Copyright Law in the Digital Environment: DRM Systems, Anti-Circumvention Legislation and User Rights.

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Abstract

This thesis deals with the way in which copyright law is changing in the digital environment and the mechanisms which are facilitating this change. It deals with these issues by analysing the mechanisms of this change, specifically Digital Rights Management (DRM) Systems and anti-circumvention legislation, and the impact which this change is having on the rights of copyright users.

The purpose of copyright is to provide an incentive to authors to continue creating while simultaneously providing a public good in allowing the public to use those creations in certain ways. Copyright achieves this purpose by granting both the author and user certain rights. The author is given a limited monopoly over their work in exchange for allowing this work to enter the public sphere and ensuring that users of that work can utilise that work in certain limited ways. The success of copyright thus rests on maintaining the balance between the rights of these parties.

The rise of digital technology has created a situation in which copyright content can be easily copied by any party with a Personal Computer and disseminated around the globe instantly via the Internet. In response to these dangers, copyright owners are making use of DRM systems to protect content. DRM systems include various measures of control within its scope. Theses systems allow for copyright owners to control both access and use of content by copyright users. DRM Systems are not foolproof measures of protection however. Technologically sophisticated users are able to circumvent these protection

measures. Thus, in order to protect DRM Systems from circumvention, anti-circumvention legislation has been proposed through international treaties and adopted in many countries.

The combined effect of these protection measures are open to abuse by copyright owners and serve to curtail the limited rights of copyright users. The end result of this is that the balance which copyright law was created to maintain is disrupted and copyright law no longer fulfils its purpose.

This thesis undertakes an analysis of these issues with reference to how these issues affect copyright users in developing countries. This is done with particular reference to possible approaches to this issue in South Africa as South Africa is a signatory to these anti-circumvention treaties.

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Australia – United States Free Trade Agreement (came into force January 1, 2005).

Berne Convention for the Protection of Literary and Artistic Works (completed at Paris on May 4, 1896)

WIPO Copyright Treaty (adopted in Geneva on December 20, 1996).

WIPO Performances and Phonograms Treaty (adopted in Geneva on December 20, 1996).

Table of Directives

European Union

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Copyright Directive - Directive 2001/29/EC of the European Parliament and of the Council May 22, 2001 on the harmonization of certain aspects of copyright and related rights in the information society.

Database Directive - Directive 96/9/EC of the European Parliament and of the Council of the European Union of 11 March 1996 on the legal protection of databases.

European Copyright Directive, Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society.

Software Directive - Council Directive 91/250/EEC of 14 May 1991 on the Legal Protection of Computer Programs.

UNITED NATIONS

United Nations Commission on International Trade Law Model Law on Electronic Commerce 1996 with additional a 5 *bis* as adopted 1998 (General Assembly Resolution 51/162 of 16 December 1996)

Abbreviations

Alb. L. J. Sci. & Tech.	Alabama Law Journal of Science and Technology
Am. J. Comp. L.	American Journal of Comparative Law
AUSFTA	Australia – United States Free Trade Agreement
AVI	Audio Video Interleave
CD ROM	Compact Disc Read-Only Memory
Colum. L. Rev.	Columbia Law Review
CPPM	Content Protection for Pre-Recorded Media
CPRM	Content Protection for Recordable Media
CSS	Content Scrambling System
DMCA	Digital Millennium Copyright Act
DRM	Digital Rights Management
Duke L. J.	Duke Law Journal
Duke L. & Tech. Rev.	Duke Law and Technology Review
DVD ROM	Digital Versatile Disc Read-Only Memory
DVR	Digital Video Recorder
E-Book/eBook	Electronic Book
EPUB	Electronic Publication
E-Reader	Electronic Book reader
ECTA	Electronic Communications and Transactions Act
EU	European Union
EUCD	European Union Copyright Directive
Fla. L. Rev.	Florida Law Review
Fordham L. Rev.	Fordham Law Review
Hous. J. Int.'l L.	Houston Journal of International Law
IBM	International Business Machines

IFLA	International Federation of Library Associations and Institutions
IP	Intellectual Property
ISP	Internet Service Provider
IT	Information Technology
J. Int'l Media & Ent. L.	Journal of International Media and Entertainment Law
J. Legal Stud.	Journal of Legal Studies
JIMEL	Journal of International Media and Entertainment Law
MP3	MPEG 1 or MPEG 2 Audio Layer 3
NGO	Non-Governmental Organization
PC	Personal Computer
PDF	Portable Document Format
PER	Potchefstroom Electronic Law Journal
RIAA	Recording Industry Association of America
SA	South Africa
SALJ	South African Law Journal
SCMS	Serial Copy Management System
Sony BMG	Sony Bertelsmann Music Group
Stan. L. Rev.	Stanford Law Review
TRIPS	Agreement on Trade-Related Aspects of Intellectual Property Rights
Tul. J. Tech. & Intell. Prop.	Tulane Journal of Technology and Intellectual Property
U. Chi. L. Rev.	University of Chicago Law Review
UK	United Kingdom
UNCITRAL	United Nations Commission on International Trade Law
UNCTAD	United Nations Conference on Trade and Development
U. Ill. L. Rev.	University of Illinois Law Review
UPS	United Parcel Service

US	United States of America
USB	Universal Serial Bus
Vand. L. Rev.	Vanderbilt Law Review
VCR	Videocassette Recorder
Wash. U. Global Stud. L. Rev.	Washington University Global Studies Law Review
WIPO	World Intellectual Property Organization
WCT	WIPO Copyright Treaty
WPPT	WIPO Performances and Phonograms Treaty
WTO	World Trade Organization

Chapter 1

Introduction

1. Introduction

DRM systems have been touted by some commentators as signalling the beginning of the end for copyright law.[1] Some of these commentators seem akin to doomsday prophets standing on street corners with cardboard signs and preaching that the end is nigh! However, keeping in step with the digital age in which we find ourselves firmly entrenched; the usual placards and soap boxes have been replaced by PDF journal articles, IP blogs and 'Tweets'. So the question which must be asked is this, do DRM systems and the anti-circumvention legislation with which they have become associated really spell the end for copyright law?

This thesis aims to undertake an analysis of copyright law in the digital environment by examining the various implications of DRM systems and anti-circumvention legislation for copyright law. This research will be largely focused on the impact of DRM systems and anti-circumvention legislation on the rights of copyright consumers or users. While copyright law requires the protection of the rights of copyright owners to exploit their works in various ways, these rights are kept in balance by the equal rights of users of those copyright works.

The balancing of the rights of copyright owners and copyright users is an integral measure for ensuring that the purpose of copyright is fulfilled.[2] Any discussions on the issues of

[1] See for example: JP Barlow "The Economy of Ideas" (1994) *Wired* http://www.wired.com/wired/archive/2.03/economy.ideas.html (accessed 13 May 2010); RS Ray Ku "The Creative Destruction of Copyright: Napster and the New Economics of Digital Technology" (2002) 69 *University of Chicago Law Review* 263; L Lessig "Code and Other Laws of Cyberspace" (2006) 124-125 http://pdf.codev2.cc/Lessig-Codev2.pdf (accessed 28 June 2010); T Gillespie "Copyright and Commerce: The DMCA, Trusted Systems, and the Stabilization of Distribution" (2004) *The Information Society* 239; P Samuleson "The Copyright Grab" *Wired* (1996) http://www.wired.com/wired/archive/4.01/white.paper_pr.html (accessed 12 March 2010).

[2] The purpose of copyright can generally be understood as being "To promote the Progress of Science and Useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective

copyright in the digital environment will, thus, need to be informed by the effect of particular changes on the purpose of copyright law.

2. Copyright Law: Purpose and the Digital Context

The purpose of copyright law is to allow creators of certain literary, dramatic, musical, artistic and other such works to benefit from their creativity. This is done by protecting certain rights in that creation, and through this protection an incentive is introduced to continue to create. This in turn is intended to promote further creativity and thus the cycle continues. Moore explains that "this argument [the incentive-based argument] is based on the economic principles of restricting access to copies of a work to increase demand and value through scarcity".[3]

In the past, analogue technology was the norm. This type of technology carried with it certain limitations. Perhaps one of the most obvious limitations, in the context of this research, and depending on whether one views the situation from the position of the copyright holders or the end-users, is the issue of piracy. The piracy of music is an example of the limitations of analogue technology.

Prior to the rise of the internet and the prevalence of digital music, the copying of music was a cumbersome operation. Lincoff states that such copying "required an organizational infrastructure, manufacturing facilities, distribution channels and lots of capital".[4] He explains that such operations were vulnerable to the music industries anti-piracy campaigns at every turn.[5] Furthermore, in the context of the everyday average home-user, the pirated

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Writings and Discoveries." US Constitution Article 1 – The Legislative Branch, Section 8 – The Powers of Congress, Clause 8.

[3] C Moore "Commonising the Enclosure: Online Games in Reforming Intellectual Property Regimes" (2005) 3 *Australian Journal of Emerging Technologies and Society* 100 at 105.

[4] B Lincoff "Common Sense, Accommodation and Sound Policy for the Digital Music Marketplace" (2008-2009) 2 *Journal of International Media and Entertainment Law* 1 at 4.

[5] Lincoff 2008-2009 *J. Int'l Media & Ent. L* 4.

copy which the home-user was able to produce was usually inferior to the original. This was due to a certain level of degradation which was inevitable when music was copied using cassette tapes, for example.[6] This type of piracy, whilst troublesome, did not represent a serious threat to the music industry and various other media and entertainment related industries.

The situation today is vastly different. Digital technology and the interconnectedness of the digital world via the internet have allowed for the seamless reproduction of copyright material. If one is to re-examine the example of music piracy in the context of digital technology, a very different picture emerges. The average home PC or any new PC, Laptop or Mac purchased today comes standard with a CD or DVD ROM. This technology allows anyone with access to it to copy music from any of their CDs and put it on their computer. This process is referred to as 'space-shifting'.[7] If people around the world are doing this and then sharing their music with others, which is made easy through the internet, then it seems apparent that the music industry will lose a great deal of revenue because consumers would rather get something for free than pay for it. Lincoff states rather pithily that music piracy in the digital age "…has become cheap, quick, easy and ubiquitous."[8]

The greatest problem that currently faces many media and entertainment-based industries, which are usually large-scale owners of copyright, is not the copying of their works through large-scale operations, but the fact that digital technology and the internet have allowed the average home-user to infringe copyright from the comfort of their own homes. An estimate by the International Federation of the Phonographic Industry submits that 20 billion unauthorised music recordings were downloaded in 2006, with the ratio of illegal to legal

[6] Lincoff 2008-2009 *J. Int'l Media & Ent. L* 4.
[7] Stammer explains that this concept allows "a person to make a copy of a sound recording for their own private and domestic use. They must own the original copy of the recording". K Stammer "Internet Law – The new face of Copyright law in Australia" (2007) *Freehills Law Firm* http://www.ibls.com/internet_law_news_portal_view.aspx?id=1710&s=latestnews (accessed 4 January 2010).
[8] Lincoff 2008-2009 *JIMEL* 4.

song downloads estimated to be 40:1.[9] It is clear that this has resulted in major revenue losses for the holders of these rights and digital technology poses a grave threat, not only to these industries, but to the efficacy of copyright law in general.

The fundamental nature of the purpose of copyright law, for the discussions undertaken in this thesis, requires one to understand, firstly, what this purpose is and, secondly, how maintaining the balance of rights between owners and users of copyright is integral to ensuring that purpose is being fulfilled. These issues will be discussed further in Chapter 2.

3. Digital Rights Management

In response to the threat which piracy in the digital age poses to copyright works, various companies have attempted to protect their rights by making use of Digital Rights Management.[10] It is important to note that there is no globally established definition for this term.[11] The term encompasses a number of different types of technologies which can be attached to a digital work. The purposes of DRM are twofold. Firstly, to control who may access certain works and secondly, to control how that work may be used, or what may be done with that particular work. These functions are referred to as access and use rights respectively.[12] Kruger notes that "DRM provides a realistic means to limit digital piracy while recognizing the global nature of file-sharing".[13]

Two examples of DRM will be examined. The first example is encryption. An encrypted file requires a password or a key to unlock the information contained in that file. The concept

[9] "Pirates Still Have All the Best Tunes" *The Guardian* 27 May 2007 http://www.guardian.co.uk/business/2007/may/27/musicnews.music (accessed 12 February 2010).
[10] Hereinafter "DRM".
[11] S Bechtold "Digital Rights Management in the United States and Europe" (2004) 52 *American Journal of Comparative Law* 323 at 324.
[12] Bechtold 2004 *Am. J. Comp. L.* 327.
[13] C Kruger "Passing the Global Test: DMCA as an international Model for Transitioning Copyright Law into the Digital Age" (2006) 28 *Houston Journal of International Law* 281 at 289.

behind this is that access to a file will be limited to those authorised users who have the password or key. This type of DRM is common with e-books.[14]

The second example of a DRM is a watermark. Watermarks can be seen as an identifier which allows a certain file to be tracked as well as controlling access to a particular file. Digital players are often linked with particular watermarks. So if a particular file does not possess the required watermark, it will not be playable on that particular digital player. A case in point would be Amazon's e-reader 'Kindle'. A Kindle is only capable of reading e-books which have been purchased from Amazon's website. Thus e-books which do not possess Amazon's watermark, regardless of whether or not they have been purchased legally, will not be usable by the end-user. Amazon not only controls access to its e-books, but also controls the way in which these e-books can be used.

As alluded to in the Amazon example above, various problems have emerged as a result of this DRM technology. One is that copyright holders are abusing this technology by giving themselves greater rights over their works than the law itself has given them. Wheatley notes that once "the exclusive rights of the copyright owner evanesce, DRMs continue to function and bar certain uses of the copyrighted work".[15] So certain rights which a consumer of copyright material would have over these works in an analogue world have now been denied to them by copyright owners in the digital world.

The right to fair dealing provides an example of the way in which some of these consumer rights have been restricted, and in some cases completely removed. Again using the example of Kindle, certain fair dealing rights cannot be exercised as a result of the DRM attached to Kindle. One such fair dealing limitation is an inability to make a copy of or print

[14] Kruger 2006 *Hous. J. Int.'l L.* 291.

[15] CT Wheatley "Overreaching Technological Means For Protection of Copyright: Identifying the Limits of Copyright in Works in Digital Form in the United States and the United Kingdom" (2008) 7 *Washington University Global Studies Law Review* 353 at 359.

out a particular part of a book or resell that e-book later on.[16] However, the rights which DRM provides holders of copyright, extends beyond the rights that copyright law grants them. A prime, and somewhat ironic, example of this was a situation which arose when Amazon deleted copies of George Orwell's '1984' which had been legally purchased by some of its Kindle users. Amazon's Terms and Conditions of Use Agreement did not grant them this right but the technology in place allowed them to do this anyway.[17] An analysis of DRM systems and the advantages and disadvantages of such systems will be made in Chapter 3.

4. Anti-Circumvention Laws

In a response to DRM and abuse of this technology by some copyright holders, technologically savvy communities have found ways of circumventing DRM. Some of this circumvention by consumers was said to have been done in order to make use of the work as their rights under copyright law allowed them to, while others did so in order to pirate and take advantage of these works. Thus the control over use and access of the digital works was again, in a practical sense, lost by the copyright holders. In an attempt to curb this circumvention, the World Intellectual Property Organization[18] drafted the WIPO Copyright Treaty.[19] This treaty, to which South Africa is a signatory but has not yet ratified, provides in Articles 11 and 12 that parties to the treaty must enact legislation within their respective territories to prevent circumvention of DRM.

Anti-circumvention laws, depending on the territory[20] and the specific legislation therein, make it an offence to circumvent any DRM or traffic any tools which allow for the

[16] "Amazon Erases Orwell Books from Kindle" *New York Times* 18 July 2009 http://www.nytimes.com/2009/07/18/technology/companies/18amazon.html (accessed 21 December 2009).
[17] "Amazon Erases Orwell Books From Kindle" *New York Times* 18 July 2009 http://www.nytimes.com/2009/07/18/technology/companies/18amazon.html (accessed 21 December 2009).
[18] Hereinafter "WIPO".
[19] Hereinafter "*WCT*". See WIPO Copyright Treaty 1996 http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html (accessed 21 January 2010).
[20] Some examples include: the Digital Millennium Copyrights Act 1998 (USA Act); European Directive 2001/29/EC specifically Article 6 (EU); Bill C-60 (Canada).

circumvention of DRM. An example of a case which took place in the US is illustrative of the seriousness with which these anti-circumvention laws are taken. The case of the *United States v Elcom Ltd.*[21] involved a Russian cryptography expert named Sklyarov who was in the US to give a lecture at a conference about the Advanced E-book Processor. This was essentially a computer programme which could be used for the purposes of circumventing the DRM on Adobe Systems Inc. E-book Reader software.[22] The circumvention which this programme would allow included the ability to "copy, distribute, print or have the text read audibly by a computer".[23] Some of these accessed abilities include rights which the end-user would have in terms of their right to fair dealing, but these rights had been denied to them by the DRM. Sklyarov and the company for which he worked were to be criminally prosecuted for their creation of this programme. The charges against Sklyarov were later dropped. The case against ElcomSoft went to trial and ElcomSoft was acquitted.[24]

Thus, the only means by which an end-user can make use of their rights to fair dealing in certain digital works, has now been turned into an offence by anti-circumvention laws. It is this unsavoury situation in which copyright law in the digital age now finds itself. Some sort of balance needs to be struck between the holders of copyright and the consumers of these copyright works. Craig poignantly states the issue by asking "whether media companies are overzealously protecting the rights of the copyright holder while ignoring the rights of the end-user?"[25] The above examples indicate that this question should be answered with a resounding 'yes'. An in-depth discussion of these issues will be undertaken in Chapter 4.

[21] 203 F.Supp.2d 1111 (N.D.Cal. 2002).
[22] CE Craig "Lending Institutions: The Impact of the E-Book on the American Library" 2003 *University of Illinois Law Review* 1 at 5.
[23] Craig 2003 *U. Ill. L. Rev.* 6.
[24] *Electronic Frontier Foundation "US v ElcomSoft & Sklyarov FAQ"* (2002) http://www.eff.org/cases/us-v-elcomsoft-sklyarov/faq#CivilOrCriminal *(accessed 1 March 2010).*
[25] Craig 2003 *U. Ill. L. Rev.* 4.

5. South African Approaches to Copyright in the Digital Environment

There is usually a great deal of confusion when one discusses user rights under copyright law. Many users are not aware of their rights or have misconceptions as to the extent of these rights. This confusion is often the result of unclear legislation concerning the rights of these users.[26] Although the scope of these rights are not nearly as broad as most users perceive them to be, they still serve an important function, especially in allowing for access to information.

