraph 264 (Delegation of the Republic of Korea).

⁵¹⁰ Ibid. See also 33 paragraph 253 (Delegation of the European Communities), 34 paragraph 260 (Delegation of the United States), 35 paragraph 265 (Delegation of the United Kingdom), and 36 paragraph 267 (Delegation of South Africa). See also 34 paragraph 256 for a contrary view by the Delegation of Denmark, which argued that certain temporary acts of reproduction should be expressly excluded from the scope of the right of reproduction and not be made dependant on a system of exceptions. See further 35, 37 paragraphs 263 and 274 for similar views by the Delegations of Sweden and Norway respectively.

⁵¹¹ Ibid.

⁵¹² See Chapter IV paragraph 4.2.2.1.

⁵¹³ Article 1(4) and the agreed statement concerning this article.

included within the ambit of the right of reproduction. A discussion of the protection provided by the European Union under the right of reproduction in the context of the implementation of Article 1(4) of the WCT will follow.

4.2.2.1.1 The Right of Reproduction of the European Union

The Directive requires members to expressly provide protection for temporary acts of reproduction within the scope of the right of reproduction.⁵¹⁴ It is submitted that this approach is appropriate as the temporary storage of a work in digital form in or on an electronic medium, such as the random access memory of a computer, would implicate the right of reproduction. In an attempt to maintain the traditional balance of interests in the copyright regime, the Directive further mandates members to recognize limited exemptions from the right of reproduction.⁵¹⁵ Temporary acts of reproduction, which are transient, incidental or an integral and essential element of a technological process and the sole purpose of which are to enable transmissions in networks to users by online service providers or lawful activities that have no economic importance must be excluded from the right of reproduction.⁵¹⁶ The Directive endorses the three-step test of the Berne Convention by requiring that the exclusions shall only be enforced by members (1) in special cases (2) which do not conflict with the normal exploitation of the work and (3) do not unreasonably prejudice the legitimate interests of the rightholder.⁵¹⁷ The application of exceptions to the protection of temporary acts of reproduction is accordingly dependant on the provisions of the Berne Convention.⁵¹⁸

It is submitted that the approach adopted by the European Union ensures that special acts of reproduction such as fair uses, browsing the Internet and acts that are a part of the technological process of computer networks are specifically excluded from the scope of the right of reproduction. It is agreed that these exceptions could have been excluded from the scope of the right of reproduction by simply applying the provisions of Article

⁵¹⁴ Article 2.

⁵¹⁵ Article 5(1). See also Recitals 14, 31 and 33 of the Directive.

⁵¹⁶ Ibid.

⁵¹⁷ Article 5(5).

⁵¹⁸ Casellati (note 418 above) 383. See also Copenhagen (note 115 above) 436.

9(2) of the Berne Convention.⁵¹⁹ It is submitted that the provision of specific mandatory exemptions to the right of reproduction provides clarity on the controversial aspect of temporary acts of reproduction and more significantly harmonises members' laws and promotes the consistent enforcement of exceptions to temporary acts of reproduction.

It is argued that temporary acts of reproduction that are made by online service providers to facilitate the transmission of works over the Internet to users, temporary acts of reproduction that are a part of the technological process of the computer, temporary acts of reproduction that are made to facilitate legitimate activities permitted by the Copyright Act such as fair use and temporary acts of reproduction that are made while browsing the Internet could similarly be excluded from the current right of reproduction by applying the provisions of Sections 12 and 13 of the Copyright Act. It is, however, agreed that the right of reproduction should be clarified to expressly include temporary acts of reproduction.⁵²⁰ In this regard it is submitted that any clarification of the right of reproduction should specifically provide, like Article 5 of the Directive, that the aforementioned acts of reproduction are excluded from its ambit as exceptions.

It is submitted that the aforementioned an approach would appropriately provide online service providers with the assurance that they would not attract liability for infringing rights of reproduction by performing temporary acts of reproduction during the transmission of works over computer networks to facilitate fair use of the work by the user, as such acts has been expressly excluded from the scope of the right of reproduction. This would, further, ensure that online service providers would not refrain from providing services to online users to retrieve information for fair use purposes. It is submitted that the ability of the user to make fair use of the work would thus not be affected. Consequently, the balance of interests would be respected in the digital age in this respect.

⁵¹⁹ See WIPO (note 94 above) 37 paragraph 273.

⁵²⁰ Copenhagen (note 115 above) 437.

4.2.2.2 The Right of Communication to the Public

The right of ‘communication to the public’⁵²¹ or otherwise referred to as the ‘making available right’⁵²² was recognized at the Diplomatic Conference and scholars alike, as discussed above, as valuable and important for the advanced issues of the digital age, in particular for the information communication infrastructure that facilitates mass unauthorized uses of digital works over the Internet.⁵²³

The Copyright Act provides for certain exclusive rights of communication to the public that differ in nature from one another. These include, in respect of literary or musical works, publishing the work,⁵²⁴ performing the work in public,⁵²⁵ broadcasting the work⁵²⁶ and transmitting the work in a diffusion service.⁵²⁷ These rights also apply to other categories of work but not to all categories of recognized works.⁵²⁸

The extents to which the aforementioned rights apply to the digital environment are, however, uncertain.⁵²⁹ While de Villiers is of the view that the Internet should be regarded as a diffusion service as opposed to a broadcasting service,⁵³⁰ it is submitted that the scopes of the rights as contained in the Copyright Act were not drafted to address digital transmissions over the Internet. The application of the current right of communication of a work to the public by publication in the digital environment will be discussed next.