South Africa's growth, as well as the growth of numerous other developing nations, requires that access to information is of paramount importance. The digital environment provides a landscape in which the free flow of information is prevalent. Such an environment should be considered a positive one for developing nations as it allows for widespread access to almost instantly available information. It should be recognised, however, that the citizens of many developing nations, including South Africa, face limitations with regard to the prohibitive costs associated with purchasing the means with which to access this information, i.e. the prohibitive costs of purchasing a computer. The impact of DRM systems and anti-circumvention legislation, however, may serve to stifle the positive aspects which underscore this environment. The ultimate effect of such measures may greatly limit access to information in developing nations which leaves the dream of development hamstrung.

In order to avoid this scenario, various approaches are discussed which may not serve to completely remedy the negative aspects of DRM systems and anti-circumvention legislation, but may alleviate some of the problems which these measures cause. The focus in this regard will specifically be on South Africa, as its status as a developing nation and as a signatory to the *WCT*, which it has not yet ratified, serves as the perfect arena in which to test some of the approaches aimed at protecting user rights. These issues will be discussed in greater detail in Chapter 5.

[26] See for example sections 12-19B of the Copyright Act 98 of 1978.

6. Conclusion

Although the areas identified will be discussed individually, in their respective chapters, the debate being undertaken is one in which the overlapping of concepts and problems are inevitable. It is important for the reader to keep this in mind when considering the numerous submissions and questions raised throughout this thesis, in order to fully realise the extent of the problems noted. It is with this in mind that the discussion of the purpose of copyright law begins, in the following chapter.

Chapter 2

The Purpose of Copyright Law and the Digital Environment

1. Introduction

The effects which the digital era, through the dual mechanisms of digital technology (in terms of copying) and the Internet (in terms of dissemination), is having on copyright law is a matter of serious contention. What cannot be denied, however, is that copyright law is being affected by the digital age.[27] Whether this impact is good or bad is a matter which is largely unsettled and is a perhaps a question which evades this type of binary categorisation. Whatever the answers to these questions may be, the current debates surrounding the legitimacy of Digital Rights Management systems, and what has been termed the 'digital dilemma',[28] cannot be understood unless one considers the historical context from which copyright laws emerged.

As will be shown in this chapter, an understanding of the history of copyright law involves a consideration of the technologies of the time. In considering these technologies the purpose which copyright law served is of paramount importance. It is only through an understanding of the purpose of copyright in the particular context in which it emerged that one can determine whether that purpose is still being fulfilled in the digital era.

Thus, this chapter undertakes to consider the following: the historical context in which copyright law emerged; its purpose in that particular context and; the position which copyright law occupies in the current digital environment. With these goals in mind one can begin to analyse the scenario which gave rise to the birth of copyright law.

[27] RS Ray Ku "The Creative Destruction of Copyright: Napster and the New Economics of Digital Technology" (2002) 69 *University of Chicago Law Review* 263 at 263.

[28] Committee on Intellectual Property Rights and the Emerging Information Infrastructure "The Digital Dilemma: Intellectual Property in the Information Age" (2000) http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=9601 (accessed 15 May 2010).

2. The Birth of Copyright Law – A Brief History

a. Context and Purpose

It is widely acknowledged that the Statute of Anne[29] represents the first piece of copyright legislation enacted in a Western legal system which was not associated with a royal decree or censorship.[30] The Statute came about as the result of lobbying by London booksellers who feared that their monopoly over the market would be negatively affected by works printed in other areas of the United Kingdom, namely Ireland and Scotland.[31]

One of the effects which the Statute had was that it emphasised the importance of 'authorship' in the creation of original texts and that such creativity was worthy of protection. In seeking to provide a means of protecting this creativity, the Statute gave rise to the notion of these works as constituting a form of property capable of being owned. Both Mendelson[32] and Jaszi[33] note that the notion of 'authorship' and the theory that these works constituted a form of property arose out of "… the burgeoning market economy in England and 'authorship' was a result of the linguistic and ideological progeny of 'possessive individualism'."[34]

What Mendleson[35] and Jaszi[36] are alluding to in the above quotation, is the context in which the Statute emerged and it is in this context that the purpose of the Statute needs to be

[29] Copyright Act, 1709, 8 Anne, c. 19 (hereinafter referred to as "The Statute").
[30] LL Mendelson "Privatizing Knowledge: The Demise of Fair Use and the Public University" (2003) 13 *Alabama Law Journal of Science and Technology* 593 at 595. See also G Davies *Copyright and the Public Interest* (2002) 10, as well as "Nature and History of Copyright" in K Garnett, G Davies and G Harbottle *Copinger and Skone James on Copyright* 15 ed Vol 1 (2005) para 2-16.
[31] M Rose "The Author as Proprietor: *Donaldson v Becket* and the Genealogy of Modern Authorship" (1988) *Representations* 51 at 52.
[32] Mendelson 2003 *Al. L. J. Sci. & Tech.* 596.
[33] P Jaszi "Toward a Theory of Copyright: The Metamorphoses of 'Authorship'" (1991) 1991 *Duke Law Journal* 455 at 471.
[34] Mendelson 2003 *Al. L. J. Sci. & Tech.* 596.
[35] Mendelson 2003 *Al. L. J. Sci. & Tech.* 596.
[36] Jaszi 1991 *Duke L. J.* 471.

understood. It is generally agreed that the purpose of the Statute was to provide a means of protecting literary works and, in so doing, provide the 'author' with the benefits of this protection.[37] Ginsburg notes that the authors' ability to control and be compensated for their works makes it worth their while to be creative."[38] Indeed, the long title of the Statute states that it was "An Act for the encouragement of learning, by vesting the copies of printed books in the Authors or Purchasers of such copies, during the times therein mentioned."[39]

While it is clear that the purpose of the Statute was primarily concerned with protection,[40] it can be argued that the true purpose of this Statute was to provide a means of protection not for newly created 'authors' but for the lobbyists of this legislation (i.e. publishers and booksellers). Barlow states that it is not the idea for which one gets paid but rather the ability to deliver that idea into reality.[41] In the context in which the Statute operated, this task of delivering the authors' ideas into reality was fulfilled mainly by distributors. This remains true to this day under traditional distribution models for copyright content.

The Statute protected the market for booksellers and publishers by creating a right over work as if it were a piece of tangible property. However, it was not the authors who owned these rights, but rather the booksellers and publishers who purchased these property rights from the authors.[42] Booksellers and publishers were thus able to maintain control over the market through the creation of property rights. Ray Ku submits that "the law, therefore,

[37] Davies *Copyright and the Public Interest* (2002) 13.
[38] JC Ginsburg "Copyright and Control over New Technologies of Dissemination" (2001) 101 *Columbia Law Review* 1613.
[39] Copyright Act, 1709, 8 Anne, c. 19.
[40] Davies *Copyright and the Public Interest* (2002) 13.
[41] JP Barlow "The Economy of Ideas" (1994) *Wired* http://www.wired.com/wired/archive/2.03/economy.ideas.html (accessed 13 May 2010).
[42] Mendelson 2003 *Al. L. J. Sci. & Tech.* 596. See also T Macaulay who submits that copyright represents "a tax on readers for the purpose of giving a bounty to writers". T Macaulay quoted in S Breyer "The Uneasy Case of Copyright: A Study of Copyright in Books, Photocopies and Computer Programs" (1970) 84 *Harvard Law Review* 281.

makes it possible to have a private market for works of authorship by artificially rendering those works scarce and exclusive."[43]

Ultimately, the importance of this Statute for the development of copyright law cannot be overstated. It is from this Statute that the global concept of copyright law has been modelled.[44] Indeed, legislation in the United States of America has largely been shaped in accordance with Article 1, Section 8, Clause 8 of the US Constitution,[45] which took its lead from the Statute of Anne in emphasising the importance of protection of works resulting from creativity. The Statute's effect on the US Constitution has been emphasised in this paper because a large majority of copyright works, on which this research focuses, originate from the US (i.e. music and literature).

b. Quid Pro Quo

It is important to remember that the protection of the work, by providing the author with a limited monopoly in relation to that work, is seen to be granted in exchange for the author making that work available to the public. In making this work available to the public the information contained therein enters and becomes a part of the public sphere. The knowledge of the public is seen to develop and improve. Thus the author is seen as providing a public good and is compensated, through their limited monopoly, for the provision of this public good.

From this relationship between the author and the public it is clear that this interaction is structured in order to operate on a *quid pro quo* basis. The competing interests concerned in this relationship are: (1) the rights of the authors to remuneration for their creativity as

[43] Ray Ku 2002 *U. Chi. L. Rev.* 279.
[44] Davies *Copyright and the Public Interest* (2002) 9.
[45] US Constitution Article 1 – The Legislative Branch, Section 8 – The Powers of Congress, Clause 8 states that Congress shall have the power "To promote the Progress of Science and Useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries".

well as for making these works available to the public and (2) the rights of the public to access these works in exchange for the monopoly granted to these authors.[46] In the American case of *Harper & Row, Publishers v National Enterprises* the court noted that "by establishing a marketable right to the use of one's expression, copyright supplies the economic incentive to create and disseminate ideas."[47]

The success of the above relationship requires a fine balance between the interests of these two groups. The importance of maintaining this balance is integral to the analysis being undertaken in this chapter. Before undertaking a discussion of the importance of maintaining this balance, however, one first needs to understand what the interests of these groups are. It is from an understanding of these interests that the rationale for granting rights both to authors and to the public can be understood.

In order to understand why a limited monopoly is granted to authors, it is necessary to undertake a discussion of copyright law theory, more specifically the incentive theory and the free rider problem which underlies it. Prior to an analysis of this theory, the quasi-public good nature of copyright requires discussion.

[46] CM Cimino "Fair Use in the Digital Age: Are We Playing Fair?" (2002) 4 *Tulane Journal of Technology and Intellectual Property* 203.
[47] *Harper & Row, Publishers Inc. v National Enterprises* 471 U.S.539, 558 (1985).

3. The Public Good

The concept of the public good has been mentioned at various points throughout this chapter. It is the quasi-public good nature of copyright which forms one of the pillars on which the justifications for the exclusive rights of copyright holders are based.[48]

A public good can be operationally defined by two criteria. The first is the non-excludability criterion while the second is the non-rivalrous consumption criterion. The non-excludability aspect of a public good is that once it has been made available to one person or group it immediately becomes available to others and cannot be easily withheld from those others.[49] This non-excludability aspect of copyright works is especially apparent when one considers the viral dissemination of digital content through file-sharing sites such as Napster or Limewire. Even where digital content is released with measures in place to protect the content from such viral and unauthorised dissemination, such measures do not protect the digital content for long. If or/when that technological protection is 'cracked' the work becomes available to all consumers.

A public goods non-rivalrous aspect concerns its seemingly inexhaustible nature once produced.[50] This nature was explained by Demsetz to mean that "it is possible at no extra cost for additional persons to enjoy the same unit of a public good."[51] Using the same example in the previous paragraph, once the technological protection has been bypassed then the work will usually be disseminated without any cost to other consumers over the Internet. This example is of course the very real problem which faces various copyright stakeholders.

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[48] WM Landes and RA Posner "An Economic Analysis of Copyright Law" (1989) 18 *Journal of Legal Studies* 325 at 326.

[49] PM Johnson "A Glossary of Political Economy Terms" (2005) http://www.auburn.edu/~johnspm/gloss/public_goods (accessed 12 June 2010).

[50] Johnson "A Glossary of Political Economy Terms". See also Ray Ku 2002 *U. Chi. L. Rev.* 277.

[51] H Demsetz "The Private Production of Public Goods" (1970) 13 *Journal of Law and Economics* 293 at 295.

Normally, due to the nature of a public good, it is something which does not lend itself to private production and is rather carried out by governments or special interest groups such as NGOs. This is largely due to the two criteria discussed above, which underlie a public good and lead to the inevitable free rider problem which arises from a public good and is of greatest concern in private production. In spite of this problem, it is these quasi-public good aspects inherent in works which are subject to copyright protection which forms the basis of the relationship between the consumer and the creator/distributor of the copyright work. Thus, access to the authors work is premised on certain protection being offered to the author. This protection offers an incentive for authors to make their works available. It is this incentive-based theory to which the discussion now turns.

4. The Incentive Theory

To reiterate what was discussed previously, the granting of a limited monopoly is seen as providing an incentive to authors to create new works. Burrell and Coleman state that the incentive theory relies on the premise that "a work will only be created if the expected revenues exceed the cost of expression and the cost of making and distributing copies." [52]A basic explanation of this is that if the author is able to benefit from their creativity then they will continue to create new works as a result of this benefit. The ability to derive some sort of benefit from their work is achieved by granting them this limited monopoly over particular usage of their works.

Moore explains that the incentive theory operates on the basis of "…restricting access to copies of a work in order to increase demand and value through scarcity."[53] If there were no means in place for protecting the work then the work would not be scarce and the demand as well as its value would greatly diminish. Following this there would be very little incentive to produce these works.

[52] R Burrell and A Coleman *Copyright Exceptions: The Digital Impact* (2005) 170.
[53] C Moore "Commonising the enclosure: online games in reforming intellectual property regimes" (2005) 3 *Australian Journal of Emerging Technologies and Society* 100 at 105.

This initially seems like a worthwhile endeavour, and it could be argued that most people would agree with this idea of allowing someone to derive a benefit from their labour and creativity in exchange for providing a public good. Ray Ku submits that the interests of both creators and distributors are often bundled together and therefore the interests of the two are treated as one in the same.[54] However it must be remembered that these two groups are separate and thus there is a distinction between the incentive to create and the incentive to disseminate works. In order to understand the incentive to disseminate works one needs to understand how these distributors, for whom this incentive is required, acquire rights in the works they disseminate.

In the past, the bundling of the interests of creators and distributors could be seen as acceptable, as this bundling was required in order for these groups to fulfil their obligation in providing public access to various works. The costs involved in creation were not in themselves prohibitive. Problems arose however, as mentioned above, in the dissemination of works. The analogy of protection of ideas versus the protection of the physical embodiment of that idea is captured in the example of wine. If one were to imagine a piece of work which is subject to copyright protection as wine, it is the wine bottle which is protected rather than the wine. In other words the wine bottle represents the physical medium through which the wine (i.e. the idea) can be distributed.

The costs involved in embodying this creation in some form of physical medium which could then be made available to the public were prohibitive. Examples of these types of media are numerous and can be seen as including books, vinyl records and CDs. The book or CD, in this example, obviously does not constitute the creative work itself. Rather a book provides a means for disseminating a literary work while a CD provides a means for disseminating musical works in a tangible form. Ray Ku notes that "while disembodied ideas may spread freely […] the books and albums conveying those ideas come at a price."[55] The importance

[54] Ray Ku 2002 *U. Chi. L. Rev.* 267.
[55] Ray Ku 2002 *U. Chi. L. Rev.* 267.

of this issue of the physical embodiment of works will be discussed in greater detail in part 5 of this chapter. However, returning to the incentive to disseminate, the following should be noted.

The copyright protection of the author's rights to his work only represents half of the interests concerned. An author would generally be unable to shoulder the costs of distributing their own works in an analogue era. As a result, authors will enter into licence agreements in terms of which they will assign their rights to publishers who will then distribute the work. Copyright therefore also serves to protect the publisher through an assignment of rights by the author. Thus the interests of both parties are protected by copyright law.[56]

The problems which face the distributors of works are largely concerns over being able to recoup the often exorbitant costs involved in the process of distribution.[57] Consider the following. A record label or publisher would be required to pay the costs of pressing thousands of copies of an album or printing thousands of copies of a book and then distributing these works. This would include the cost of the factory where the printing press is situated; the resources required to produce these copies; the labour involved in printing the books and packaging them; the carriage costs for transporting them to various locations to be purchased; and the marketing costs involved in making sure that the public know about the work. The list seems almost endless. It is unlikely that authors would be able to pay these costs themselves prior to the distribution of their works. The production of the medium to be distributed could not take place without these costs being paid. Therefore the distributor or publisher serves an important function in this relationship.[58]

[56] Ray Ku 2002 *U. Chi. L. Rev.* 279.
[57] Ray Ku 2002 *U. Chi. L. Rev. 267*. See also Davies *Copyright and the Public Interest* (2002) 15.
[58] Ray Ku 2002 *U. Chi. L. Rev.* 267. See also Landes and Posner 1989 *J. Legal Stud.* 327.

On this basis one could argue that the publisher would be equally as entitled to benefit from disseminating the work as the author would be entitled to benefit from creating the work. Without the author, the work would not exist, but without the distributor the work would not reach the public and the public good which copyright works supposedly seek to achieve would not be possible. Therefore a bundling of the two interests seems fair.

The use of copyright as an incentive is said to give rise to the "…classic public goods problem as in the absence of copyright protection, others would be tempted to free ride".[59] Thus, in light of the need to derive a benefit from this creativity and labour, as well as the investment in making this work available to the public, copyright protection is provided to protect against the free rider problem. One thus needs to understand what the free rider problem is.

5. The Free Rider Problem

a. The Problem

Like most things in western democratic societies, copyright is largely connected to an economic purpose. The incentive theory states that copyright operates by providing protection to works in order to ensure the continued existence of an incentive to both create and distribute certain "cultural products"[60] and thus allow the public to access these works. Without this incentive the public good which these cultural products are seen as providing would be subject to the free rider problem which carries with it certain ramifications. So the question which arises is this: What is the free rider problem?

In short, the free rider problem is an economic principle. It operates on the assumption that a public good will be susceptible to abuse by users who fail to internalise the costs of their

[59] Burrell and Coleman *Copyright Exceptions* 170.
[60] Burrell and Coleman *Copyright Exceptions* (2005) 170.

use and therefore the cost of the production of a particular work.[61] A basic example will serve to better explain the theory: where people use a road without paying the toll to use that road, eventually there will be no road to use. The failure of these 'free riders' to pay for their use results in a trickle-down effect in terms of which the provider of the road is unable to pay for the upkeep of that road and recover the costs which were paid in building the road. Therefore the incentive to maintain current roads, or build more roads, disappears in the same way as the public good which it served. By putting legislation in place, however, which makes it an offence not to pay the toll, the road builder and the public good are offered legal protection. Copyright law represents the protection offered to these 'doers of public good', i.e. authors and distributors. On this point Burrell and Coleman note that without copyright law "others would be tempted to free ride – either potential purchasers would copy the work for themselves or rival publishers would emerge who would be able to undercut the author or first publisher…"[62]

b. The Pre-Digital Era

In an environment, such as the analogue era of creative works, which requires that works have some form of physical embodiment in order for them to be distributed to the public, the free rider problem constitutes a very real concern to the interested parties. What made this problem less worrisome in the pre-digital era was the difficulty associated with copying and the reduction in quality of copied works.[63] Therefore, while the potential for free riding was present, its ultimate effect on the incentives for creation, and, perhaps more importantly dissemination, was not dramatic. An important point which Jensen notes is that "copyright law has historically been directed toward mediating relationships among a relatively small number of people".[64] This situation is very different in a digital environment.

[61] Ray Ku 2002 *U. Chi. L. Rev.* 278.

[62] Burrell and Coleman *Copyright Exceptions* (2005) 170.

[63] Ray Ku 2002 *U. Chi. L. Rev.* 272. See also C Jensen "The More Things Change, the More They Stay the Same: Copyright, Digital Technology and Social Norms (2003) 56 *Stanford Law Review* 531 at 543.

[64] Jensen 2003 *Stan. L. Rev.* 543.

c. The Digital Era

In the digital environment the technology required to copy works has vastly improved and the costs of this technology have dramatically reduced. With this now affordable technology, the ability to copy is available to almost anyone who has a PC. Moreover, digital copies constitute a perfect reproduction of the original without any reduction in the quality of subsequent copies.[65] The Internet provides a means for near instant dissemination of copied works at the cost of a PC and an Internet connection. It is this combination of accessible technology and cheap means of dissemination which has greatly altered the playing field with regard to the free rider problem.

In discussing the free rider problem in the digital domain, while it must be remembered that the manner in which the free rider problem works is that all parties concerned are ultimately affected, it seems apparent that the group whose interests are most at risk are the distributors of works. Ray Ku notes that these groups "…fear the power of the Internet to distribute digital information 'virally'…"[66] It could be argued that this reduction in the cost of distribution would be an advantage to the likes of publishers and record companies.

These reduced costs arise from not needing to produce and distribute a physical embodiment or physical copies of a given work.[67] If one takes the example of publishing a book, the reduction in costs would include, but not be limited to: the cost of the resources to create the physical embodiment of the work, for example the cost of purchasing ink and paper; the maintenance costs associated with maintaining the printing presses; the cost associated with purchasing or renting the property on which all the books are to be printed; the costs involved in paying for storage of the books; the labour costs involved in producing the physical embodiment of the work; and the costs of packaging and carriage for

[65] Ray Ku 2002 *U. Chi. L. Rev.* 271. See also Cimino 2002 *Tul. J. Techn. & Intell. Prop.* 204.
[66] Ray Ku 2002 *U. Chi. L. Rev.* 267. See also CC Mann "The Heavenly Jukebox" (2000) 4 http://www.theatlantic.com/past/docs/issues/2000/09/mann.htm (accessed 19 May 2010).
[67] Ray Ku 2002 *U. Chi. L. Rev.* 270 – 271.

disseminating the work. All these costs disappear or are greatly reduced by distributing works in a digital form. While one can understand the fears of distribution groups in relation to the above scenario, as they perceive this digital dissemination to be a boon to their monopoly over the market, this means of dissemination can also been seen to hold great potential for them too.

By removing the need for tangible embodiments of work the cost reduction associated leads to a reduction in the need for distributors, as the creators would be better able to distribute their works themselves. An example of the possibilities which current digital technology and the Internet provides to creators in terms of dissemination can be viewed by looking at various album releases by artists.

The power of technology for the production and dissemination of creative content is evidenced by the success of a self-released album. In 2005 the Brooklyn-based band "Clap Your Hands Say Yeah" pressed and released an album under their own steam, without the assistance of a record label (i.e. a distributor).[68] The album became a sensation via word of mouth and over the Internet through music blogs. Indeed, one journalist noted on the hype surrounding the band "…the indie success story of 2005 went from barely blipping on the radar to saturating it […] one thing was certain: CYHSY could be admired or disliked, but not ignored."[69] However, in this story it should be pointed out that this increase in popularity eventually lead to a severe demand on the band itself in terms of re-pressing more albums. Thus later in 2005 the band signed to a record label in order to lighten the load with regard to the production and distribution of its album.

[68] "Clap Your Hands Say Yeah – Album Review" *Pitchfork.com* 21 June 2005 http://pitchfork.com/reviews/albums/1811-clap-your-hands-say-yeah (accessed 16 May 2010). "Clap Your Hands Say Yeah" hereinafter referred to as "CYHSY".

[69] "Clap Your Hands Say Yeah - Cat's Cradle: Carborro NC" *Pitchfork.com* 9 March 2006 http://pitchfork.com/features/articles/6297-clap-your-hands-say-yeah (accessed 16 May 2010).

This story serves as an example of the power of the Internet to generate interest in new creative works, but where the work still relies on a physical medium for its distribution then it seems apparent that distributors still have an integral role to play. From this the following question arises: How would the above the situation be different where a work was distributed in a purely digital form and no physical embodiment of the work was required?

6. The Digital Dilemma

The rise of digital technology which allows for copying and the dissemination of work at a greatly reduced cost has given rise to fears by the distribution industry as well as creators of works. This fear is largely related to the ease with which digital works can be copied and disseminated. This in turn has lead to concerns that current copyright law would be unable to regulate the increased threat of the free rider problem which emerges from digital technology.

If one follows the incentivist theory, this increased free rider problem would result in distributors being unable to recoup their costs invested for the dissemination of works. Furthermore, the incentive to create would be diminished as creators would be unable to benefit from their creativity and labour. Ultimately, so the argument goes, the public access to works would be greatly diminished as the incentive to create these works and distribute them would have been greatly affected by digital technology stoking the fire of the free rider problem. Thus the public good of providing the public access to knowledge is being negated by digital technology. This explanation portrays a situation of imminent doom and gloom. Is this really the fate which awaits copyright?

It is fair to say that the interests of distributors are being threatened by the rise of digital technology. In response to this threat these distribution groups have clearly decided to fight fire with fire. In other words, distributors have responded to the threat of digital technology by making use of digital technology to protect their rights. On this point it has been noted

that technology is a double-edged sword.[70] Indeed, Professor Lessig notes that digital technology relies on computer code to function and as such this code can be used to regulate that technology and the uses of and access to it by the public.[71] An in-depth discussion of the use of these technologies follows in chapter 3. It is, however, important to note that distributors make use of technological means of protecting their rights and, even further, these technologies are used to provide them with greater control over usage and access. Therefore, in practice, distributors provide themselves with greater rights than copyright law gives them.

Two questions follow from the above. First, does the need for distributors exist in a digital environment? Of course one must realise that as the situation currently stands it is unlikely that digital works will completely replace their tangible counterparts. Indeed, one could argue that it is the tactile nature of these physical embodiments of works which will ensure their continued survival in the digital age. For example, the smell of a book or the texture of a page is unlikely to be replaced by using Amazon's Kindle E-reader. However, for works which are largely based on digital dissemination, is the distributor still required?

If it is possible for the creator of the work to distribute their work themselves in a cost-effective way in a digital environment, and the public is able to internalise the cost of this creator-based dissemination, then surely the pre-digital role of the distributor becomes redundant in a digital environment? Indeed, Barlow notes that the reason copyright law worked in the pre-digital era was that it operated on the basis of protecting expression and to express was, more often than not, to make physical.[72] To make physical was not an easy thing to do.

[70] Ray Ku 2002 *U. Chi. L. Rev.* 274.

[71] L Lessig "Code and Other Laws of Cyberspace" (2006) 124-125 http://pdf.codev2.cc/Lessig-Codev2.pdf (accessed 28 June 2010).

[72] Barlow "The Economy of Ideas".

Perhaps in realising this possibility, various distribution groups have made use of a variety of means to ensure the survival of their business in an environment which does not necessarily need them.[73] Through lobbying for legislation which favours the interests of distributors and which allows, and indeed calls for, the implementation of DRM systems into the technologies which threaten them, distributors have managed to retain a foothold in the digital environment. Through various technological measures, contractual arrangements and licensing agreements, these groups have not only managed to prevent themselves from becoming irrelevant, but have given themselves greater power than they previously possessed. While relevant, this discussion extends beyond the scope of this chapter and is discussed further in chapter 3 and 4 respectively.

The second question which then follows on from the first is: What role should copyright law play in a digital environment? If digital dissemination of work removes the requirement for a work to be physically embodied in a particular medium, then the bundling of the creation and distribution incentives may no longer be apt.[74] By removing the need for a distributor, in the role which they filled in the pre-digital copyright environment, the interests left are those of the creator and those of the public. Thus the question which needs to be answered is whether copyright still serves as an appropriate means of protecting the interests of these two remaining groups?

The above question is not an easy one to answer. Indeed, part of the purpose of this research is to provide greater insight into this very question. Burrell and Coleman in discussing the free rider problem submit that without copyright "no one would bother to create or publish copyright works."[75] The authors go on to note that in the absence of copyright protection, the market for such works would tend towards cheap and faddish

[73] Mann "The Heavenly Jukebox".
[74] Ray Ku 2002 *U. Chi. L. Rev.* 267 – 268.

[75] Burrell and Coleman *Copyright Exceptions* 170.

works.[76] A reliance on these types of works would provide both creators and distributors the opportunity to recover their costs both in creation and distribution. While copyright law does not necessarily concern itself with the quality of the work which it protects, a market for copyright works which only produces cheap and faddish works poses serious concerns. The main issue which emerges is that the so called cheap and faddish works may not add much to the public sphere and therefore public knowledge.

The concerns raised by Burrell and Coleman and their emphasis on the importance of copyright law are valid. However, it is clear that their concerns largely stem from the free rider problem. As noted earlier, the rise of digital technology and the dangers of viral dissemination posed by the Internet carry with them the likelihood of the free rider problem becoming an exponential hazard to copyright works. One should however take into account the argument that the digital dilemma may not be a dilemma at all, and may in fact provide a solution to the free rider problem in copyright works.

a. The Free rider problem and the Digital Dilemma

The incentive theory recognises the importance of copyright law as a means of providing an incentive to create and distribute. Earlier, pre-digital technologies which allowed for the copying of works were seen as diminishing incentives, but the incentives were still present. This was in large part due to the inadequacies of earlier copying technologies.[77] Therefore the distribution industry faced a less serious threat from older copying technologies such as photocopiers, VCRs and audio cassette recorders.[78]

[76] Burrell and Coleman *Copyright Exceptions* 170 . See also Ray Ku 2002 *Chicago Law Review* 296.

[77] Ray Ku 2002 *U. Chi. L. Rev.* 272. B Lincoff "Common Sense, Accommodation and Sound Policy for the Digital Music Marketplace" (2008-2009) 2 *Journal of International Media and Entertainment Law* 1 at 4. See also Landes and Posner 1989 *J. Legal Stud.* 329.

[78] Ray Ku 2002 *U. Chi. L. Rev.* 272. Lincoff 2008-2009 *J. Int'l Media & Ent. L* .4.

As submitted earlier, because of the way in which digital technology and the Internet have altered the way in which copying and dissemination occurs, the incentive to distribute can be unbundled from the incentive to create. Following this unbundling, the importance of an incentive to distribute, as it functioned in the pre-digital era, may no longer be required in the digital era. This is due to the reduction in costs of digital production and in the means of disseminating such works. What remains then of the incentive which is provided, and protected, by copyright law is the incentive to create.

Ray Ku notes that the artificial scarcity which copyright creates is justified by the incentive it provides for creation in reciprocation for public access.[79] What is the situation, however, if the need to create that artificial scarcity is no longer required as the market is capable of providing incentives to create and such incentives are completely removed from the creation of an artificial scarcity? Will copyright law still be required, bearing in mind that the purpose which it fulfils is no longer needed?[80]

Barlow argues that because intellectual property relates to a non-tangible work, it is obviously very different from physical property. By removing the work from its physical embodiment we can no longer treat that work like physical property because the differences between the physical and unbound are great. In an example he states "…if we continue to assume that value is based on scarcity, as it is with regard to physical objects, we will create laws that are precisely contrary to the nature of information, which may, in many cases, increase in value with distribution."[81]

[79] Ray Ku 2002 *U. Chi. L. Rev.* 293.
[80] Ray Ku 2002 *U. Chi. L. Rev.* 293.
[81] Barlow "The Economy of Ideas".

Ray Ku ultimately submits that "the economics of digital technology renders copyright both unnecessary and inefficient."[82] As to why he says this, one needs to look at the incentive to distribute and the incentive to create respectively in the digital era.

b. Distribution Incentives in the Digital Era

The argument of distributors can be summed up as follows: if, over time, the growth in income and technological advances enlarges the size of the market for any given work, and the cost of copying declines, copyright protection should expand.[83] In other words, as the cost of copying decreases and the quality of copies increases, then the potential for unauthorised copies increases. This gives rise to a greater likelihood of more free riders and the bundled incentive right suffers from more free riders. Thus greater protection from free riders is required and this is done by granting further copyright protection to the incentivists groups.

This issue has been termed the 'incentive-access' paradox by Professor Lunney.[84] The paradox of which she speaks relates to the need for an incentive in order to create and distribute which in turn allows for greater public access. In an increase in the incentive to create and distribute the public is better able to access these works. Therefore, any reduction in these incentives will lead to a reduction in the creation and distribution of works which will diminish public access to a work. Lunney notes that limiting the protection of a work to ensure its dissemination reduces the incentive to disseminate such work in the first place.[85]

In order to prevent the above from happening, so the argument goes, there is a need to provide greater protection to these incentives. However, by providing greater protection to

[82] Ray Ku 2002 *U. Chi. L. Rev.* 294.
[83] Ray Ku 2002 *U. Chi. L. Rev.* 279.
[84] GS Lunney "Reexamining Copyright's Incentives-Access Paradigm" *Vanderbilt Law Review* (1996) 483.
[85] Lunney 1996 *Vand. L. Rev.* 557.

the rights of copyright holders in these works, the ability of the public to access these works is diminished, which defeats the ultimate goal of providing copyright protection in the first place. Obviously, in light of this paradox, it is not in the interests of any of the parties concerned to upset the balance of these interests too much. However the balance seems largely skewed in favour of the rights of the incentive-based groups.

Bearing in mind that the history of copyright law indicates that the cost of distributions has consistently been identified as a barrier to distribution, the following is submitted. If part of the purpose of copyright law is to allow for the initial distributor to recover the costs of their investment, then surely as digital technology reduces the costs of copying, this would mean that the investment in the initial distribution would be reduced by the reduction in the costs of manufacturing and distributing these works. Consequently, with a great reduction in this cost barrier, the costs which a distributor needs to invest in a work will be reduced.

Following this, the costs which distributors would need to recover from their investment in the production and distribution of works would not be as great as they were in the pre-digital era. It follows that a decrease in the cost of copying should be accompanied by a minimising of copy protection rather than an expansion thereof. Instead it seems that the public aspect sitting at the heart of copyright law has been ignored, as the public are merely viewed as potential infringers while the distributors are viewed as helpless victims. This situation is far from the truth.

Ginsburg notes that the rise of digital technology, and copying technologies in general, can be seen as having initially shifted the balance of control in favour of the user. She goes on to note however that legislative response to this threat, especially in the USA, has swung the pendulum greatly in favour of the copyright owners.[86]

[86] Ginsburg 2001 *Colum. L. Rev.* 1614.

Indeed one could argue that a reduction in the cost of copying is a good omen for public access rights and that the response of the major stakeholders in the copyright industry represents their fear over a loss of control through a reduced need for distributors as a result of the reduced need for distribution incentives. Given the historical background of copyright law and the constant presence of the hand of distributors in various legislative enactments, it is submitted that the rights of the public to access works have taken a back seat to the need of distributors to recover the costs of their investment.

An interesting argument raised against the expansion of copyright in order to provide greater incentives is based on the submission that digital technology gets rid of the free rider problem which plagued the pre-digital era. The submission made by Ray Ku is that the public internalise the costs of distribution in a digital environment and as such the content of works is disseminated to the public without the need for a distributor. The question which arises from this is how exactly does the public internalise the costs of distribution?

The argument submitted is a simple one. The public internalise the costs of distribution by purchasing the equipment with which to distribute. Thus the answer to the question of how the public internalises the costs of distribution has been stated throughout this chapter and is in fact part of the problem. With the rise of relatively cheap digital technology which allows for the inexpensive and efficient reproduction of a work which produces a near perfect copy of the original, the public carry with them the means to distribute work without needing a separate distributor. It has been noted on this point that in purchasing the various technologies which allow for reproduction and dissemination the public "…form the distribution channels for disseminating digital content."[87]

Of course, the success of the above argument relies on the need for some form of royalty or licensing system being in place in order to allow the creators of works to benefit from their

[87] Ray Ku 2002 *U. Chi. L. Rev.* 301.

creative endeavour. Ray Ku identifies that, in the US, revenue will also be received indirectly from the royalties provided by the Audio Home Recording Act[88] for the sale of blank CDs, digital recording devices, and computer hardware.[89] Therefore mechanisms are, or can, be put in place to ensure that distributors can reap the benefits of their monopoly. Thus the current approach to distributors in the digital environment is one of protecting an industry which can no longer be seen as a necessity. Yet they still wish to reap the benefits from work which is not their own, whilst not being required to distribute this work in a digital context.

With the submission that the incentive for distribution is no longer required for digital dissemination, one should be wary not to throw the baby out with the bath water. In other words, the incentive to create should be viewed as something separate from the incentive to distribute, as was the purpose of unbundling the two incentives. If the distribution channels of old disappear then so should the rights of distributors. The issue which then arises is whether or not the incentive to create is still present in a digital environment.

c. Creation Incentives in the Digital Era

Throughout most of this chapter the focus on the incentives which copyright provides has largely been on distribution. However, with distribution in the digital era no longer entirely dependent on an independent distribution industry, it remains to be seen whether copyright still serves the purpose of providing an incentive to create. The importance of the creation of new works is indeed something which should be of concern, as the ability of the public to adopt the distribution role is meaningless without there being any content for them to distribute. Furthermore, a market is likely to stagnate where no new works are being produced and only old works circulate amongst the public.

[88] Note that this Act actually forms part of the US Copyright Act of 1976 under Chapter 10 but is often referred to as the Audio Home Recording Act.
[89] Ray Ku 2002 *U. Chi. L. Rev.* 304.

Ginsburg notes that "economic incentives to create may be needed to achieve [...] the goal of public instruction, but those incentives should be as modest as possible."[90] So does copyright provide an incentive for the creation of works in a digital era? In order to answer this question one needs to look at the various avenues through which a creator might earn revenue from their creative endeavours.

i. Royalties

The question of whether copyright still provides an incentive to create is difficult to answer without looking at how this incentive operated in the pre-digital era. In taking the example of a musician, Mann states that it is very rarely that a musician will earn royalties from the sale of a CD.[91] He notes that musicians, under a standard contract with a record label, may often be in debt to the record label that produced their album. This debt relates to the costs of "production, marketing, promotion and other expenses" to name a few.[92] Mann goes on to note that a musician will be required to sell roughly a million copies of an album before they will receive any royalty payments. This is due to their debt to their record label. Ray Ku notes that "meanwhile the same million copies will have earned the record company approximately $11 million [US Dollars] in gross revenue and $4 million net."[93] This is a startling figure given that RIAA research states that less than 1 percent of the audio releases between 1992 and 1999 sold a million copies or more.[94] On this basis, very few if any musicians earn any income from the royalties of album sales. If these artists do not receive much of their income from royalty payments then the question arises: Where do they get their money?