⁵²¹ Article 8 of the WCT.

⁵²² Ibid.

⁵²³ See Chapter II.

⁵²⁴ Section 6(b).

⁵²⁵ Section 6(c).

⁵²⁶ Section 6(d).

⁵²⁷ Section 6(e).

⁵²⁸ See for example section 7(b) and (c) in respect of an artistic work and section 8(b), (c) and (d) in respect of a cinematographic work.

⁵²⁹ Copenhagen (note 115 above) 440.

⁵³⁰ de Villiers (note 501 above) 52. His view is based on the English case *Shetland Times Ltd v Dr Jonathan Wills and Zetnews Ltd* [1997] SLT 669.

4.2.2.2.1 Publication of the work

A copyright owner has the exclusive right in terms of the Copyright Act to publish the work or authorize the publication thereof in respect of literary, musical⁵³¹ or artistic works⁵³² and computer programs.⁵³³ A publication does not include performance of a musical or dramatic work, cinematographic film or sound recording, public delivery of a literary work, transmission in a diffusion service or the broadcasting of a work.⁵³⁴ A work will be considered published if copies thereof have been issued to the public.⁵³⁵ Subject to the latter provision, a work will be considered published if copies thereof have been issued to the public, with the consent of the copyright owner, in sufficient quantities to reasonably meet the needs of the public.⁵³⁶

In terms of the above a person who, without the authority of the copyright owner, issues copies of the copyrighted work to the public will commit infringement of copyright by publication.⁵³⁷ The Copyright Act is in relation to literary and musical works framed in terms of print in analogue form.⁵³⁸ The traditional right of publication thus focuses on physical ‘copies’ of works that have been issued to the public.⁵³⁹ The question relating to the application of this right in the digital age is whether publication takes place when digital copies of the work are made available on the Internet? While this might, in terms of a literal application of the traditional right, amount to publication,⁵⁴⁰ it is submitted that the complication of the application of this right in the digital context would arise as a result of the nature of the Internet.

⁵³¹ Section 6(b).

⁵³² section 7(b).

⁵³³ section 11B(b).

⁵³⁴ section 1(5)(e).

⁵³⁵ section 1(5)(d).

⁵³⁶ section 1(5)(a).

⁵³⁷ AJC Copeling (updated by AJ Smith) ‘Infringement of Copyright’ in *LAWSA* (2004) 5(2) 24 paragraph 26(b).

⁵³⁸ de Villiers (note 501 above) 49 where it is submitted that sections 6 and 7 apply to ‘tangible media such as books...’.

⁵³⁹ *LAWSA* (note 537 above).

⁵⁴⁰ de Villiers (note 501 above) 49 where it is argued that there is no reason why the right of publication could also apply to ‘the Internet and more specifically to the placement of a work on a web site for users to make transient copies of it by viewing it or more permanent copies by downloading it’.

The interactive nature of the Internet requires the individual member of the public to access the work to view or make use of it. While the availability of the work to be accessed by the public might constitute publication, whether it is a temporary copy that is made in the random access memory of a computer or a permanent copy that is downloaded for private use, it has been argued that the mere act of making a work available on the Internet could essentially constitute a transmission of the work in a diffusion service.⁵⁴¹ If there is any merit in this latter argument then the making available of the work on the Internet would not fall within the right of publication as publication, in terms of the Copyright Act, does not extend to transmissions of works in a diffusion service.⁵⁴² Consequently if the making available of works in a diffusion service is considered as transmissions in a diffusion service, then the right of publication, as currently contained in the Copyright Act, would not be implicated. It follows that the copyright owner could maintain control over the digital transmission of his work in terms of the exclusive right to transmit the work in a diffusion service.⁵⁴³ It is however unsettled whether the Internet could be regarded as a diffusion service.⁵⁴⁴

The interactive element of the Internet that requires the member of the public to access the work once it has been made available to them would fall within the scope of the 'right of communication to the public or the making available right' of the WCT.⁵⁴⁵ This right would effectively allow the copyright owner to control works that have been made available on the Internet for use by the public and protect themselves against the unauthorized use of their works.⁵⁴⁶ Alternatively, the copyright owner could exercise control in terms of either the right of reproduction as publication does amount to the implication of this right or the right of distribution as 'infringement by publication amounts to no more than infringement by distribution'.⁵⁴⁷ The more simplistic solution is discussed below.

⁵⁴¹ de Villiers (note 501 above) 49.

⁵⁴² Section 1(5)(d)(iii).