[90] Ginsburg 2001 *Colum. L. Rev.* 1615.
[91] Mann "The Heavenly Jukebox".
[92] Ray Ku 2002 *U. Chi. L. Rev.* 307.
[93] Ray Ku 2002 *U. Chi. L. Rev.* 307.
[94] Ray Ku 2002 *U. Chi. L. Rev.* 308.

ii. Live Performances

The greatest asset which a musician has in their arsenal is their monopoly over the performance rights for their music. Following this, it has been suggested that most of the money which musicians earn comes from touring and live performances.[95] Indeed, in North America concerts generated over $1 billion in revenue during the year 2000.[96] The album recordings merely generate publicity to get people to go to the live performances.[97] If musicians are not earning any income from CD sales then free music serves as a form of advertising in that it promotes their main source of income, i.e. ticket sales.[98] Besides being one of the main forms of income for musicians, touring is also seen as providing other benefits to the musicians.

Barlow states that a musician's greatest means of protecting their intellectual property is that they are "the only real-time source of it."[99] He distinguishes between the actual experience of being at a live performance and a recording of that performance.[100] His example specifically refers to the Grateful Dead for whom he wrote lyrics. He submits that a recording of a live performance and recordings in general merely represent a 'thin projection' of the music as a whole, as the music cannot easily be separated from the experience of viewing the performance. The power of live performances serves to give musicians a means of generating income while album sales mainly serve the interests of record labels. This can be seen by looking at a recent example of a free album release by Prince in the UK.

In 2007 the musician "Prince" entered into a deal for the free distribution of his album "Planet Earth" with the *Mail on Sunday* newspaper. The newspaper is estimated to have a reader circulation of roughly 2.3 million. Based on that estimate, the same number of copies

[95] Barlow "The Economy of Ideas".
[96] Ray Ku 2002 *U. Chi. L. Rev.* 309.
[97] Ray Ku 2002 *U. Chi. L. Rev.* 308.
[98] Barlow "The Economy of Ideas".
[99] Barlow "The Economy of Ideas".
[100] Barlow "The Economy of Ideas".

of the album would have been distributed to these readers. These copies were released prior to the album launch which was only scheduled for the 24th of July of that year. This free album distribution was followed up by 21 live performances by Prince in London's "02 Arena". Free album copies were also distributed with tickets purchased for the show.[101] All 21 shows were completely sold out. One journalist noted that the stadium could hold 24 000 people.[102] Over 21 nights, that adds up to 504 000 people. That number may seem to pale in comparison to the reader circulation of the newspaper and the number of albums freely distributed, but one could argue that not all of the readers of the newspaper would regularly purchase a Prince album or have attended one of his shows. The free album distribution thus generated publicity and interest in his live performances which resulted in 21 sold out shows. Even more interesting was the response of distributors and parties involved in the distribution chain to this free distribution.

Sony BMG, the record label concerned with releasing the album, upon hearing the news of the free album distribution stated that its UK branch, Sony BMG UK, would not be releasing the album in that region due to the free distribution through the newspaper.[103] The co-chairman of the Entertainment Retailers Association stated that "The Artist formerly known as Prince should know that with behaviour like this he will soon be the Artist Formerly Available in Record Stores."[104] He went on to say that "It is an insult to all those record stores who have supported Prince throughout his career. It is yet another example of the damaging covermount culture which is destroying any perception of value around recorded music."[105] It is clear that the distributors of Prince's music were not pleased by his move to give away free copies of his album. The reason for their displeasure seems obvious. The

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[101] "U.K. Storm Brewing Over New Prince Album" *Billboard.com* http://www.billboard.com/bbcom/news/article_display.jsp?vnu_content_id=1003605696#/bbcom/news/article_display.jsp?vnu_content_id=1003605696 (accessed 23 May 2010).

[102] "Backstage with Prince" *Daily Mail* 20 September 2008 http://www.dailymail.co.uk/home/moslive/article-1056586/Backstage-Prince.html (accessed 23 May 2010).

[103] "Princes Free Album Causes Storm With Retailers" *USA Today* 2 July 2007 http://www.usatoday.com/life/music/news/2007-06-29-prince-giveaway_N.htm?csp=34 (accessed 23 May 2010).

[104] "Princes Free album Causes Storm With Retailers" *USA Today*.

[105] "Princes Free Album Causes Storm With Retailers" *USA Today.*

retailers and record label were removed from the distribution chain entirely and as such they lost out on revenue which the album would have generated.

It should be made clear that what is being argued here is not that creators do not deserve to benefit from their works. Rather, the previous sales-based business models which relied on factors such as album sales to generate income provided very little income to creators anyway. If the digital era removes the need for the traditional distributor in relation to digital copies of works, then these traditional sales-based models do not serve any necessary interests. Therefore there should be a shift in the way in which business is done. This shift should allow creators to benefit from their works while allowing the public to access these works.

iii. Secondary Markets

The so-called 'secondary markets' are said to provide greater opportunities for creators to earn more income than their performance and reproduction rights alone would allow. Other forms of income generation for creators besides live performance could include, but would not be limited to: rights to grant licences for derivative works, trademarks as well as product and service endorsements.[106] Furthermore, the Internet can be seen as a provider of other secondary markets from which creators can derive benefit from their works.

There are various examples of the above which one can consider. The author Stephen King, for example, self-published novels including "Riding the Bullet" and "The Plant" and released them in instalments through his website.[107] This instalment system cost purchasers $1 per instalment and $2 thereafter for subsequent instalments. King did not require these payments to be made upfront but rather adopted what has been termed the "honour

[106] Ray Ku 2002 *U. Chi. L. Rev.* 309.

[107] "Stephen King Sows Dread in Publishers with His Latest E-Tale" *New York Times* 24 July 2000 http://www.nytimes.com/2000/07/24/business/media-stephen-king-sows-dread-in-publishers-with-his-latest-e-tale.html?pagewanted=1?pagewanted=1 (accessed 24 May 2010).

system" or "ransom approach". King stated that if he did not receive payments from at least 75% of the purchasers then he would withhold releasing subsequent instalments. Therefore fans would ensure that this minimum threshold was reached so that they could purchase the subsequent instalments.[108] One author noted that "The pass-around dynamic of Web publishing will create demand the way radio generates demand for new songs".[109] One issue which arises is whether the success of this particular example of self-publishing is due to the way in which it was carried out or the author's fame which created the publicity and ultimately the sales.

In literary works, deals between publishers and authors operate on a royalty basis. However, these royalty agreements suffer from similar ills to those of musicians and record companies. The services provided by publishers are similar to those provided by other distributors of copyright works. Examples of these services include in-house editors, printing, cover design and distribution. These could be likened to music industry examples of producers, album pressing, album artwork and distribution. So in self-publishing their work and in making use of the Internet as a distribution tool, an author does not need to rely on the distribution services offered by publishers.

Arguments on the viability of the self-publishing route seem to depend on who is being asked. On the possible success of the self-publishing model, one author notes that the increased profitability of the self-publishing model will likely draw more authors into distributing their works in this manner.[110] Unpublished authors or so-called 'slush pile' authors would be drawn to this distribution method because it is cheap while the best-selling authors would make use of this method of distribution because of the greater income to be made.[111] Publishers are however quick to point out that "big publishers' economies of scale allow them to do business more cheaply and effectively than authors

[108] "Stephen King Sows Dread" *New York Times.*
[109] "Stephen King Sows Dread" *New York Times.*
[110] "Stephen King Sows Dread" *New York Times.*
[111] "Stephen King Sows Dread" *New York Times.*

could by paying editors, printers and everyone else."[112] They further point out, that most authors are concerned with the creative process of writing and do not really have any desire to be involved in the actual mechanisms of distribution. This argument could be extended to the authors of other copyright content such as music. It is therefore submitted that the success of these kinds of distribution models, for example self-publishing, will largely be determined in time.

A music-based example of adopting alternative distribution methods which does not rely on the sales-based revenue model could be seen in the album release of Radiohead's seventh album "In Rainbows". The band initially released the album in a digital format on October 10th 2007 and a pre-order 'discbox' which cost £40.[113] The album in its digital format could be downloaded from the band's website on a 'pay-what-you-want' basis. According to one report, most fans paid nothing to download the album. It was however noted that the money it had generated purely through its digital distribution was greater than the total money generated by their previous album "Hail to the Thief" in 2003.[114]

d. Conclusion

On this basis, can it really be said that copyright provides an incentive for creators to create? If very few musicians receive royalties from their album sales and rely largely on touring and live performances for income, then surely the copyright protection of the physical embodiment of their creation, e.g. CDs, provides them with no financial incentive. It is clear from the above examples that the only financial interests that the sales of CDs serve are those of the distributors. Ginsburg suggests that "digital media, by making the means of production and dissemination available to any computer-equipped author, gives authors a realistic opportunity to bring their works to the public without having to put themselves in

[112] "Stephen King Sows Dread" *New York Times.*
[113] "Fans Crash Radiohead Album Site" *BBC News* 2 October 2007 http://news.bbc.co.uk/2/hi/entertainment/7024130.stm (accessed 24 May 2010).
[114] "Radiohead Reveal how successful 'In Rainbows' download really was" *NME* 15 October 2008 http://www.nme.com/news/radiohead/40444 (accessed 24 May 2010).

thrall to traditional intermediaries."[115] If the digital era no longer requires these traditional distributors, then what purpose does copyright serve in this regard?

If the free rider problem is not in fact a problem anymore, then the means of protecting against the problem may not be required. Thus, while it is acknowledged that the digital dilemma represents a very real threat to the interests of distributors, it remains to be seen whether the 'dilemma' will have as dramatic an impact on the interests of creators and ultimately the public.

7. Conclusion

Davies notes that the Statute of Anne arose as the result of "a new communications technology, the printing press, and modern copyright laws have to be regularly fine-tuned to adapt to the new communications technologies of the day."[116] Ginsburg explains that "...each significant technological progress may alter the balance of control between authors and users, in turn eventually prompting a new legal calibration."[117] This is a fine idea in theory but the situation does not appear as rosy when one considers that this slow incremental tweaking of the law will be rapidly outpaced by technology which advances and evolves "in lunging jerks, like the punctuation of a biological evolution grotesquely accelerated."[118]

This is one of the contradictions present in the use of copyright law as a means of protecting digital content. Copyright works have a public good quality to them. The physical embodiment of a copyright work is subject to a property right which in turn protects the content. In the absence of this physical embodiment and the limitations which they entail, various measures are used in order to attempt to protect these rights.

[115] Ginsburg 2001 *Columbia Law Review* 1619.
[116] Davies *Copyright and the Public Interest* (2002) 9 – 10.
[117] Ginsburg 2001 *Columbia Law Review* 1614.
[118] Barlow "The Economy of Ideas" *Wired*.

In an environment in which the, so called, 'wine bottle' is disappearing, how is one to protect the 'wine', where the previous methods of protection only worked because of the bottle? The digital era in which the world largely finds itself has lead to an increased removal of the physical embodiments of copyright works. In the absence of these physical embodiments, copyright law is now attempting to protect the idea itself. This protection of an idea becomes ever more difficult by claiming such protection on the basis of a property right. How can one claim a property right over something which is for all intents and purposes an abstraction?

It is clear that the very thing on which copyright law once relied in order to claim legitimacy over the property rights which it protected is disappearing. In an attempt to hold onto and protect rights which are rapidly eroding in the face of the digital era and social norms, copyright holders protect their rights by making use of litigation, Digital Rights Management Systems and legislation. It is these means of protection and their advantages and disadvantages as well as their possible success which will be examined in chapters 3 and 4 of this thesis.

Chapter 3

Digital Rights Management Systems

1. Introduction

Amidst the myriad of articles and discussions by commentators about DRM systems and their implications for copyright law, it is easy to get lost as to the meaning of the term 'DRM'. From the outset of this chapter it is necessary to note that the term DRM is not one which is easily defined. Bechtold states that "DRM architectures range from simple copy-protection technologies to comprehensive secure distribution systems."[119] From this it is apparent that the term does not comprise of one over-arching definition, but is rather an umbrella term which incorporates a number of different aspects. These include various technologies, economic theories, legal implications and business models. These aspects will be discussed in greater detail later in this chapter.

In undertaking an analysis of DRM systems, it is important to understand why these systems have become so prevalent of late. In examining this prevalence a basic understanding of how these systems work is required. Through this understanding the advantages and disadvantages of these systems will become apparent.

This chapter will examine DRM systems. In undertaking this analysis, it is intended that the reader is made aware of the complexity of these systems and, ultimately, both the positive and negative effects which these complex systems have on copyright laws in various jurisdictions throughout the world.

[119] S Bechtold "Digital Rights Management in the United States and Europe" (2004) 52 *American Journal of Comparative Law* 323 at 324 footnote 6.

2. What are DRM systems?

To reiterate what was noted in the introduction to this chapter, DRM is an umbrella term incorporating various aspects. Therefore, ascertaining what DRM systems are requires an analysis of the intertwined relationship between the various components which make up the whole.

While DRM systems have recently become something which are rather *in vogue* in the world of digital property of late, it is important to realise that these systems are not as novel as many might think. Various commentators identify numerous examples of attempts to make use of technological protection of content throughout the 20th century.[120]

a. Examples of technological protection in the Pre-Digital Era

Examples of these include the "Xanadu" project. The concept on which this project is based started in the 1960s as the brain-child of Theodor H Nelson. The "Xanadu docuverse" is a digitized and decentralized library. This site allows for authors to be automatically remunerated for any of their works which are accessed or used via the site.[121]

A further example was the use of dongles. This usage was largely prevalent during the 1980s but has since given way to other technologies. This technology protected content by only allowing access where the necessary hardware, i.e. the dongle, was present. In a practical

[120] Bechtold 2004 *Am. J. Comp. L*.326 footnote 9. See also C Jensen "The More Things Change, the More They Stay the Same: Copyright, Digital Technology, and Social Norms" (2003) *Stanford Law Review* 551.

[121] Xanadu http://www.xanadu.com.au. (accessed 25 March 2010) The site claims "This system of literature (the "Xanadu Docuverse") must allow people to create virtual copies ("transclusions") of any existing collection of information in the system **regardless of ownership**. In order to make this possible, the system must guarantee that the owner of any information will be paid their chosen royalties on any portions of their documents, no matter how small, whenever and wherever they are used."

sense, dongles are pieces of hardware that are similar to USB drives in their appearance and which are attached to a port of a computer in order to allow secured software to run.[122]

There are numerous other examples which one can to look to when examining this issue.[123] What is important with regard to this research is how the law has reacted to these new technologies and the changes which they generate.

b. The law's response to technological protection

Ginsburg identifies two types of cases in the US relating to the issue of the protection of copyrighted content when such content is confronted with a new technology.[124] The first are cases where the copyright owners seek payment for the exploitation of their works through new technologies. The second types are those cases in which the copyright owners try to prevent new means of dissemination from becoming available to the public. These two types of cases indicate the willingness of courts in the US to protect such content in certain situations and not in others.

In the first type of case, the copyright owners are generally successful in enforcing their rights and being compensated for the use of their works. Early examples of such cases concerned radio stations and public performance licences.[125] These stations claimed that they did not require a performance licence to broadcast music. Their argument focussed on

[122] B McGuigan "What is a dongle?" http://www.wisegeek.com/what-is-a-dongle.htm (accessed 25 March 2010). A more detailed explanation is that "A dongle is a piece of hardware that attaches to a computer in order to make a piece of secured software run. A dongle in this sense is used as a high-end form of security to prevent the unauthorized copying of software, since making a copy of the hardware itself is much more difficult than simply copying the software." However the author notes "The earliest type of dongle was usually attached via a computer's serial port. When the software being protected was loaded, it checked for the presence of this hardware device. If it found the hardware device, it loaded; if it didn't find the dongle, it wouldn't load. This simple system was fairly open to cracking, since a programmer could fairly easily find the value in the software that indicated whether the hardware was present and simply set it to exist."

[123] See Bechtold 2004 *Am. J. Comp. L* 326 footnotes 9-11.

[124] J Ginsburg "Copyright and Control over New Technologies of Dissemination" (2001) 101 *Columbia Law Review* 1613.

[125] *Associated Music Publishers, Inc. v Debs Memorial Radio Fund, Inc.* 46 F. Supp. 829 (S.D.N.Y. 1942), *M. Witmark & Sons v L. Bamberger & Co.* 291 F 776, (D.N.J 1923), *Jerome H. Remick & Co. v Am. Auto. Accessories Co.* 5 F.2d 411 (6th Circuit 1925).

the requirement that a licence be obtained for the public performance of a work which was subject to copyright where the public performance was for profit. In the various noted cases, the radio stations argued either that they were not required to obtain a licence as their broadcasts were free and therefore not for profit or that the performance was not public as the broadcasts were received in private residences.[126]

The courts in these cases disagreed with the arguments advanced by the radio stations. The definition of 'for profit' was seen to include transmissions which were received in places open to the public regardless of whether or not an entrance fee was charged. So for example, if one was in a shop or a restaurant and the radio was playing, this would constitute a 'public performance for profit' and as such a licence would be required by the shopkeeper. As for the argument that a broadcast to a private residence was not a 'public performance', the court adopted the approach that a broadcast or 'performance' which was received by the public constituted a public performance. The end result of these types of cases was that US courts would support the copyright holders' protection of their rights where it was clear that these groups were attempting to exploit the new technology in order to derive a benefit from their copyright.

With regard to the second type of case, the courts have been less sympathetic to copyright holders. In these cases copyright holders who were seen as trying to block a certain type of reproduction or means of dissemination which had arisen as a result of a new technology were less likely to succeed with their claims. Ginsburg states that the courts would be hesitant to give full protection to the copyright where copyright holders "…were seeking to prohibit a new form of reproduction and distribution, or to leverage their exclusive reproduction rights into monopoly power over the device employed to effect the new kinds of reproduction."[127] Examples of these types of cases include cable television and the retransmission of local signals[128] as well as cases of importing a distant signal.[129] These cases

[126] Ginsburg 2001 *Colum. L. Rev*. 1620.
[127] Ginsburg 2001 *Colum. L. Rev*. 1622.
[128] *Fortnightly Corp v United Artists Television, Inc* 392 U.S. 390 (1968).

will not be discussed in any sort of detail but rather their decisions and comments thereon serve to illustrate the point.

It has been noted on these two types of cases that the decisions seem strained and are more a means to an end in allowing the courts to correct behaviour which it perceived as television companies trying to prevent the emergence of rivals, rather than protect its content or the means through which it was broadcast.[130]

Perhaps the best example to deal with in relation to this second type of case is the US case, *Sony Corporation of America v Universal City Studieos, Inc.*[131] This case, also referred to as the "*Betamax* case", serves as an example of how holders of copyright have attempted to use technological protection measures as well as license agreements with the producers of electronic devices in order to control usage and protect their content. These two measures of protection will be discussed in greater detail in parts B and C of this chapter. The case also provides an example of how the holders of copyrights attempt to throw their weight, and money, around in order to get the maximum control over their content. This exercise, as will be seen, is often done at the expense of the consumer.

c. The 'Betamax' case

The facts of the case were that the respondent, Universal City Studios, had sued the appellants, Sony, for manufacturing and distributing certain technology. This technology was a mass market VCR which, the respondents alleged, allowed for home users to create unauthorised copies of works. These unauthorised works, it was alleged, had the effect of infringing on the copyright of Universal City Studios and as a result Universal sought to hold the manufacturer of the VCR liable for this possible infringement. The majority decision held

[129] *Teleprompter Corp v CBS* 415 U.S. 394 (1974).
[130] Ginsburg 2001 *Colum. L. Rev*. 1624.
[131] 464 U.S. 417 (1984).

that the manufacturer could not be held liable for creating a technology which some users may use to create infringing copies.[132] This was qualified by the fact that the device was capable of a performing a substantial number of functions which did not infringe on the copyright of Universal City Studios.[133]

Put differently, "where a technology has many uses, the public cannot be denied the lawful uses just because some (or many or most) may use the product to infringe copyright."[134] This judgment may seem to be heavily in favour of the producers of technology. The overall effect of this decision, so it has been argued, amounts to an acceptance of devices which allow for infringing uses and ultimately condoning piracy. While this is partially true, it does not tell the entire story.

In order to truly understand this decision, one needs to consider certain factors. On this point Ginsburg identifies that the '*Betamax*' case shares certain common features with the cable television cases mentioned in part b above. The author first notes that the respondent, in suing the appellant, was trying to prevent the VCR from being distributed. This was not purely due to the device's ability to create infringing copies of works. Rather, this attempted prevention was also based on the fact that the movie industry was attempting to surpass the VCR with a different device which it approved of. This approved device was a non-recordable videodisc player.[135] Furthermore, the author notes that "the majority of the court found no economic harm to the existing markets from 'time-shifting'

[132] *Sony Corp. of America v Universal City Studios* 464 U.S. 417 Supreme Court (1984) 456. The majority held "…the record and findings of the District Court lead us to two conclusions. First, Sony demonstrated a significant likelihood that substantial numbers of copyright holders who license their works for broadcast on free television would not object to having their broadcasts time-shifted by private viewers. And second, respondents failed to demonstrate that time-shifting would cause any likelihood of nonminimal harm to the potential market for, or the value of, their copyrighted works."

[133] *Sony Corp. of America v Universal City Studios* 464 U.S. 417 Supreme Court (1984) 456. The court noted "The *Betamax* is, therefore, capable of substantial noninfringing uses. Sony's sale of such equipment to the general public does not constitute contributory infringement of respondents' copyrights."

[134] Electronic Frontier Foundation "The *Betamax* Case" http://w2.eff.org/legal/cases/*Betamax*/ (accessed25 March 2010).

[135] Ginsburg 2001 *Colum. L. Rev*. 1624.

of free broadcast television (having excluded other kinds of copying or programming from its analysis).”[136] One could also note that, in spite of their protests, the movie industry had failed to realise the dramatic economic potential which it may, and ultimately would, realise in this new market.

d. The effect of the ‘Betamax’ case

The importance of the decision in the *Betamax* case cannot be overlooked. The judgment provides a safe haven by offering protection to inventors and producers of devices that may allow for both infringing and non-infringing uses. This case ensured that technological progression is not hampered by the entertainment industry’s efforts to completely control usage of its works. The *Electronic Frontiers Foundation* notes that “It's thanks to the *Betamax* ruling that the makers of VCRs and every other technology capable of infringing and non-infringing uses (e.g., personal computers, CD burners, the TiVo DVR, Apple's iPod, and Web browsers) can continue to sell their wares without fear of lawsuits from copyright owners.”[137]

It should be noted that the author is not suggesting that copyright works do not require protection. Rather it is submitted that a balance needs to be struck between copyright holders, innovation and consumer rights. It is believed that a finding in favour of the movie industry in the ‘*Betamax* case’ would have greatly shifted this balance in favour of the copyright holders. It would have allowed the holders of copyright to determine what devices could be used in order to play their works. From this, the holders of copyrights would have far greater control over the usage of their works as well as access to their works. This would ultimately leave the consumer with very few rights over the work which they purchased. Furthermore, it would leave inventors in the unfortunate position of having to ask the entertainment industry for permission every time they wished to invent something which

[136] Ginsburg 2001 *Colum. L. Rev*. 1624.
[137] Electronic Frontier Foundation “The *Betamax* Case”.

may allow for unauthorised copies of a work to be made or face possible litigation and liability.[138]

While it is understood that copyright law is meant to grant the author a limited monopoly over their work, it is submitted that a majority decision in favour of the movie industry would have allowed copyright holders to greatly over-step the bounds of that limited monopoly. It is further submitted that a decision in favour of the movie industry in the *Betamax* case would have stifled technological progression. This would be counterproductive for copyright holders as new technology has been shown to provide these groups with a new and/or slightly altered market which may allow them to realise a greater economic benefit from their copyright works.

e. The Rio case – an audio example

The case of *Recording Industry Association of America v Diamond Multimedia Systems*[139] was a decision which followed on from the '*Betamax* case'. The case concerned a portable MP3 player called "Rio" which was manufactured by the respondent. The statute under which the case was decided was the Audio Home Recording Act of 1992.[140] The purpose of this Act was largely to protect the music industry from the threat posed by the emergence of Digital Audio Tapes, especially in the wake of the '*Betamax* judgment'.[141]

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[138] See dissenting judgment in *Sony Corp. of America v Universal City Studios* 464 U.S. 417 Supreme Court (1984) at 488 where the court noted: "In absolving Sony from liability, the District Court reasoned that Sony had no direct involvement with individual *Betamax* users, did not participate in any off-the-air copying, and did not know that such copying was an infringement of the Studios' copyright. 480 F. Supp., at 460. I agree with the *Gershwin Publishing Corp. v Columbia Artists Management* 443 F. 2d 1159 (CA2 1971) court that contributory liability may be imposed even when the defendant has no formal control over the infringer".

[139] 180 F.3d 1072 (9th Circ. 1999).

[140] Note that this Act actually forms part of the US Copyright Act of 1976 under Chapter 10 but is often referred to as the Audio Home Recording Act.

[141] Ginsburg 2001 *Colum. L. Rev*. 1628. See also B Bahlmann and C Martz "SCMS – Serial Copy Management System" http://www.birds-eye.net/definition/acronym/?id=1154207915 (accessed 26 March 2010).

In terms of subchapter B section 1002 (a) of the Act, a prohibition was placed "on the importation, manufacture, and distribution of digital audio recording devices or digital audio interface devices that do not conform to [some form of copy control]." The copy control incorporated into the device must either have been the Serial Copy Management System (SCMS) or a similar type of copy control.

Subchapter 3 sections 1003 - 1007 further requires that manufacturers of digital audio recording devices or digital audio interface devices pay a statutorily imposed royalty for each device sold. The purpose of this royalty seems to have been to allay the fears of the *RIAA* and other associations of entertainment groups which feared the loss of revenue they might face as a result of unauthorised digital copying of their works.

It was apparent that the respondents did not intend to pay royalties as required by the Act. The appellant contended that they were entitled to royalties from the respondents in terms of the Act. They further argued that the respondent's Rio product did not incorporate the SCMS copy control, nor any other form of copy control, and therefore did not meet the requirements in terms of the Act. As a result of both of these failures to comply with the Act the *RIAA* enjoined the respondents by way of an injunction. This meant in a practical sense that the *RIAA* was attempting to block the distribution of the respondent's device.

The Ninth Circuit court which heard the appeal, found that although the Rio device did not incorporate the measures of copy control required by section 1002 (a), this was irrelevant. The court held that the Rio product was not a digital audio recording device as defined by the Act. Therefore the provisions of the Act did not apply to the respondent and their product did not require copy control, nor were the respondents required to pay any royalties to the appellant for each device sold.

Whether or not this decision is correct is open to debate. A digital audio recording device is defined in subchapter A section 1001 of the Act as

> "…any machine or device of a type commonly distributed to individuals for use by individuals, whether or not included with or as part of some other machine or device, the digital recording function of which is designed or marketed for the primary purpose of, and that is capable of, making a digital audio copied recording for private use…"

In terms of this definition the Rio device did not strictly fall within its ambit. The court in this case held that "…a device falls within the Act's provisions if it can indirectly copy a digital music recording by making a copy from a transmission of that recording."[142] The way in which the device worked was that MP3 files would be placed on the internal memory of the device or on a memory card supported by the device. The actual Rio device did not record the music itself, but rather music was transferred onto it from a PC. On this point the court found "because the Rio cannot make copies from transmissions, but instead, can only make copies from a computer hard drive, it is not a digital audio recording device. For the foregoing reasons, the Rio is not a digital audio recording device subject to the restrictions of the Act."[143]

On this issue Ginsburg notes that the argument could be made that the transfer of those MP3 files from a PC to the Rio meant that the Rio created its own copies of those files.[144] This argument was rejected by the Ninth Circuit as the court held that the Rio device was only indirectly capable of reproducing a transmission. [145] Because of this finding Ginsburg submits that the judgment was influenced to some extent by the courts perception that the *RIAA* was attempting to prevent the dissemination of the Rio. This harks back to Ginsburg's second type of case as discussed in 2.ii above and serves as an example of the courts reluctance to provide protection for copyright holders in such circumstances.

[142] 180 F.3d 1072 (9th Circ. 1999) paragraph 38.
[143] 180 F.3d 1072 (9th Circ. 1999) paragraph 38 & 39.
[144] Ginsburg 2001 *Colum. L. Rev*. 1626.
[145] 180 F.3d 1072 (9th Circ. 1999) fn 7.

f. Conclusion

The above provide examples of attempts to protect copyrighted content from new technological means which allow for both non-infringing as well as possible infringing uses. What must be taken from these examples is that the previous measures used by copyright holders to protect their content from technology capable of both types of uses were largely unsuccessful. It was from the limited success of these previous measures that the arrival of digital content, while posing a serious threat to digital content, also provided a platform for copyright holders.

New means of protection had to be sought which allowed for a secure platform from which the greatest degree of control over the content could be retained by the copyright holders. It is through this need that DRM systems should be viewed. In other words, the nature of digital technology allowed copyright holders to take protective measures into their own hands without much concern for the decisions in the *Rio* or the *Betamax* cases.

It is important to note that while technological protection is an integral part of a DRM system, it is not its sole means of protection. Rather, a complex DRM system will make use of technology license agreements, usage contracts (in the form of shrink-wrap and click-wrap agreements), as well as technological means of protection. It is the interconnectedness of these components which, along with anti-circumvention legislation (which will be discussed in much greater detail in Chapter 4), make DRM systems so formidable.

Bechtold notes that DRM systems do more than merely offer protection against the copying of content; they also offer a means of identifying and managing that content. If a DRM system allows for the above then it provides “a secure distribution platform” for this

content.[146] The ability to manage and identify this digital content is mostly done through the use of metadata. When content can be identified and managed, then an environment is present which facilitates the trading of digital content and digital rights. Thus metadata plays a vital role in DRM systems. The following subsection will provide greater detail as to how metadata identifies and manages digital content and how it allows for the facilitation of trade in digital content and rights.

3. Metadata

Metadata literally means data about data.[147] The International Federation of Library Associations and Institutions (*IFLA*) defines metadata as follows. "The term refers to any data used to aid the identification, description and location of networked electronic resources. Many different metadata formats exist, some quite simple in their description, others quite complex and rich."[148]

Bechtold explains:

"…the machine-readable identification and description of

1. Content, content providers and rights holders;
2. Usage rules under which content may be accessed and used; and of
3. Users of protected content."[149]

What does all of this actually mean? As stated earlier, metadata is literally data about data. This means that a file on a computer such as an MP3 file (music) or an AVI file (video) is in

[146] Bechtold 2004 *Am. J. Comp. L* 326.
[147] National Information Standards Organization "Understanding Metadata" (2004) http://www.niso.org/publications/press/UnderstandingMetadata.pdf (accessed23 March 2010).
[148] International Federation of Library Associations and Institutions "Digital Libraries: Metadata Resources and Indices" (2005) http://archive.ifla.org/II/metadata.htm (accessed 21 March 2010).
[149] Bechtold 2004 *Am. J. Comp. L* 327 – 328.

and of itself data. Metadata is attached to that file and serves to provide certain information about that file/data. A very basic example of this can be obtained by right-clicking on a file, using a Microsoft Windows operation system,[150] and clicking on properties. Those file properties constitute metadata as they provide information about the data/file.

Further examples will help to clarify this concept. The information contained in the metadata of an MP3 file could include: the artist's name, the song title, the album title, the track number, the writer of the song, the year in which the album was released etc. The metadata relating to a PDF or an EPUB file could include: the title of the book, the author's name, the publisher, the cover artist, the year it was published etc.[151] This information allows for the uses described above, i.e. identification and description of the file, which in turn provides a platform for the rights holder to manage their rights more effectively.

Thus metadata serves to provide a means of identifying and describing data. However, metadata alone cannot control usage of and access to data. It is only when used in conjunction with certain DRM technologies that it allows for the rights holder of digital content to control the use of and access to that digital content.[152]

For instance, a holder of copyright for an e-book, such as the latest Bret Easton Ellis novel, would not be able to control who could access that novel and how that novel could be used by that purchaser by making use of metadata alone. Some means of capturing this information is required, and once that information has been obtained some means of distinguishing authorised from unauthorised users of the content is required. Furthermore, a method of restricting the use of that content between authorised users is needed. This is where DRM technology steps in.

[150] For example Windows XP, Windows Vista, or Windows 7.
[151] See also TechTerms http://www.techterms.com/definition/metadata (accessed 25 March 2010).
[152] Bechtold 2004 *Am. J. Comp. L* 329.

The means of controlling access could be carried out in various ways, but one of the most common methods for e-books is encryption and password protection. Any customer wishing to read an e-book would only be able to do so by purchasing the novel through the proper channels. With this being done, the consumer would then receive a medium (usually a decryption key which will be hidden to the purchaser) through which the novel could be decrypted and read.[153] Thus, access to the copyright content is limited by the holder of the copyright in that novel to those consumers who purchase the content through the correct channels, i.e. those consumers who have paid for the novel.

The ability of these systems extends to allowing for a compromised consumer device to be revoked and or disabled by the device manufacturer.[154] Such control is usually granted through the end-user licence agreements or terms of service agreements which are discussed in greater detail in part 6 of this chapter. A good example of this ability to revoke or disable a compromised consumer device can be seen in the the recent situation where Amazon deleted copies of George Orwell's classic "1984" from Kindle users' devices due to copyright issues. This revocation was made without the affected consumers being warned of the deletion and without any apparent recourse in terms of the end-user agreement which the customers had entered into with Amazon.[155]

The holder of copyright in digital content also has the ability, through a DRM system, to control how that content is used. This usage control includes under what circumstances the content could be used and for what purpose.[156] So if we look at the Bret Easton Ellis e-book example, the holder of the copyright in that novel would be able to control what devices that novel could be read on. Furthermore, they could control whether or not a 'loan' of that

[153] "The Ugly World of DRM and Ebook Readers" *eBookReadersResource.com* Published Date Unknown http://ebookreadersresource.com/articles/ebook-reader-articles/drm-and-ebook-readers/ (accessed 28 March 2010).
[154] Bechtold 2004 *Am. J. Comp. L* 330.
[155] "Amazon Erases Orwell Books From Kindle" *New York Times* 18 July 2009 http://www.nytimes.com/2009/07/18/technology/companies/18amazon.html (accessed 21 December 2009).
[156] Bechtold 2004 *Am. J. Comp. L* 327.

novel could be made to others for a limited period of time. Further limitations include limitations on copying and printing of e-books.[157]

Determining these usage rights largely comes down to the devices on which the digital content can be used. Each device will have certain usage limitations placed on them in terms of various agreements between the manufacturers of those electronic devices and the holders of the copyright in digital content to be used on those devices. These relationships, referred to as technology licence agreements, will be discussed in greater detail in part 5 of this chapter.

An example of the above would be if one were to purchase an e-book from Amazon.com, only to find that the e-book can be used on Amazon's Kindle e-reader only. Another example would be Apple's digital music player the "iPod" and its associated software 'iTunes'. Apple made use of a DRM system called "FairPlay".

This FairPlay DRM system did not impose overly stringent limitations on the usage of content.[158] The controversy surrounding it, however, was that Apple refused to licence it to others. This effectively meant that songs downloaded by users, which incorporated the FairPlay system, could only be used in conjunction with the iTunes program and/or on another Apple product, for example an iPod. The problem with this is apparent. Apple had effectively cornered the online digital music market by controlling the devices on which content was available. This had the effect of determining what devices users would be more

[157] "The Ugly World of DRM and Ebook Readers". The site notes "As an Amazon Kindle owner or owner of another E-reader device, you know that there are limitations to copying, printing and sharing of E-books."

[158] See "How iTunes Works" Published Date Unknown http://electronics.howstuffworks.com/itunes7.htm (accessed 14 March 2010). The Authors explain "FairPlay was an Apple-proprietary encryption scheme that determined what users could do with a file once they downloaded it. FairPlay let you:

- authorize up to five different computers to play FairPlay-protected files
- burn a protected song to CD as many times as you want
- burn a particular playlist containing a protected song up to seven times."

likely to purchase in order to allow them to properly use content which they had purchased. The FairPlay system is no longer in effect as Apple began phasing it out in 2009. The example is still of interest when considering the way in which a DRM system was used to control the market.[159]

These examples indicate that the usage rights of digital content are not only controlled by the content, but also by the devices associated with the use of that content.

The relationship which exists between copyright holders, electronic device manufacturers and makers of DRM systems requires greater investigation as this relationship has a tremendous impact on the DRM market. Furthermore, these relationships ultimately have an effect on consumers and their enjoyment of copyright material and, as such, are worthy of further analysis.

4. Serial Copy Management System – An example of technological protection

In the earlier discussion of the *RIAA v Diamond Multimedia*[160] case it was noted that the Audio Home Recording Act for the first time required a form of copy protection to be used in relation to certain audio devices. SCMS represents the copy protection agreed upon between the *RIAA* and manufacturers of electronic devices. It serves as an example of technological means of protecting digital content. In terms of the Audio Home Recording Act, SCMS is required in both recordable CDs as well as digital recording devices.