⁵⁴³ Section 6(e) contains the copyright owner's exclusive right, in respect of a literary or musical work, to transmit the work in a diffusion service.

⁵⁴⁴ Copenhagen (note 115 above) 440.

⁵⁴⁵ Article 8.

⁵⁴⁶ Bitar, Bottero and Crosetti (note 32 above) 11.

⁵⁴⁷ LAWSA (note 537 above).

The scope of the application of other forms of communication as contained in the Copyright Act to the digital age is also questionable.⁵⁴⁸ Further, it is submitted that cognizance must be taken of the fact that these communication rights are drafted in terms of an analogue environment. It is therefore argued that they do not specifically address development of and advances in technology. For example, they do not comply with the second part of the right contained in the WCT, which is the interactive element of making the work available to the public. It has been established that this right relates specifically to digital transmissions and use of works⁵⁴⁹ over the Internet. It is therefore submitted that the Copyright Act should be amended accordingly to comply with the provisions of Article 8 of the WCT. Contracting parties, are in terms of Article 8, given a choice as to whether to include the right within an existing exclusive right or in terms of the enactment of a new right.⁵⁵⁰ It is agreed that South Africa should, when implementing the WCT, introduce a new right of communication to the public that specifically addresses all categories of work and the interactive transmissions of the Internet.⁵⁵¹ It is submitted that this would involve a simplistic approach that would evade any difficulties of including the right within the scope of an existing right and would guarantee the copyright owner with an understandable, unambiguous and exclusive right of communication to the public that would protect him against unauthorized transmissions of his work over the Internet.

The next section considers the provisions of the Copyright Act relating to infringement of the exclusive rights of the copyright owner in a digital context.

4.2.3 Infringement of Copyright

Infringement of copyright is regulated by section 23 of the Copyright Act. The Copyright Act provides for two forms of infringement.⁵⁵²

⁵⁴⁸ Copenhagen (note 115 above) 440.

⁵⁴⁹ See Chapter II.

⁵⁵⁰ See comments from the Delegation of the United States at the Diplomatic Conference WIPO (note 94 above) 41 paragraph 301.

⁵⁵¹ Copenhagen (note 115 above) 438.

⁵⁵² Dean (note 5 above) 1-37.

4.2.3.1 Direct Infringement⁵⁵³

Section 23(1) provides that a person who, without the authority of the copyright owner, performs or causes another person to perform any of the exclusive rights shall infringe copyright.⁵⁵⁴ This is referred to as direct or primary infringement.⁵⁵⁵

It has been established that the advanced issues of the digital age resulted in substantial copyright infringement by reproduction, which is the most significant means by which works are being commercially exploited over computer networks such as the Internet.⁵⁵⁶ In the circumstances copyright was in a digital crisis. It has been identified in this chapter that a wide interpretation of the right of reproduction in the Copyright Act would include the storage of content in digital form in or on an electronic medium such as the Internet. In the circumstances the copyright owner would, in terms of section 23(1), be able to pursue infringement proceeding, under the present Copyright Act, against the unauthorized reproduction of his work in the digital environment. A lack of knowledge that one is engaging in unauthorized reproduction or any of the other restricted acts is not a defense to copyright infringement.⁵⁵⁷

The problem with the scope of the right of reproduction is that, as mentioned above,⁵⁵⁸ it needs to be refined to address specific technological advances such as the internal workings of the computer. While the copyright owner's right of reproduction is wide enough to cover infringement by reproduction in respect of all copies that are made in the memories of computer networks during the transmission of the work from the host computer to the local computer, it is submitted that it would, for example, be unfair to hold liable for copyright infringement an innocent online service provider which, without knowledge, assists a subscriber in transmitting work by making unauthorized acts of reproduction over networks. It is therefore submitted that the Copyright Act should be

⁵⁵³ This is the first form of copyright infringement in the Copyright Act. See Dean (note 5 above) 1-37.

⁵⁵⁴ Section 23(1).

⁵⁵⁵ Dean (note 5 above) 1-37.

⁵⁵⁶ See Chapter I.

⁵⁵⁷ Dean (note 5 above) 1-43.

⁵⁵⁸ See Chapter IV paragraph 4.2.2.1.

amended accordingly to exclude, from the ambit of the protective net, temporary acts of reproduction of the nature discussed above.⁵⁵⁹

4.2.3.2 Indirect Infringement⁵⁶⁰

Indirect or secondary infringement⁵⁶¹ would occur first when a person, who without the license of the copyright owner, deals with infringing copies of copyrighted works and second when a person permits a place of public entertainment to be used for an infringing public performance.⁵⁶²

Section 23(2) of the Copyright Act regulates the unauthorized dealing in infringing copies, which includes the trafficking in infringing copies⁵⁶³ and the distribution of infringing copies of a work in the Republic for the purposes of trade or other purposes, to the extent that the copyright owner of the work in question is prejudicially affected.⁵⁶⁴ The Copyright Act imposes on the infringer the requirement that he must have had knowledge of the infringing copy.⁵⁶⁵ An infringing copy is defined in the Copyright Act as a reproduction or adaptation of a literary, musical or artistic work, a published edition or a cinematographic film in which the making of such copy constitutes an infringement of the work in question.⁵⁶⁶ Although the Copyright Act does not expressly provide the copyright owner with an exclusive right of distribution as contained in the WCT,⁵⁶⁷ it does protect him from the unauthorized distribution of infringing copies of works in which copyright subsists.⁵⁶⁸

⁵⁵⁹ Ibid.

⁵⁶⁰ This is the second form of copyright infringement in the Copyright Act. See Dean (note 5 above) 1-37.

⁵⁶¹ Dean (note 5 above) 1-37.

⁵⁶² Ibid 1-43 – 1-46.

⁵⁶³ section 23(2)(b) of the Copyright Act .

⁵⁶⁴ section 23(2)(c) of the Copyright Act.

⁵⁶⁵ section 23(2) of the Copyright Act. See Dean (note 5 above) 1-44 where it is submitted that an infringing article which is made by infringing the copyright in a work is generally referred to as an 'infringing copy'.

⁵⁶⁶ Section 1 of the Copyright Act.

⁵⁶⁷ Article 6 of the WCT.

⁵⁶⁸ Section 23(2)(b) of the Copyright Act.

The question then remains as to how this right of distribution, inclusive of the provisions relating to indirect infringement of copyright, applies to the digital age? It would seem that the right as contained in the Copyright Act does correlate to the right as contained in the WCT in so far as the expression ‘article’ would include ‘fixed copies placed into circulation as tangible objects’.⁵⁶⁹ It has been argued that the scope of the right of distribution of the WCT could be extended to include digital transmissions of electronic copies of works over the Internet.⁵⁷⁰ Copenhagen⁵⁷¹ argues that the right of distribution should not be extended to include transmissions over the Internet as the right of communication to the public, as contained in the WCT, more appropriately deals with the interactive nature of the Internet.⁵⁷² The copyright owner is in terms of the Copyright Act entitled to damages, an interdict and the delivery of infringing copies in respect of copyright infringement.⁵⁷³

4.2.4 Limitations of and Exceptions to Copyright

The exemptions to copyright infringement are contained in section 12 to section 19B of the Copyright Act. Fair dealing with the work is universally accepted as the most fundamental public interest exemption. The concept of fair dealing in South Africa is unclear and is left to interpretation by the Courts in light of surrounding circumstances to the alleged infringing conduct.⁵⁷⁴ Owen Dean recommends that the factors that have been laid down in United States Copyright Act, 1976⁵⁷⁵ to determine whether ‘fair use’ has taken place in respect of a work should be taken into account by our courts when considering whether ‘fair dealing’ of a work has taken place.⁵⁷⁶ These factors include: the purpose and character of fair use, the nature of the copyrighted work, the amount and substantiality of the portion uses and the effect upon the plaintiff’s potential market.⁵⁷⁷

⁵⁶⁹ Copenhagen (note 115 above) 438.

⁵⁷⁰ Ibid.

⁵⁷¹ Ibid. 438-439.

⁵⁷² Ibid.

⁵⁷³ section 24(1) of the Copyright Act.

⁵⁷⁴ Dean (note 5 above) 1-52

⁵⁷⁵ The Copyright Act of 1976, Title 17 United States Code.

⁵⁷⁶ Dean (note 5 above) 1-52 submits that the term ‘fair use’ which is used in the United States Copyright Act, 1976 is synonymous with the term ‘fair dealing’ as used in the Copyright Act.

⁵⁷⁷ See section 107 of the Copyright Act of 1976, Title 17 United States Code.

Fair dealing is dealt with in section 12 of the Copyright Act, which relates to exemptions from copyright infringement in respect of a literary or musical work. The fair dealing exceptions include fair dealing with the work for the purposes:-

- (1) of research or private study or personal or private use;⁵⁷⁸
- (2) criticism or review;⁵⁷⁹
- (3) reporting current events:
 - (i) in a newspaper, magazine or similar periodical; or
 - (ii) by means of broadcasting or in a cinematographic film.⁵⁸⁰

The aforementioned exceptions also apply to artistic works,⁵⁸¹ broadcasts⁵⁸² and published editions.⁵⁸³ The source and the author's name, if it appears on the work, must be indicated when one is fair dealing with works in certain circumstances.⁵⁸⁴

The copyright in any work shall further not be infringed by the reproduction of a work if such reproduction is permitted in terms of regulations prescribed in terms of section 13 of the Copyright Act and which is not in conflict with the normal exploitation of the work and is not unreasonably prejudicial to the legitimate interests of the owner of the copyright.⁵⁸⁵ Section 13 of the Copyright Act relays the three-step test of the Berne Convention although the 'special cases' element is to be determined by the minister in terms of regulation. Reproduction of works is permitted by regulation in respect of general reproductions, reproductions by libraries or archives and reproductions for use in educational institutions.⁵⁸⁶

⁵⁷⁸ section 12(1)(a) of the Copyright Act.