[159] The response of copyright holders, such as EMI, was to release music on iTunes which was free of DRM's. The purpose of this was to attempt to negate the monopolistic effect which Apple's FairPlay System was having on the digital music market. It could be argued that the interests of copyright holders, in this scenario, extended beyond concerns of piracy as Apple's growing monopoly over the market was identified as the greater threat. See NF Sharpe and OB Arewa "Is Apple Playing Fair? Navigating the iPod FairPlay DRM Controversey" (2007) 5 *Northwestern Journal of Technology and Intellectual Property* 331.
[160] 180 F.3d 1072 (9th Circ. 1999).

This DRM operates only in respect of digital audio and does not effect analogue audio copying. The purpose of SCMS is twofold.[161] Firstly, it controls the number of copies which can be made from the original audio content. Secondly, it prevents serial copies from being produced from those first generation copies. It should be noted that SCMS allows for unlimited first generation copies to be produced from a digital master.[162]

In very basic terms, the system operates by placing a copy protection bit into a digital recording. This bit is present in both the digital master as well as subsequent copies. The copy protection can be varied by toggling the copy bit on the CD. If the copy protection is set to a high frequency then only one copy may be made from the original, whereas if there is no copy protection the copy bit will be toggled to 'off' or to a low frequency.[163] Therefore a high frequency indicates a high level of copy protection where a maximum of one copy of an original CD could be made for personal use, while a low frequency represents little or no copy protection where any number of copies can be made from an original. Subsequent copies feature copy protection bits which are toggled on and off and prevent further copies from being made from these subsequent copies.[164]

What this means in practice is that this system would allow one to purchase an original music CD, for example a copy of David Bowie's "The Rise and Fall of Ziggy Stardust". If the CD has a high level of copy protection, one would be able to insert it into a PC and make a single copy for private use. However, subsequent copies could not be produced from the personal copy which was made from the original. Furthermore, depending on the level of copy protection, I might not be able to create a subsequent copy of the original CD.

[161] B Bahlmann and C Martz Birds-Eye.Net.
[162] B Bahlmann and C Martz Birds-Eye.Net.
[163] B Bahlmann and C Martz Birds-Eye.Net.
[164] B Bahlmann and C Martz Birds-Eye.Net.

However, if that original David Bowie CD I purchased had a low level of copy protection or no copy protection at all then I would be able to make any number of copies from that original. Although the SCMS protection would still prevent me from making further copies from those first generation copies which I had made.

Ultimately the purpose of the SCMS scheme is to limit unauthorised copies of musical copyrighted works.[165] This is achieved through legislative requirements that certain audio devices which are capable of making digital recordings make use of copy protection. While the Audio Home Recording Act provides an example of one way in which DRM systems are implemented, it must be noted that such legislative means are not the only form of implementing these systems. A further example is the way in which certain DRM systems are linked to certain licensors and technologies. It is these relationships to which this chapter now turns its attention.

5. Technology Licences

a. The parties

In an analysis of the technology licences within the DRM context, one needs to have an understanding of the relevant role players in relation to any DRM system. Firstly, there is the holder of the copyright in the particular content for which protection is sought. This first party will often have their interests represented by an association of similar rights holders, for example the *RIAA*. Secondly, there are the manufacturers of electronic devices on which the particular digital content will largely be used. An example of such a manufacturer would be Apple, who manufacture consumer devices such as iPods on which MP3 files can be played, or the iPad which performs a number of roles including being e-book reader. Finally, there are the developers of DRM technologies. These developers create the DRM technology which goes into the manufacturer's device, or it is embedded into the digital

[165] B Bahlmann and C Martz Birds-Eye.Net.

content. Therefore, licence agreements are required between these parties to regulate their relationships with one another in this complex context.

With reference to these licences, Bechtold notes that the licensees will usually include "…manufacturers of consumer electronics, computers, storage media and other DRM-enabled devices and components as well as content providers."[166] He goes on to note that the licensors of these technologies are the developers themselves or a specialised licensing agent.[167] It is these relationships between the licensors and licensees that require further attention. This is especially so in relation to the balance of bargaining power which the various parties have when setting up these license agreements.

The following provides a general scenario of the way in which the relationships between the parties will generally operate. The association representing the rights holders will require that the content which it releases be encrypted prior to its release. The onus is then placed on the manufacturer to make use of some form of DRM technology in order to decrypt this encrypted data. The particular DRM technology to be used will usually be specified by the association of rights holders in terms of the type of encryption it uses for its content. The manufacturers, in order to use that particular digital content on their devices, are then required to approach the developer of the specified DRM technology or a licensing body and enter into a licence agreement with them for the particular decryption system they require.

In a practical sense, if the *RIAA* were the association of rights holders concerned, then the *RIAA* would require that all digital audio files which it released be given some level of encryption prior to its release. If Apple, as the device manufacturer, wishes to make use of the *RIAA's* content then it will be required to incorporate the appropriate DRM technology which is capable of decrypting the encrypted content, which in this case would be SCMS.

[166] Bechtold 2004 *Am. J. Comp. L* 347.
[167] Bechtold 2004 *Am. J. Comp. L* 347.

Apple would then have to approach the particular developer or licensor of SCMS technology and enter into a licence agreement in order to incorporate SCMS technology into its devices.

There are problems which must be noted with this particular example. The Audio Home Recording Act creates a statutory requirement which means that the manufacturers of electronic devices, such as Apple, are required to make use of a particular DRM technology that has been agreed on and recommended to the government by the *RIAA*. Therefore a situation is created where the parties to these licensing agreements are not entering into these agreements on an equal footing. This inequality in terms of bargaining power means that at least one of the parties to these agreements is going to be prejudiced in some way by the agreement.

In turn, the licence agreements between the developers or licensing bodies with the manufacturers will incorporate various terms and conditions which safeguard the interests of rights holders. This scenario can be seen as operating on a *quid pro quo* basis. In other words, the rights holders will make use of a particular DRM technology and in exchange the DRM developer will ensure that its license agreements with manufacturers have the best interests of those rights holders at their foundation. Bechtold submits that in order for a DRM system to be successful, it requires a large amount of available content to be used within that system.[168] In other words, device manufacturers are not going to make use of a DRM technology where this technology will not be capable of decrypting the majority of digital content which could be available for that device.

In order for the manufacturers to have a commercially successful device they require an appropriate amount of content to be used on that device. In order to have this content they will need to enter into licence agreements with the developers of DRM technology. Therefore the manufacturers appear to be at the mercy of the developers of DRM

[168] Bechtold 2004 *Am. J. Comp. L* 348.

technology, while developers are themselves subject to the wishes of the content holders. In fact, it could be said that both manufacturers and developers are ultimately at the mercy of content providers.

The rights holders decide which DRM technology to use in relation to their content. It is on this basis that Bechtold argues that these licensing agreements protect the interests of rights holders despite the fact that they are not usually the licensor.[169] He further submits that this issue is largely overlooked in debates regarding such licence agreements.[170]

As stated at the beginning of this chapter, the term 'DRM' does not have an exact definition. The term does not refer to technology in general but rather to interlinked components which make up a DRM system. This interlinked aspect is notable when looking at DRM technology licence agreements. These agreements often require that when making use of one DRM technology, various others must be used in conjunction with it.[171] While this can be seen as ensuring a level of uniformity with regard to the protection of their digital content, it can also be seen as anti-competitive behaviour as certain DRM developers will be excluded from these deals. This anti-competitive issue, while noteworthy, is beyond the scope of this research.[172]

Examples of these sorts of licence agreements include the Content Scrambling System (CSS) used in DVD players. This licence agreement for CSS requires that manufacturers implement regional coding technology into their devices. This sort of regionally-based coding, as alluded to in the Australian case of *Stevens v Kabushiki Kaisha Sony Computer*

[169] Bechtold 2004 *Am. J. Comp. L* 348.
[170] Bechtold 2004 *Am. J. Comp. L* 348.
[171] Bechtold 2004 *Am. J. Comp. L* 349.
[172] For further information see Bechtold 2004 *Am. J. Comp. L* 351.

Entertainment,[173] goes further than protecting the content from infringement and steps into the realms of price discrimination based on different regional business models.

In this case the High Court of Australia confirmed an appeal in which the developer of a modification chip,[174] which was used in a Sony Playstation gaming console, was found not to have infringed s116AO of the Australian Copyright Act.[175] This section prohibits the sale or distribution of devices designed for the purposes of circumventing a technological protection measure. This in turn had the effect of bypassing the access coding built into authentic Sony Playstation games. Put simply, the mod chip allowed for games from other regions as well as copied games to be played on a Playstation console which had this chip installed. Thus in effect it allowed for both infringing and non-infringing use of the console.

The mod chip also had the effect of allowing legally purchased and fully licensed Playstation games which had been purchased in different geographical regions to be played in a region for which the access codes which had been built into the CD would otherwise not allow.

b. Licence agreement terms and conditions

The DRM technology licence itself places various obligations on the parties involved. These obligations relate to the way in which the DRM technology is implemented and used by the manufacturers of electronic devices. They further allow for the exercise of some level of control over how the end-user of the device and the content can use both that device and that content. Indeed it has been noted that these licences "…are used to establish a

[173] [2005] HCA 58.

[174] See Fitzgerald who notes "When a person wants to play a game they insert a disc into the PlayStation much like inserting a musical disc into a CD player. The PlayStation is coded (through what is called Regional Access Coding (RAC) contained within a track on each CD read by a chip known as a "Boot ROM" located on the circuit board of the PlayStation console (hereafter called "RAC/Boot Rom")) to play games available in the region in which the PlayStation was sold." B Fitzgerald "The Australian PlayStation Case: How far Will Anti-circumvention Law Reach in the Name of DRM?" (2005) *Proceedings International Conference on Digital Rights Management: Technology Issues, Challenges and Systems* 2 http://eprints.qut.edu.au/2754/1/2754.pdf (accessed 8 March 2010).

[175] Copyright Act 1968.

comprehensive DRM system architecture that enables secure transmission from the content provider to each consumer."[176] All of this is done with the aim of, and some might argue under the guise of, preventing copyright infringement through the piracy of the digital content concerned.

There are numerous examples of these sorts of technology licence agreements. In analysing these technology licences, the Content Protection for Recordable Media (CPRM)/Content Protection for Pre-recorded Media (CPPM) licence Agreement will be examined. A brief description of these systems will provide a basis for understanding the terms and conditions of these agreements.

i. CPRM/CPPM – An example

These DRM systems were developed by "The 4C Entity" which is a group comprised of four large technology manufacturers, specifically: IBM, Intel, Panasonic and Toshiba. The company claims that these systems can be used in a vast number of electronic devices to protect entertainment content. The company states that their CPRM and CPPM systems "define a renewable cryptographic method for protecting entertainment content when recorded on removable and portable physical media including, but not limited to, DVD media and Flash memory."[177]

The way in which these DRM systems protect content is by making use of a cipher (the C2 Cipher) which is capable of encrypting and decrypting content. The circumvention of this cipher, so the developer claims, would require the use of the C2 algorithm which can only be obtained from the developer under a licence agreement.[178] This agreement however

[176] Bechtold 2004 *Am. J. Comp. L* 351.
[177] 4C Entity http://www.4centity.com/ (accessed 12 April 2010).
[178] 4C Entity "How CPRM Works" (2008) http://www.4centity.com/docs/How%20CPRM%20Works.pdf (accessed 12 April 2010).

expressly prohibits the dissemination of such information[179] or the use of this privileged information for the use of circumvention.[180] Therefore, even greater legal protection is provided by the licensing agreement.

This system also makes use of media key blocks. Media key blocks are placed on DVDs which make use of CPRM protection. These key blocks are ultimately device keys. Thus protection is offered by this DRM system through the use of two different technologies: device keys and encryption.

In practice these systems operate in the following manner. The pre-recorded content is placed on a DVD and encrypted using a key. The media key blocks are placed on the DVD in a sector which is not subject to copying. Device keys are given to licensed products, i.e. devices such as DVD players. These licensed products will then be able to make use of DVDs which use the CPRM system. The device keys and media key blocks built into the devices thus allow for decryption of the encrypted content.[181]

The terms and conditions of these licence agreements often require that the DRM technology be implemented by the manufacturer in "a robust and secure way".[182] These robust measures extend to both hardware[183] and software.[184] An example of the kinds of measures used to protect the integrity of a DRM system through the use of software

[179] 4C CPRM/CPPM Licence Agreement Exhibit D Confidentiality Agreement http://www.4centity.com/docs/CPRM_CPPM_LicAgmt_201_5.pdf.
[180] 4C CPRM/CPPM Licence Agreement Exhibit C-1 Section 5.4, Exhibit C-2 Section 6.2.3.
[181] CH Huang "CPPM and CPRM – The Introduction to Important DRM Standards" *Communication and Multimedia Laboratory Department of CSIE, National Taiwan University* (2005) http://www.cmlab.csie.ntu.edu.tw/~ipr/mmsec2009/data/lecture/Lecture3%20-%20Content%20Protection%20for%20Pre-recorded%20Media%28CPPM%29%20and%20Content%20Protection%20for%20Recordable%20Media%28CPRM%29.pdf (accessed 12 April 2010).
[182] Bechtold 2004 *Am. J. Comp. L 350.*
[183] 4C CPRM/CPPM Licence Agreement Exhibit C-4 Robustness Rules, Section 3.2.
[184] 4C CPRM/CPPM Licence Agreement Exhibit C-4 Robustness Rules, Section 3.1.

includes self-checking (which protects the data where the system has been altered).[185] This prevents the system from performing its task in authorising use and decrypting or encrypting the content.

The use of hardware to protect the integrity of a DRM system includes: the embedding of device keys in the silicon of the hardware;[186] making use of a hardware construction which poses a greater degree of risk of material damage to the device should it be tampered with[187] or should a security function fail.[188] The example of this type of approach which is used in the CPRM Licence Agreement, is soldering something onto a circuit board rather than making use of a socketed item which can be replaced or taken out easily.[189]

These licence agreements do not stop at specifying what measures should be used to protect the integrity of the DRM system. They further specify that the measures used to implement all of the software and hardware protection used must meet a certain level of robustness. In other words, the hardware and software protection must be difficult for a user to overcome.[190] The CPRM Licence stipulates that the levels of robustness that must be met are as follows. The Security Functions cannot be defeated by or circumvented through the use of widely available[191] or specialised tools[192] and can be defeated, with difficulty, by

[185] 4C CPRM/CPPM Licence Agreement Exhibit C-4 Robustness Rules, Section 3.1.1. Other examples include the use of encryption as well as the use of obfuscation when implementing the software to prevent users from discovering how to overcome the DRM protection. See 4C CPRM/CPPM Licence Agreement Exhibit C-4 Robustness Rules, Section 3.1.2.
[186] 4C CPRM/CPPM Licence Agreement Exhibit C-4 Robustness Rules, Section 3.2.1.
[187] 4C CPRM/CPPM Licence Agreement Exhibit C-4 Robustness Rules, Section 3.2.2.
[188] 4C CPRM/CPPM Licence Agreement Exhibit C-4 Robustness Rules, Section 3.2.3.
[189] 4C CPRM/CPPM Licence Agreement Exhibit C-4 Robustness Rules, Section 3.2.3 http://www.4centity.com/docs/CPRM_CPPM_LicAgmt_201_5.pdf (accessed 12 April 2010).
[190] 4C CPRM/CPPM Licence Agreement Exhibit C-4 Robustness Rules, Section 4.
[191] 4C CPRM/CPPM Licence Agreement Exhibit C-4 Robustness Rules, Section 4.3
"Widely Available Tools" shall mean general-purpose tools or equipment that are widely available at a reasonable price, such as screwdrivers, jumpers, clips, file editors, and soldering irons.
[192] 4C CPRM/CPPM Licence Agreement Exhibit C-4 Robustness Rules, Section 4.4
"Specialized Tools" shall mean specialized electronic tools that are widely available at a reasonable price, such as memory readers and writers, debuggers, decompilers, or similar software development products other than devices or technologies that are designed and made available for the

professional tools.[193] Therefore these licences not only determine the means to be used to protect the integrity of the DRM system but they also determine the level of protection which the means used require.

Apart from the above requirements, if new circumstances arise which would have prevented the device from passing the standards required by sections 3 and 4 of the Robustness Rules, then the licensee will be required to rectify these issues. This is to be done by incorporating upgrades into their product which are in compliance with the robustness rules or redesigning their product so as to allow it to meet these requirements.[194]

The above Robustness Rules have been used as an example of the level of control which is present in these DRM systems on the part of the developers. The developer of the DRM system controls the way in which their systems are to be used in a device, how that device will implement these systems and how that device will continue to implement these systems in the future. This control carries through from the construction of the device to the required level of robustness and even allows for the licensor to inspect manufacturer's devices which it reasonably believes are not complying with the required standards.

It is important to remember the power which the rights holders in digital content have in respect of these works. This power allows them to largely determine which DRM technology to use to protect their content. The developers of DRM technologies thus go further than

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specific purpose of bypassing or circumventing the protection technologies that are required by the Specification, i.e., "Circumvention Devices".

[193] 4C CPRM/CPPM Licence Agreement Exhibit C-4 Robustness Rules, Section 4.5 "Professional Tools" shall mean professional tools or equipment, such as logic analyzers, chip disassembly systems, or in circuit emulators, but not including either professional tools or equipment that are made available on the basis of a non-disclosure agreement or Circumvention Devices.

[194] 4C CPRM/CPPM Licence Agreement Exhibit C-4 Robustness Rules, Section 5.

merely creating technologies to protect this digital content, but also incorporate and enforce terms and conditions in their licence agreements which protect the interests of these content holders. Added to this is the continuing trend by rights holders in digital content to litigate against "producers and suppliers of technology that has both infringing and non-infringing uses". Recent court decisions have been holding these 'producers and suppliers' liable for infringement by their users.[195] This all ensures the survivability of their business in an exceptionally competitive market.