⁵⁷⁹ section 12(1)(b), section 16(1), section 17 and section 19B(1) of the Copyright Act respectively provide that this exemption also applies to cinematographic films, sound recordings and computer programs.

⁵⁸⁰ section 12(1)(c)(i) and (ii). Section 16(1), section 17 and section 19B(1) of the Copyright Act respectively provide that this exemption also applies to cinematographic films, sound recordings and computer programs.

⁵⁸¹ section 15(4) of the Copyright Act.

⁵⁸² section 18 of the Copyright Act.

⁵⁸³ section 19A of the Copyright Act.

⁵⁸⁴ see the proviso to Section 12 of the Copyright Act where it is stated that fair dealing for the purposes of criticism or review and reporting current events in a newspaper, magazine or similar periodical (section 12(b) and (c)(i) respectively) will be allowed provided that the source and the name of the author of the work is mentioned.

⁵⁸⁵ section 13 of the Copyright Act relays the three-step test of the Berne Convention although the 'special cases' element has been left to be determined by regulation.

⁵⁸⁶ Dean (note 5 above) 1-58A.

The importance of maintaining traditional limitations and exceptions in the digital age and the role that exceptions will play in the information age has been emphasized in this dissertation. It has been established that the WIPO, in formulating the various provisions of the WCT, paid specific attention to the preservation of the traditional balancing of interests in the digital environment.⁵⁸⁷ The Preamble and the provisions of Article 10(2) of the WCT acknowledge the need for the traditional limitations and exceptions, which are considered acceptable under the Berne Convention, to be extended into the digital age.⁵⁸⁸ The fair dealing exception incorporated in section 12 of the Copyright Act and the exception to the right of reproduction contained in section 13 of the Copyright Act would thus fall within the scope of this article. It is accordingly submitted that these traditional exceptions could be appropriately extended by South Africa, when ratifying the WCT, into the digital environment, thereby fostering the interests of the public to enforce exceptions so as to benefit from the products of the information age. It is submitted further that this extension would encourage development in the areas of research, education and the public access to information.

The provisions of Article 10(2) further address the situation of the need to develop new exceptions to deal with the changing environment of digital technology. It is thus submitted that South Africa will, when ratifying the WCT, be left with the flexibility of introducing new exceptions desired necessary for the digital environment. It is submitted that this provision is important as it acknowledges the ability of digital technology to transform suddenly thus necessitating the need for contracting parties to craft new exceptions that appropriately address the changes. The significant feature of this provision is that the development of additional exceptions is dependant on the three-step test of the Berne Convention. Lessons to be learned from the Directive⁵⁸⁹ indicate that the need to maintain traditional exceptions and develop new exceptions was undermined by the provisions of Article 5.

⁵⁸⁷ See Chapter II, Preamble of the WCT and Article 10 of the WCT.

⁵⁸⁸ See also agreed statement concerning Article 10 of the WCT.

⁵⁸⁹ This aspect was discussed in Chapter III Part B.

The aspect of an appropriate interface relation between traditional exceptions to copyright and the legal protection of technological measures, in the context of Article 1, will be discussed in the next section.

4.3 The Legal Protection of Technological Measures⁵⁹⁰

It has been established that the model of the technological protection measure provides copyright owners with the means to protect their works against copyright infringement in the digital age.⁵⁹¹ It has further been acknowledged that the effectiveness of technological measures could be easily defeated without adequate circumvention legislation.⁵⁹² The Diplomatic Conference emphasized the importance of providing adequate legal protection against the circumvention of technological measures that are designed to prevent or restrict exclusive copyright acts in relation to copyrighted works and consequently adopted Article 11 of the WCT.⁵⁹³ Copyright protection is based on the principle that copyright owners must receive economic benefits for their intellectual creations and to encourage the creation of further 'products of intellect'.⁵⁹⁴ It has been established that adequate legal protection of technological measures, which are increasingly being used by copyright owners to protect their works from copyright infringement in the digital environment and more significantly, their economic benefits that are associated with the exercise of their rights, would encourage copyright owners to create further 'products of intellect'.⁵⁹⁵ It is submitted that the implementation of Article 11 of the WCT is therefore fundamental to the encouragement of intellectual creations, enhancement of knowledge and the promotion of education as well as the competitive participation of South Africa in the global knowledge-based economy.

It has been recognized that while technological measures can be engaged by copyright owners to prevent acts of copyright infringement, they can also be engaged to prevent or restrict acts that are permitted by the system of copyright such as limitations of and

⁵⁹⁰ Article 11 of the WCT.

⁵⁹¹ See Chapter I and Chapter II.

⁵⁹² Ibid.

⁵⁹³ See Chapter II.

⁵⁹⁴ Dean (note 5 above) 1-1

⁵⁹⁵ See Chapter I and II.

exceptions to the exclusive rights of the copyright owner.⁵⁹⁶ It has already been identified⁵⁹⁷ that the problematic feature of the technological protection model is that it has the potential to profoundly affect the application of the fair dealing exception, which is generally considered acceptable under the Berne Convention and the Copyright Act. It has been illustrated that the Diplomatic Conference,⁵⁹⁸ in an attempt to avoid this potential danger to the enforcement of exceptions in the digital environment, carefully formulated the provisions of the WCT. It has been indicated that the WCT effectively provides a balanced framework within which contracting parties would be able to provide adequate legal protection of technological measures and simultaneously extend the application of traditionally accepted exceptions to copyright such as fair dealing into the digital age.⁵⁹⁹ In doing so, it is submitted that the WCT established a system of digital standards for the digital age that appropriately respects and maintains the traditional system of copyright, which sought to balance the rights of the copyright owner with the interests of the public to engage in fair uses of copyrighted works, in the digital environment.

It has been illustrated⁶⁰⁰ that the implementation models of the DMCA and the Directive went beyond the requirements of the WCT in providing extensive protection for copyright owners as well as an access right, which could effectively jettison the enforcement of traditional exceptions to copyright such as fair dealing and ultimately destroy the traditional system of copyright. The exceptions to the anti-circumvention provisions have been identified⁶⁰¹ as narrow and limited in scope: the exceptions of the DMCA do not correlate to traditional exemptions to copyright and the interface between exceptions to copyright and the legal protection of technological measures of the Directive confines members to intervene in limited circumstances. The Directive further does not allow for members to introduce exceptions that may be relevant in the digital age.

⁵⁹⁶ Vinje (note 39 above) 197.

⁵⁹⁷ See Chapter II and Chapter III.

⁵⁹⁸ See Chapter II.

⁵⁹⁹ Ibid.

⁶⁰⁰ See Chapter III.

⁶⁰¹ See Chapter III.

It is submitted that the approach adopted by the United States and the European Union conspicuously extend beyond the parameters of copyright law to ensure that the effectiveness of technological protection measures would not be weakened. While both the United States and the European Union attempted to maintain a balance between the legal protection of technological protection measures and the enforcement of exceptions to copyright such as fair use, it has been established that this attempt created a legal fiction only.⁶⁰²

South Africa may choose not to extend legal protection to technological measures as it may be argued that this protection is not required as section 23(1) of the Copyright Act would satisfactorily enable a copyright owner to reprimand a person who circumvents a technological measure for infringing purposes. By the same analogy a manufacturer of a circumvention device could be held liable for copyright infringement under the provisions of Section 23(1), in so far as the manufacturer causes this person to infringe copyright by supplying the circumvention too.⁶⁰³ It is submitted that as the provisions of section 23(1) of the Copyright Act does not impose a knowledge requirement, a user who negligently circumvents a technological measure or a manufacturer who has no knowledge that the circumvention device would be used for infringing purposes could be unfairly prejudiced and be held liable for direct copyright infringement.

Apart from the reasons mentioned in paragraph one of this section, it is submitted that the implementation of Article 11 of the WCT would act as a deterrent and be advantageous to the curtailment of massive copyright infringement in the digital age. The potential infringer would be apprehensive as he would face liability in respect of the infringement of copyright as well as the contravention of the anti-circumvention provisions.⁶⁰⁴ It is argued further that the legal protection of technological measures should be implemented to clarify the potential problems that a negligent user or innocent manufacturer could face in terms of the current Copyright Act.

⁶⁰² Ibid.

⁶⁰³ Copenhagen (note 115 above) 445, 450 where she presents this argument.

⁶⁰⁴ Vinje (note 39 above) 198.

It is submitted that the mistakes made by the United States and the European Union are lessons to be learned by the South African Legislature. The Legislature must, when formulating appropriate anti-circumvention and anti-trafficking legislation, respect the traditional system of copyright and acknowledge the function that the balancing of interests would play in the information age. It has been established that the system of copyright promotes the economic interests of the copyright owner, the creativity and innovation of the protected writer and the next generation of writers as well as the social and cultural interests of the public by enforcing limitations of and exceptions to the exclusive rights of the copyright owner that allow the dissemination, access and use of the work by the public.⁶⁰⁵ Scholars⁶⁰⁶ are in agreement that the exclusive rights of the copyright owner and the limitations of and exceptions to copyright are mutually exclusive of one another, the one co-existing with the other. Without appropriate exceptions and limitations the system of copyright would be non-existent. This would have adverse consequences for the participation of any country with an inadequate system of copyright to compete in the global information economy.⁶⁰⁷ Accordingly, the interrelation of provisions relating to the legal protection of technological measures and the enforcement of exceptions to copyright must be carefully drafted and must not, in any manner, threaten to derail the enforcement of exceptions such as fair dealing in the digital age.

It is submitted that the formulation of provisions relating to the legal protection of technological measures by the South African Legislature would remain within the boundaries of the WCT with the underlying principles of the system of copyright guiding the legislative process without the influence of other factors. Taking into consideration the finding that the anti-circumvention and anti-trafficking provisions of the United States and the European Union are detrimental to the enforcement of non-infringing activities such as exceptions in the digital environment, it is submitted that the legal protection of technological measures in South Africa should incorporate the following essential elements:-

⁶⁰⁵ See Chapter I and Chapter II.