The level of control exercised by the developers of DRM technologies, when coupled with the notion that the holders of rights in digital content have a great amount of say in the DRM system to be used to protect their content, may create the impression that the manufacturers do not have much power in terms of these relationships. It is submitted that this is not the case. One should not underestimate the power which a manufacturer may hold in these situations. The following example from Apple illustrates this point.

ii. Apple Inc. – The manufacturer's position

The Apple brand wields a tremendous amount of power in the field of consumer electronic devices.[196] They have a dedicated consumer base commonly referred to as 'Macheads'[197] and a range of products including the iPod and the iPad. Apple's devices are seen as trendsetters in their particular areas. Indeed, one author noted on this issue that the "iPod came into a market that was small; reshaped, established and dominated it."[198] Many content providers will develop content to specifically be used on these devices prior to their

[195] MA Lemley and RA Reese "Reducing Digital Copyright Infringement without Restricting Innovation" (2004) 56 *Stanford Law Review* 1345 at 1354.
[196] "On First Day, Apple Sells 300,000 iPads" *The New York Times* 5 April 2010 http://www.nytimes.com/2010/04/06/technology/06ipad.html?fta=y (accessed 12 April 2010). See also "Apple Sells 300 000 iPads – but is that good or bad?" *Mail & Guardian* 6 April 2010 http://www.mg.co.za/article/2010-04-06-apple-sells-300-000-ipads-but-is-that-good-or-bad (accessed 12 April 2010).
[197] Definition: pronounced MAK-hed n. a slang term for a person who regularly uses and is somewhat obsessed with Apple computers; or Macs. http://www.urbandictionary.com/define.php?term=machead (accessed 12 April 2010).
[198] "Apple Sells 300 000 iPads – but is that good or bad?" *Mail & Guardian*.

release in order to profit from this market power.[199] So in order for a content provider to be able to ride on the coattails of this success, they would be required to create terms and conditions of a licence which Apple would find beneficial. As a result of this market power, a company such as Apple would not be the powerless manufacturer which the earlier relationship analysis represented. It is of course important to note that not all manufacturers enjoy the select position in which Apple finds itself. Thus companies like Apple may be the exception rather than the rule.

From the above it is clear that the technologies involved, as well as the licensing of these technologies, play a major role in the protection of the rights of the content holders. DRM technologies, such as CPRM/CPPM and SCMS, provide a means of preventing or at least making it difficult to violate copyright by making use of or producing infringing copies. The licence agreements then step in to ensure that these DRM technologies are implemented in such as way as to ensure that the integrity of this protection is maintained by manufacturers. The end-user will ultimately be affected by these technology licence agreements through manufacturer's attempts to fulfil their role in ensuring the robustness of the system. These two aspects alone are not the only means through which a DRM system protects copyrights.[200] The third aspect which must be considered is the important role which contracts play in adding another level of protection to the overall DRM system.

6. Contracts and End-User Licence Agreements

The use of contracts plays an integral role in protecting the integrity of a DRM system and in turn protecting copyrighted digital content from infringement. As mentioned previously, many of the terms and means of ensuring robustness of a DRM system are carried from the rights holder through to the developer and from the developer to the manufacturer. The final link in this chain is that between the manufacturer and the consumer. Therefore the

[199] "Developers Scramble to Strike iPad Gold" *The New York Times* 4 April 2010 http://www.nytimes.com/2010/04/05/technology/05apps.html?ref=technology (accessed 12 April 2010).
[200] Bechtold 2004 *Am. J. Comp. L* 352.

various relationships between the parties involved each give rise to another level of protection and means enforcement. The most common way in which this is done between manufacturers and end-users is through usage contracts.[201]

Usage contracts stipulate the ways in which the end-user of a device may use that device and/or the content thereon. By ensuring that devices and any associated software are regularly updated, the manufacturer can fulfil the terms of its licence agreement with the DRM developer and ensure that any issues which threaten the robustness of the security of the DRM system can be corrected.[202] Thus usage contracts serve two main functions. First, as the name suggests, they control the usage of content or the device in question by the end-user and, secondly, they maintain the integrity of the DRM systems as a whole by regulating the user's usage of the content and the device.

a. Shrink-wrap and click-wrap agreements

These usage contracts will often take the form of a shrink-wrap agreement or a click-wrap agreement. The contract will, in these cases, stipulate that by removing the wrapping from the packaging (in the case of a shrink-wrap agreement) or by checking the accept box (in the case of a click-wrap agreement) the user accepts the terms and conditions of the agreement and is willing to abide by the terms and conditions of usage which the contract requires.

[201] Bechtold 2004 *Am. J. Comp. L* 340.

[202] For example section 2.1 of Microsoft Windows XP Home Edition End-user licence agreement states "If the DRM Software's security has been compromised, owners of Secure Content ("Secure Content Owners") may request that Microsoft revoke the DRM Software's right to copy, display and/or play Secure Content. Revocation does not alter the DRM Software's ability to play unprotected content. A list of revoked DRM Software is sent to your computer whenever you download a license for Secure Content from the Internet. You therefore agree that Microsoft may, in conjunction with such license, also download revocation lists onto your computer on behalf of Secure Content Owners." Microsoft Windows XP Home Edition (Retail) End-User Licence Agreement for Microsoft Software (2004) http://www.microsoft.com/windowsxp/eula/home.mspx (accessed 10 April 2010). This allows for third party software to be installed on a user's computer by Microsoft without the user's consent. This section further allows Microsoft the opportunity to monitor the usage of content on any computer making use of this operating system.

Examples of a shrink-wrap agreement would be the end-user licence agreements in shrink-wrapped software. So if one were to purchase the latest copy of Microsoft Windows 7, then the box would usually be accompanied by terms and conditions of use which would be attached to the packaging of that software. By opening the packaging the user agrees to the terms and conditions which Microsoft has stipulated. A problem which can be noted with these sorts of agreements is that in many instances the usage contract is not attached to the packaging and as a result the end-user is unable to know what it is that they have just agreed to.[203]

Click-wrap agreements have been defined as requiring "a user affirmatively to manifest assent to conditions proposed by the software provider in order to continue with the installation of the software."[204] An example of such an agreement would include the long-winded terms of service agreements and end-user licence agreements which pop up when one is installing software. Most users merely scroll down to the end and click on 'accept'. By doing so, the user is actually agreeing to the terms and conditions of that agreement. So, for example, when one installs iTunes a 'terms of service' agreement will pop up asking the user to accept the terms and conditions in the terms of service licence before the installation will continue. A failure by the user to agree with the terms of service will result in a cancellation of the installation process. So an end-user cannot install the software, and in some cases, use the device associated with that software, unless they accept the terms.

The usage rules of these contracts will often specify whether or not the user is permitted to make copies of the copyright content and, if so, how many copies can be made and for what purpose these copies can be made.[205] So if one wishes to make a copy of digital content downloaded from the 'iStore,' they will be limited to only a certain number of copies of that content and those copies will only be allowed for personal use of the user. Bechtold notes

[203] "Lawsuit challenges software licensing" *CNetNews* 10 February 2009 http://news.cnet.com/2100-1001-983988.html?tag=fd_top (accessed 15 April 2010).
[204] *Via Viente Taiwan v United Parcel Service, Inc.* 2009 WL 398729 (E.D. Tex. Feb. 17, 2009). Facts taken from "Memorandum Opinion & Order Granting Defendants Motion of Transfer" http://www.buckleykolar.com/Via_Viente_v_UPS.pdf (accessed 15 April 2010) pg 3 footnote 1.
[205] Section 9 Terms of Service "Apple"

that "…many DRM usage contracts expressly forbid the consumer to copy, distribute, transmit, broadcast or modify protected content or to alter or delete attached metadata and usage rules."[206]

The problem which arises in relation to these contracts is that in order to use the product (be it hardware, software or both) the end-user must agree to those particular terms and conditions. This raises the concern of whether the user actually has any real choice in this matter. The general explanation on the Apple website for the use of any of its products states the following

> "Your use of Apple-branded hardware and software products is based on the software license and other terms and conditions in effect for the product at the time of purchase. You will be asked to agree to the terms of the applicable agreement at the time that you obtain or install the software or setup the hardware product."[207]

Furthermore

> "… your purchase is subject to the particular agreement that accompanied the software or hardware product at the time of purchase and that you ***must*** agree to the terms and conditions of that agreement when you install the software or set up the product."[208] (*emphasis added*).

While it is obvious that the user may 'choose' not to agree to the terms and conditions of the usage agreement, it does not seem appropriate to refer to this as a choice. The agreements are full of legalese with the effect that the user has no real idea about what they are agreeing to. If the end-user wishes to use the product then they are forced to abide

[206] Bechtold 2004 *Am. J. Comp. L* 340.
[207] Apple "Hardware and Software Product Agreements" (2009) http://www.apple.com/legal/sla/ (accessed 13 April 2010).
[208] Apple "Hardware and Software Product Agreements" (2009).

by the terms of usage which often results in a limitation of rights that they would normally have in such content under copyright law. These kinds of problems raise concerns over the enforceability of shrink-wrap and click-wrap agreements.

b. The enforceability of these agreements

It is perhaps trite to point out that in order for a contract to be successful in fulfilling its purpose, the contract needs to be enforceable. In this case the purpose of the contract is to control usage, protect the DRM systems integrity and ultimately grant personal rights to the manufacturers and content providers. As usage contracts largely take the form of shrink-wrap and click-wrap agreements it is these contracts which must be enforceable. Due to the nature of shrink-wrap and click-wrap agreements the enforceability of these contracts has been questioned.[209]

Bechtold notes that the enforceability of these contracts was largely uncertain in the United States as well as in Europe.[210] This uncertainty was changed in the landmark case of *ProCD, Inc v Zeidenberg*.[211] In that case Judge Easterbrook held that "Shrink-wrap licenses are enforceable unless their terms are objectionable on grounds applicable to contracts in general (for example, if they violate a rule of positive law, or if they are unconscionable)."[212] The position in South Africa relating to the enforceability of these agreements is largely governed by the Electronic Communications and Transactions Act.[213] Section 13(5) of that Act concerns electronic agreements where an electronic signature is not required.[214] This

[209] Bechtold 2004 *Am. J. Comp. L* 342. Jensen 2003 *Stan. L. Rev.* 536. MJ Madison "Legal-Ware: Contract and Copyright in the Digital Age" (1998) 67 *Fordham Law Review* 1025 at 1143.
[210] Bechtold 2004 *Am. J. Comp. L* 342.
[211] 86 F.3d 1447 (7th Cir. 1996).
[212] 86 F.3d 1447 (7th Cir. 1996).
[213] Act 25 of 2002.
[214] Section 13(5) states "Where an electronic signature is not required by the parties to an electronic transaction, an expression of intent or other statement is not without legal force and effect merely on the grounds that-
(a) it is in the form of a data message; or
(b) it is not evidenced by an electronic signature but is evidenced by other means from which such person's intent or other statement can be inferred."

section can be seen as applicable to shrink-wrap and click-wrap agreements, as they are electronic agreements which do not require an electronic signature and the user, by opening the packaging or clicking on the "I agree" tab, are expressing intent.[215]

The position of click-wrap contracts had been seen as analogous to that of their slightly more tangible sibling the shrink-wrap agreement. In a recent US case of *Via Viente Taiwan LP v. United Parcel Service Inc*[216] the federal court in Texas held that click-wrap agreements were enforceable even in a situation where the agreement is accepted by an employee of the vendor. In order to understand why such agreements were held to be binding, one needs to have an understanding of the facts.

This case concerned an agreement for carriage of goods to Taiwan by UPS for Via Viente. In accordance with this agreement, Via Viente was required to install UPS software to print shipping labels. The software was installed by a UPS employee. The software contained terms and conditions, in the form of a click-wrap agreement, which needed to be accepted during the installation of the software. The Court found "the License Agreement to be a so-called 'click-wrap' agreement."[217]

A dispute arose between the parties. UPS then applied for a motion of transfer of venue from Texas to Georgia as they were entitled to do by a 'forum selection clause' in the terms and conditions of the click-wrap agreement. Via Viente contended that the click-wrap agreement was not binding because the software had been installed by a UPS employee. As a result they were not able to review the terms and conditions of the agreement.

[215] See further D De Andrade "Is the pen mightier than the electronic signature?" *De Rebus* (2005) http://nexis.ru.ac.za/nxt/gateway.dll/zkfaa/bsxha/uei9/7okka/eqkka/svbua (accessed 29 April 2010).
[216] 2009 WL 398729 (E.D. Tex. Feb. 17, 2009). Facts taken from "Memorandum Opinion & Order Granting Defendants Motion of Transfer" http://www.buckleykolar.com/Via_Viente_v_UPS.pdf (accessed 15 April 2010).
[217] "Memorandum Opinion & Order Granting Defendants Motion of Transfer" http://www.buckleykolar.com/Via_Viente_v_UPS.pdf (accessed 15 April 2010) pg 3 footnote 1.

Therefore, there had not been a meeting of the minds between the two parties and the contract was unenforceable.

Via Viente's argument was unsuccessful on the grounds that it was the policy of UPS to *only* install the software when the installation was supervised and after "the customer indicates acceptance" of the terms of usage.[218] The court noted that due to the size of the plaintiff's company, they found it difficult to believe that they would allow someone to have unsupervised access to their computer system and furthermore that installation of the software would take place unsupervised. [219] Ultimately the court reasoned that the plaintiff had used the software of UPS in running its business and it would be inequitable to allow them to benefit from certain favourable terms of the agreement but not to be bound by those terms which were unfavourable.

The specific facts of the case serve as an example of the approach of the courts in the USA to click-wrap agreements. Certain aspects of the *ratio* would obviously not be in issue in the case of a private home user. For example the software would likely be installed by the end-user themselves and as such they would be viewed as having the opportunity to review the terms and conditions of usage.[220] It is the court's finding on the inequity of this type of conduct which is most telling and perhaps has a wider application than merely this case.

Where an end-user accepts the terms and conditions of a usage agreement and benefits from certain aspects of this agreement, it is indeed inequitable to allow them this benefit

[218] "Memorandum Opinion & Order Granting Defendants Motion of Transfer" http://www.buckleykolar.com/Via_Viente_v_UPS.pdf (accessed 15 April 2010) pg 2.
[219] "Memorandum Opinion & Order Granting Defendants Motion of Transfer" http://www.buckleykolar.com/Via_Viente_v_UPS.pdf (accessed 15 April 2010) pg 4 – 5.
[220] Although this may not always be the case. See "Lawsuit challenges software licensing" *CnetNews,* where a woman brought a class action law suit against various software developers and retailers for not being able to view End-User Licence Agreements of certain software prior to purchasing it. Once the software had been purchased, then the retailers had a non-return policy. Therefore the end-user was unable to read the agreement before purchasing the software and, once the software had been purchased, if the user did not agree to the terms and conditions of the agreement then they were unable to return the product.

while at the same time not expecting them to be bound by aspects of the contract which negatively impact on their usage.

The above situation seems cut and dried in its certainty, as equity would dictate that when one is bound by a contract that they are bound by both the beneficial and detrimental terms of that agreement. What happens in a situation where the terms and conditions of the usage contract deny the end-user certain usage rights which are afforded to them by copyright law? In terms of this content which is subject to copyright protection, an end-user/consumer/purchaser has a right to deal in or use that content in a certain way. In other words, copyright law prescribes that an end-user has certain rights concerning the usage of legally purchased/obtained content which is subject to copyright protection.[221]

c. The balance of power – user rights vs. usage terms

It is clear that certain usage rights are restricted by end-user licence agreements and terms of service agreements. Therefore, it is questioned whether the above situation is as cut and dried where the usage contract prohibits certain uses which the users is entitled to in terms of their rights to fair dealing (in the South African and UK context) or fair use (in the US context). E-readers serve to illustrate this point.

Certain e-readers prohibit the copying of even sections of an e-book or the way in which that e-book may be used or re-sold. Amazon's Kindle places various restrictions on how the digital content purchased from them for use on the Kindle may be used by the end-user. These restrictions are enforced by technological measures. The technological protection measures, in turn, are supported by the end-user agreement which provides another means of legal protection against certain usage of the content.

[221] Sections 12 -14 Copyright Act 98 of 1978. See also United States of America Copyright Act of 1976, 17 U.S.C. Section 107.

The 'Amazon Kindle: Licence Agreement and Terms of Use' states in section 3 that "Unless specifically indicated otherwise, you may not sell, rent, lease, distribute, broadcast, sublicense or otherwise assign any rights to the Digital Content or any portion of it to any third party, and you may not remove any proprietary notices or labels on the Digital Content. In addition, you may not, and you will not encourage, assist or authorize any other person to, bypass, modify, defeat or circumvent security features that protect the Digital Content."[222] The anti-circumvention protection which is mentioned will be discussed in greater depth in Chapter 4. What is important to note are the restrictions placed on the uses of an e-book and the Kindle device by Amazon.

Section 5 of the Amazon Kindle: Licence Agreement stipulates that any failure to comply with any of the terms of the agreement allows Amazon to terminate any rights which the user has under the agreement.[223] Therefore acceptance of these terms and conditions carries with it certain obligations. It seems that these obligations which are placed on the user far outweigh their usage rights.

It should be remembered that content in a digital form is more easily transferred from one person to another. With this in mind, it could be argued that the purpose of these prohibitions on use is to prevent the user from distributing the digital content and therefore infringing the copyright of that digital content. If this is the purpose of these prohibitions then a situation is present where the rights of content providers and those of the content users are conflicting. The resolution to this issue which has been adopted by the content providers is to basically give themselves greater legal recourse than the content users.

The terms of end-user licence agreements are not limited to preventing infringing use however. They can also include limitations on use in order to promote certain business

[222] Amazon Kindle: Licence Agreement and Terms of Use – s3 Digital Content: Restrictions (2009) http://www.amazon.com/gp/help/customer/display.html?nodeId=200144530 (accessed 14 April 2010).
[223] Amazon Kindle: Licence Agreement and Terms of Use – s5 General: Termination (2009).

models which the content provider and/or the device manufacturer concerned may have. The use of regional coding on DVDs[224] and Playstation gaming consoles[225] serve as such examples. This regional coding technology in conjunction with end-user licence agreements limits usage rights of the user and prevents them from using the digital content in a manner to which they are entitled by copyright law.

The Australian Playstation[226] case provides an example of this issue as a user may be prevented from using a legally purchased gaming CD which had been purchased in another region. The end-user agreement prohibits any sort of action which would circumvent the technology in place which controls this usage. Therefore this form of DRM can be seen as serving the purpose of preventing infringement, but this purpose is merely incidental to its main function of allowing for different pricing structures to be used in different regions. In this situation a user's rights must give way to the pricing schemes of content providers. This provides just one example of the problematic scenario which is becoming more prevalent with DRM usage.

The situation ultimately boils down to the following: without agreeing to the usage contract the end-user is unable to access the content and therefore the content remains secure. Thus the usage contract serves as a gateway to the content and the user is tied into particular usage by the contract. Jensen states that because of the way in which these end-user licence agreements and terms of service agreements are drafted and structured, the end-users of digital content are locked-out of the process and have little power over the terms of these agreements.[227]

[224] For example CPPM/CPRM DRM technologies.
[225] [2005] HCA 58.
[226] [2005] HCA 58.
[227] Jensen 2003 *Stan. L. Rev.* 566.