⁶⁰⁶ Vinje (note 39 above) 192 where it is submitted that 'Far from being just a minor appendix to the copyright rule, let alone a mere blot on the copyright landscape, exceptions to copyright are an indispensable complement to the exclusive right'.

⁶⁰⁷ This aspect is beyond the scope of this dissertation.

- Legal protection against circumvention must be afforded to technological measures that are used by copyright owners, in connection with the exercise of their exclusive rights of the Copyright Act, to prevent or restrict acts, in respect of their works, which are protected by the Copyright Act and not authorized by the copyright owners concerned or permitted by law.

- It follows from the aforementioned element that protection of technological measures that are used by copyright owners to prevent or restrict access of copyrighted works should not be protected as the protection of access is not used in connection with any of the exclusive rights of the copyright owner. Such a form of protection would effectively provide the copyright owner with a right of access. It has been established that the provision of a right of access extends beyond the prerogatives of copyright law and would effectively prejudice the enforcement of exceptions to copyright.⁶⁰⁸

- The circumvention of a protected technological measure for the purposes of copyright infringement must be prohibited. This ban on the act of circumvention should incorporate a subjective standard of knowledge element⁶⁰⁹ where the person concerned carries out the circumvention in the knowledge that he or she is pursuing circumvention for the purposes of infringement.

- The prohibition should also be extended to the manufacturing and trafficking in circumvention devices or services. This would ensure that the source of the infringement is tackled. It is agreed with Copenhagen that a reasonable foreseeability test should be applied to determine whether or not a circumvention device would be used for the purposes of infringement.⁶¹⁰ To this end, a provision in respect of the prohibition of circumvention devices or services should impose

⁶⁰⁸ See Chapter II and Chapter III.

⁶⁰⁹ Electronic Frontier Foundation 'Seven Lessons From a Comparison of the Technological Provisions of the FTAA, the DMCA, and the recent bilateral Free Trade Agreements' www.eff.org (date accessed: 4 April 2005).

⁶¹⁰ Copenhagen (note 115 above) 450 where it is similarly argued that a reasonable foreseeability test be applied to determine whether the circumvention device should be prohibited.

an objective standard of knowledge element on the part of a manufacturer who produces and trafficks in circumvention devices with the reasonable grounds to know that the device would be used for the purposes of copyright infringement.

- It has been emphasized that anti-circumvention provisions must be carefully formulated to ensure that the traditional enforcement of exceptions such as fair dealing is not restricted or defeated. It is therefore submitted that it is essential that the prohibition on both the act of circumvention and circumvention devices correspond to the infringement of copyright. Drawing on the effect of the anti-circumvention and anti-trafficking provisions of the United States and the European Union,⁶¹¹ it is submitted that this approach would permit acts of circumvention and circumvention devices that facilitate non-infringing purposes such as fair dealing. This would effectively maintain the balancing of interests in the digital environment.

- Both forms of legal protection of technological measures should be subjected to a general exception for non-infringing legitimate purposes.⁶¹² Although the scope of protection extends to rights control measures and circumvention devices that are used for infringing purposes, the incorporation of an exception of this nature would reinforce the delicate balance of the system of copyright and promote exceptions not specifically mentioned as an exception to the provisions. It is submitted that this approach, which would promote flexibility for novel legitimate non-infringing uses that may develop as a consequence of technological changes, is in line with the principle of technological neutrality.⁶¹³ This approach would further comply with the provisions of Article 10(1) of the WCT, which permits the introduction of new exceptions suitable for the digital environment.

⁶¹¹ See Chapter III.

⁶¹² Ibid.

⁶¹³ See Kerr, Maurushat and Tacit (note 158 above) 70 for a discussion of this principle.

4.4 Conclusion

In conclusion, it is submitted that it would be advantageous for South Africa to revise the Copyright Act in accordance with the requirements laid down in the WCT. The Copyright Act would accordingly be amended to address the specific characteristics of the digital age, for example the right of communication to the public would apply to transmissions of works over the Internet. It has been indicated⁶¹⁴ that the extension of protection of technological protection measures would essentially provide copyright owners with the assurance that they would be able to effectively protect their works against copyright infringement and thus encourage them to produce further products of intellect. It has been identified⁶¹⁵ that as information is the key to e-commerce, adequate protection of the copyrighted works in the digital age would have the further purpose of promoting the greater public interests to benefit from the creations of others for the purposes of education and research and the economic interests of a country wishing to compete in the global economy of the information society.⁶¹⁶ It has been emphasized⁶¹⁷ that the implementation of the provisions of the WCT, in particular the formulation of provisions relating to the legal protection of technological measures, must be carefully balanced with the interests of society to be able to freely access information and exercise copyright exceptions such as fair dealing.

⁶¹⁴ See Chapter II, Chapter III and Chapter IV paragraph 4.3.

⁶¹⁵ See Chapter I.

⁶¹⁶ Copenhagen (note 115 above) 430.

⁶¹⁷ See Chapter II, Chapter III and Chapter IV paragraph 3.

V

5.1 CONCLUSION AND RECOMMENDATIONS

It is general knowledge that developed countries, such as the United States of America and Japan, have dominated the global economy of the information society. It is submitted that the efficient protection of copyrighted works in these countries⁶¹⁸ facilitates the creation of intellectual works and the effective participation by them in the global economy. It has been established⁶¹⁹ that effective protection of copyrighted works in the digital age can be achieved in South Africa, through the modification of the Copyright Act, within the context of implementation of the provisions of the WCT. It has been established⁶²⁰ that the ratification of the provisions of the WCT would clarify the application of existing rights of the copyright owner, for example, protection in respect of the communication of his works to the public would be amended to cover the transmissions of all works over the Internet and most significantly technological protection would provide copyright owners with the guarantee that protection of their works would be effectively enforced. Further, the enforcement of traditional limitations and exceptions would be preserved in the digital age.

The dissertation has recognized⁶²¹ that while the protection of technological measures is essential to combat digital copyright infringement it has also illustrated,⁶²² through the controversial models of the DMCA and the Directive, that extensive protection of technological measures could potentially derail exceptions to copyright such as fair dealing. Extensive technological protection afforded to the copyright owner, like the models of the DMCA and the Directive, could potentially extend the rights of copyright owners beyond the natural borders of copyright. It has been exemplified that broad

⁶¹⁸ This statement is not to be interpreted to mean that the extensive protection afforded by the United States anti-circumvention provisions of the DMCA and Japan's anti-circumvention provisions of the Japanese Copyright Law No. 48, promulgated on 6 May 1970, as amended by Law No. 77, of June 15, 1999 and the Japanese Anti-Unfair Competition Law, to the detriment of the enforcement of copyright exception, is preferred. It is made in the acknowledgement that adequate copyright and technological protection can be afforded, in the context of the WCT, which respects the traditional system of copyright that seeks to achieve a balance between the interests of the copyright owners and the public.

⁶¹⁹ See Chapter IV.

⁶²⁰ Ibid.

⁶²¹ See Chapter II and Chapter III.

⁶²² See Chapter III.

technological protection⁶²³ that first, provides a right of access, second, prohibits the circumvention of both access control and rights control measures in circumstances where the circumvention is for the purposes of facilitating legitimate non-infringing uses and third, prohibits the manufacture and circumvention of devices that have legitimate non-infringing uses would be harmful to the efficacy of exceptions such as fair dealing and possibly eviscerate their operation.

The dissertation establishes that ‘minimalist’⁶²⁴ technological provisions, as required by Article 11 of the WCT and which, accordingly, correlate specifically to the prerogatives of copyright would respect the enforcement of exceptions.⁶²⁵ It is submitted that the formulation of appropriate technological measures must be guided by the underlying principle of copyright that is based on the balancing of interests to ensure that the balance, which the system of copyright traditionally preserved in the analogue world, is adequately maintained in the digital environment. It has been established that the provisions of the WCT provide a balanced framework for the transposition of the system of copyright protection into the digital age.⁶²⁶

The dissertation has underscored⁶²⁷ that the system of copyright incorporates the provision of adequate protection to the copyright owner to promote further creativity and more significantly, is framed in terms of a delicate balance that recognizes the greater public interest to participate in certain uses such as fair dealing. These uses ultimately promote education, knowledge and innovation. When it is expressed that copyright is the key to growth, development and participation in the global economy of the information society, it is submitted that this embraces not only the participation of the present generation of intellectuals but the next as well. It is submitted that extensive protection of technological measures, which would effectively minimize the ability of the public to access information and enforce exceptions and contribute to the next generation of intellectual creations would have overwhelming consequences for the areas of education,

⁶²³ Ibid.

⁶²⁴ Samuelson (note 203 above).

⁶²⁵ See Chapter III.

⁶²⁶ See Chapter II.

⁶²⁷ See Chapter I-Chapter IV.

knowledge and economic development. In the circumstances it is submitted that it is essential that the legal protection of technological measures does not affect the efficacy of exceptions to copyright. Perhaps the theory that ‘Information wants to be free’⁶²⁸ and the acknowledgement by copyright owners that technological measures should not be used to ‘build fences around a tornado’⁶²⁹ would simplify the notion of copyright owners that extensive technological protections are essential. The role of information must be appreciated in the information age and copyright owners should not associate it primarily with their economic interests. As John Perry Barlow pointed out: -

Information wants to be free. Information also wants to be expensive. Information wants to be free because it has become so cheap to distribute, copy, and recombine – too cheap to meter. It wants to be expensive because it can be immeasurably valuable to the recipient. That tension will not go away. It leads to endless wrenching debate about price, copyright, ‘intellectual property, the moral rightness of casual distribution, because each round of new devices makes the tension worse, not better.⁶³⁰

⁶²⁸ J P Barlow ‘Life, Liberty and the Pursuit of Copyright’ *available online* <http://www.theatlantic.com> (date accessed: 15 May 2002).

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⁶³⁰ Ibid.

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