While the above serves as an example of how these usage contract works in theory, one however cannot divorce the attitudes of end-users of these usage contracts from this scenario.

d. User Attitudes

Mixed in with this scenario is the attitude of consumers to these end-user licence agreements. It is submitted that this attitude largely stems from the societal attitude towards copyright laws in general. Furthermore it could be argued that the intangibility of the rights of copyright holders leads to a view that these rights – rights to a monopoly over the content and the corresponding obligations of users to not infringe on this monopoly – do not need to be strictly adhered to. These submissions are in accordance with social norms and societal views relating to copyright law.[228]

Elmer notes that the view of copyright law in society is akin to the view which many people have of speed limits – "people forget they are there."[229] Jensen argues that as the result of concerted efforts by copyright holders this statement can no longer be considered a valid excuse.[230] Copyright issues have been making news headlines for more than a decade and cases such as the case of *A&M Records v Napster*[231] have brought copyright issues into the public domain. "It is common knowledge that unauthorised file sharing is against the law".[232]

While it is agreed that copyright has become an issue of which many internet users are aware, it is difficult to take that further step and say that internet users are completely aware of their rights and obligations when dealing with digital content. So while it can be

[228] Jensen 2003 *Stan. L. Rev.* 531.
[229] R Elmer "Oettinger, Copyright Laws and Copying Practices" (1968) in Jensen 2003 *Stan. L. Rev.* 533.
[230] Jensen 2003 *Stan. L. Rev.* 566.
[231] 239 F.3d 1004 (Ninth Circuit, 2001).
[232] Jensen 2003 *Stan. L. Rev.* 566.

said that end-users are likely to be aware of the general presence of copyright law and how it affects certain usage rights which they may have, it is uncertain whether the full extent of these usage rights is known. Furthermore the impact of DRM systems on these usage rights may not be fully known by end-users.

Madison argues that DRM systems "…not only anticipate and often implement non-negotiable terms that the user must accept in connection with access to the information, but also may operate as invisibly and as automatically as the flow of electrons that constitute the digital information itself."[233] As a result of the above factors, a situation arises in which copyright laws are seen as more of a suggestion and need not be followed unless someone is around to police their usage.

These norms suggest that a consumer is unlikely to purchase a product and then not use it because they did not agree with the terms of usage. This perspective is submitted for two reasons. Firstly it is unlikely that many end-users will actually read and understand all of the terms and conditions in these end-user licence agreements. Therefore most users will use a device or content without really knowing what their rights and obligations in relation to that device or content entails.

Secondly, even if the user does not agree to the terms and conditions, it is likely that they will use the product anyway. This is either because they do not believe that the monopoly afforded by copyright law is worth protecting or that they do not believe that it is the authors who benefit from this monopoly. Given the limitations placed on usage in terms of end-user licence agreements both of the above reasons could be considered to be valid excuses for infringement. However, this would completely shift the situation in favour of the consumer. Some sort of balance is needed between consumer rights and the rights of content providers.

[233] Madison 1998 *Fordham L. Rev.* 1060.

e. The problematic solution

Madison submits that "public interest concerns must find outlets to respond to the "lessons" of *ProCD* – that by framing shrink-wrap as a nominal contract, publishers cannot only avoid copyright law but can define the scope of legitimate debates about what society values in access to and use of information."[234] In defining copyright management systems as the "ultimate shrink-wrap"[235] the author extends his concern for the rights of end-users beyond his initial fears of shrink-wrap agreements to include DRM systems.

Given that Madison's article was written over a decade ago and if one is to consider the situation as it currently stands, then the following becomes apparent. The current enforceability of shrink-wrap agreements and the growing use of click-wrap agreements, both of which make up merely one of the strands in the protective mesh that is a DRM system, serves as a worrying indication of the success of publishers and similar groups in controlling usage and access rights of users. The interests of the user appear to have taken a backseat to those of the content holders.

It has been noted that the problem with these usage contracts is that they are standardised and are offered on a take-it or leave-it basis to a mass market, i.e. end-users.[236] Newitz argues that these agreements have little to do with consumer choice but rather represent legal mandates.[237] Thus the end-user has very little, if any, power to effect the terms of usage of these contracts. It has been argued that this lack of power to influence the terms and conditions of usage has allowed copyright holders to create a form of private

[234] Madison 1998 *Fordham L. Rev.* 1143.
[235] Madison 1998 *Fordham L. Rev.* 1059 – 1060.
[236] Bechtold 2004 *Am. J. Comp. L* 356.
[237] Electronic Frontier Foundation "Dangerous Terms: A User's Guide to EULA's" (2005) http://www.eff.org/wp/dangerous-terms-users-guide-eulas (accessed 15 April 2010).

legislation.[238] Newitz argues that this sort of 'private legislation' poses a danger to consumers as well as innovators.[239]

It is clear that these sorts of contracts regulate and place serious limitations on usage of the content which the end-user has purchased. Some of the terms in these contracts limit certain rights to that copyrighted work which the consumer would usually have under copyright law. These limitations in conjunction with the licence agreements and the technological protection create an interwoven mesh which gives the DRM system its strength, while perhaps exposing its greatest weakness – its lack of consumer support. It is submitted that by not considering the desires of end-users with regard to these agreements, the manufacturers and ultimately copyright holders are helping to enforce the end-user's apathetic attitude towards these agreements. This issue is especially prevalent in the end-user licence agreements which govern the consumer's use of the content.

f. End-user licence agreement misuse

The Electronic Frontiers Foundation website provides numerous examples of restrictive usage terms which are widespread and can currently be found in various end-user licence agreements.[240] While all of the examples on the site provide indications of the serious misuse of these usage agreements, there are several which clearly show how these contracts are used to subvert inherent rights which consumers would usually have. These examples will be discussed in greater detail.

The terms and conditions related to "*Pinnacle studio 9 movie making"* software allows Pinnacle to ensure that the end-user must download automatic updates. The effect of this,

[238] RP Merges "Intellectual Property and the Costs of Commercial Exchange" (1995) 93 *Michigan Law Review* 1570 at 1613. See also *Electronic Frontier Foundation* (2005) where it is noted that these agreements "…are, in effect, changing laws without going through any kind of legislative process"
[239] Electronic Frontier Foundation "Dangerous Terms: A User's Guide to EULA's".
[240] See Electronic Frontier Foundation "Dangerous Terms: A User's Guide to EULA's".

Pinnacle admits, is that some of the updates may 'impair' the functioning of the Pinnacle software as well as any other software on a user's computer which is reliant on or makes use of the Pinnacle software. Ultimately, Pinnacle has given themselves the ability to impair the functioning of not only their software but other software on a user's computer in order to install security updates for its software.[241] This greatly oversteps the bounds of what is reasonable in terms of these sorts of contracts and amounts to a misuse of this relationship which the end-user licence agreement establishes.

Many end-user licence agreements prohibit reverse engineering in order to protect the integrity of the DRM system and thus protect the content.[242] This prohibition however flies in the face of the US Copyright Act,[243] in particular section 107[244] which deals with fair use

[241] See Pinnacle Studio 9: Appendix F - Licence Agreement, Section 6 Security: "Pinnacle and/or its licensors may provide for Software security related updates that will be automatically downloaded and installed on your computer. Such security related updates may impair the Software (and any other software on your computer which specifically depends on the Software) including disabling your ability to copy and/or play 'secure' content, i.e. content protected by digital rights management."
http://www.pinnaclesys.com/WebVideo/Studio%20version%209/English%28US%29/doc/Studio_e.pdf pg 357 (accessed 15 April 2010).

[242] For example *Apple* "Software Licence Agreement for iTunes for Windows" – Permitted Licence Use and Restictions- Section 2. B. (2010) "You may not and you agree not to, or to enable others to, copy except as expressly permitted by this License), decompile, *reverse engineer*, disassemble, attempt to derive the source code of, decrypt, modify, create derivative works of the Apple Software, or any part thereof (except as and only to the extent any foregoing restriction is prohibited by applicable law or to the extent as may be permitted by licensing terms governing use of open-sourced components included with the Apple Software)." http://images.apple.com/legal/sla/docs/iTunesWindows.pdf (accessed 14 April 2010).
See also Amazon Kindle: Licence Agreement and Terms of Use – Software – Section 4 "**No Reverse Engineering, Decompilation, Disassembly or Circumvention.** You may not, and you will not encourage, assist or authorize any other person to, modify, reverse engineer, decompile or disassemble the Device or the Software, whether in whole or in part, create any derivative works from or of the Software, or bypass, modify, defeat or tamper with or circumvent any of the functions or protections of the Device or Software or any mechanisms operatively linked to the Software, including, but not limited to, augmenting or substituting any digital rights management functionality of the Device or Software."

[243] Copyright Act 90 Stat. 2541 (1976).

[244] Section 107 - the fair use of a copyrighted work, including such use by reproduction in copies or phonorecords or by any other means specified by that section, for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright. In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include —

(1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
(2) the nature of the copyrighted work;

laws. In cases concerning computer software the courts have interpreted this section as allowing for the reverse engineering of a program in order to "create a non-infringing interoperable program."[245] The position is similar in the UK.

Section 50BA of the UK Copyright, Designs and Patents Act was inserted to specifically protect this right.[246] The provision even identifies the potential for terms or conditions of end-user licence agreements to prohibit such actions. Where these terms or conditions exist, they are rendered void by the provisions of section 296A.[247]

If an end-user wanted to create a program to operate in conjunction with that original program, they are prevented from doing so by these reverse engineering clauses. The Bluwiki.com project entitled *Ipodhash*[248] provides an example of this type of clause in action.

The *Ipodhash* scenario concerned Apple's iTunes software. This software is used in conjunction with their iPod and iPhone electronic devices. Certain cryptographic information relating to iTunes had been discussed on Bluewiki's website. This was being done in an attempt to reverse engineer the software in order to allow certain electronic

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(3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
(4) the effect of the use upon the potential market for or value of the copyrighted work.

The fact that a work is unpublished shall not itself bar a finding of fair use if such finding is made upon consideration of all the above factors.

[245] Electronic Frontier Foundation "Dangerous Terms: A User's Guide to EULA's". See *Atari Games Corp v Nintendo of America* 975 F.2d 832 (1992) 843-844.
[246] Copyright, Designs and Patents Act of 1988. See section 50BA (1) which states: (1)It is not an infringement of copyright for a lawful user of a copy of a computer program to observe, study or test the functioning of the program in order to determine the ideas and principles which underlie any element of the program if he does so while performing any of the acts of loading, displaying, running, transmitting or storing the program which he is entitled to do.
[247] Section 50BA of Copyright, Designs and Patents Act 1988.
[248] "Apple is sued after pressuring open-source itunes project" *IDG News Service* 27 April 2009 http://www.pcworld.com/article/163909/apple_is_sued_after_pressuring_opensource_itunes_project.html (accessed 24 April 2010).

devices to operate with software other than iTunes. The argument for this reverse engineering was to allow for owners of iPods or iPhones to use this technology in conjunction with open source operating systems such as Linux.

Apple responded to this by demanding that the *Ipodhash* site be removed as it violated provisions of the Digital Millennium Copyright Act specifically sections 1201 (a) (2) and/or 1201 (b). They further argued that this project "threatens Apple's FairPlay copy-protection system."[249]

These sorts of limitations on the rights of users constitute a misuse where the user is attempting to reverse engineer software in a manner consistent with the factors in section 107 of the US Copyright Act or section 50BA (1) of the UK Copyright, Designs and Patents Act. The ultimate effect of this sort of usage restriction is that it inhibits innovation which is contrary to the purpose of intellectual property laws.

g. Conclusion

By looking at various aspects of DRM systems, from what they are to how they operate and provide protection to digital content, various advantages and disadvantages of these systems can be identified. For the sake of convenience, a discussion of these factors will be divided into two sections – the advantages discussed are the advantages of such systems to the copyright holders, manufactures and developers; while the disadvantages of these systems are those affecting the end-user manufactures and developers.

[249] "Apple is sued after pressuring open-source itunes project" *IDG News Service*.

7. Conclusion – Advantages and Disadvantages of DRM Systems

a. Advantages of DRM Systems

The infringement of copyright is indeed a legitimate concern for copyright holders as such infringement poses a threat to the monopoly which has been granted to these rights holders. The means by which the copyright industry has generally approached the issue of infringement has been through litigation, legislation and licensing.[250] This scattergun-like approach was relatively successful where the means of copying, and therefore infringing copyright, was something which was mainly available to large corporate entities. The current digital environment in which we now find ourselves can be seen as a double-edged sword for these rights holders. This digital environment favours both the easy dissemination of copyrighted content and the almost effortless ability to reproduce this content. DRM systems offer new levels of protection to the rights holders of digital content.

The effectiveness of the old approach to infringement is greatly reduced, and has become largely symbolic, in a context where the tools for copying and infringing copyright are available to most consumers with a home PC.[251] These tools allow for copyright infringement of digital content on a scale which has never occurred before. Lemley and Reese submit that "the high volume of illegal uses, and the low return to suing any one individual, make it more cost-effective to aim litigation at targets as far up the chain as possible" (i.e. the facilitators of the infringement).[252]

One advantage which emerges out of these DRM systems is that by entering into technology licence agreements the manufacturers, or 'facilitators', can ultimately exempt themselves from liability in these circumstances as they would be acting in accordance with standards set out by the content holders. This exemption would obviously be dependent on whether or not the manufacturer had complied with the robustness rules as determined by the DRM

[250] Jensen 2003 *Stan. L. Rev.* 566.
[251] Jensen 2003 *Stan. L. Rev.* 549.
[252] Lemley and Reese 2004 *Stan. L. Rev.* 1349.

developer and content provider. If the manufacturer had complied with the required rules then they would benefit from these DRM systems due to a limitation of their liability.

As discussed earlier, a DRM system confronts the issue of infringement by providing technological protection which provides a physical barrier to the average user infringing the work. It further enforces the use of these prevention technologies through technology licences which require that manufacturers incorporate these technologies into their products. Finally, the usage of the content by the end-user is limited through the use of end-user licence agreements in order to prevent them using the content or a device in such a way as would lead to infringement.

One needs to keep in mind that it is not one of these elements alone which gives a DRM system its strength, but rather the interwoven nature of these elements which ensure that the system as a whole maintains a level of integrity which provides the greatest amount of protection to copyright holders. Bechtold notes that the security which a DRM system provides is not the result of "technology, law or market forces alone", but rather emerges as a result of the interwoven relationship between various forces involved.[253]

When one looks at the nature of a DRM system and the various elements which it incorporates, it is clear that these aspects provide a more secure basis for digital content. As a result of this stable basis the content provider can reduce infringement of their copyright protected content and thus an incentive is provided for them to distribute this content via a digital platform and benefit from the monopoly which copyright law provides their content. Following this submission, one could further note that the end-user benefits from the use of these DRM systems as they allow for legal access to this digital content in an environment which promotes dissemination. This advantage in particular, it is submitted, is one which is perhaps the most contentious.

[253] Bechtold 2004 *Am. J. Comp. L* 355.

b. Disadvantages of DRM Systems

The disadvantages which emerge as a result of the use of DRM systems mainly affect the end-users of this content. This is due to severe limitations on their usage of legally purchased digital content by the DRM system, in terms of the technological protection, the end-user licence agreements and the trickle down effect from the technology licence agreements. As mentioned earlier, this limitation on usage by the content providers and through manufacturers and DRM developers often exceeds the bounds of what copyright law allows.

The various situations discussed earlier in this chapter provide examples of the limitation on usage. For a specific example one can look at the manner in which Amazon's Kindle prohibits fair use rights in the US context. The usage agreement, as well as the technological protective measures, does not allow the user to resell the e-book should they wish to. One must constantly bear in mind that this content is something which the user has legally purchased. In terms of copyright law in the US, end-users have certain rights in relation to the content they have purchased. One particularly important right which has been eroded by the advent of technological protection measures and DRM systems is the doctrine of first sale. This doctrine allows the purchaser of a work which is subject to copyright to transfer a particular copy of a work without the permission of the author.[254] The emergence of DRM systems, in conjunction with anti-circumvention legislation, has rendered the practical application of this right an offence. The doctrine is largely unworkable in the digital

[254] Copyright Act of 1976, 17 U.S.C. S109. See s109(a) where it is stated "Notwithstanding the provisions of section 106(3), the owner of a particular copy or phonorecord lawfully made under this title, or any person authorized by such owner, is entitled, without the authority of the copyright owner, to sell or otherwise dispose of the possession of that copy or phonorecord. Notwithstanding the preceding sentence, copies or phonorecords of works subject to restored copyright under section 104A that are manufactured before the date of restoration of copyright or, with respect to reliance parties, before publication or service of notice under section 104A(e), may be sold or otherwise disposed of without the authorization of the owner of the restored copyright for purposes of direct or indirect commercial advantage only during the 12-month period beginning on —

(1) the date of the publication in the Federal Register of the notice of intent filed with the Copyright Office under section 104A(d)(2)(A), or
(2) the date of the receipt of actual notice served under section 104A(d)(2)(B), whichever occurs first.

environment. Thus, end-users are denied usage rights which they have been given by the law because of the use of DRM systems.

Usage contracts further play a role in creating this form of "private legislation" which inevitably requires the user to accept the terms and conditions in order to use the device and/or content. The end result of this is that the user is largely powerless in changing the terms and conditions of these usage contracts. Content providers are thus able to impose these limitations on usage and give themselves greater control over their content at the expense of the user of their content. This scenario is concerning as it is the users who have legally purchased the digital content that suffer from these limitations on usage. The reality of the situation is that users of digital content who have illegally obtained this content are unlikely to be caught and will find ways around the usage restrictions which technological protection provides. Ultimately, it is submitted that the end-users who have legally obtained this content are not being rewarded for this. Therefore these users are being disadvantaged. This argument could perhaps be taken further when pointing out that by not being rewarded for legally obtaining digital content, an end-user would likely be driven to illegally obtaining that content. Thus rights holders in that digital content will lose out on revenue by not rewarding their users.

Manufactures are also subject to disadvantage in some ways, as they are forced to incorporate DRM systems into their devices in order to legally use most content provided by content holders. This, as discussed in greater detail earlier, requires manufacturers to enter into technology licence agreements which are restrictive and control how that manufacturer can construct its device. On this issue Lemley and Reese note that "the key policy point is that going after makers of technology for the uses to which their technologies may be put threatens to stifle innovation."[255]

[255] Lemley and Reese 2004 *Stan. L. Rev.* 1349.

c. Conclusion

The impact of DRM systems on copyright content in the digital environment would not be nearly as great without these systems being reinforced by anti-circumvention legislation. The relationship between these two features is almost symbiotic in its nature, as such, one could not fully realise the extent of the impact of DRM systems without considering the anti-circumvention laws which protect them. It is this aspect to which will the next chapter now turns.

Chapter 4

Anti-Circumvention Legislation and Treaties

1 Introduction

In keeping with the digital era in which we find ourselves, the copyright industry has resolved to fight the scourge of digital technology and the problem of piracy. The approach adopted operates by using that very same technology to protect the content from the viral dissemination it faces over the Internet. These DRM systems present themselves as the answer to some of the problems which the content production industry faces. As discussed in chapter 3, these systems rely on various aspects which form an interwoven mesh to provide greater protection by allowing copyright owners to exercise their rights and prevent certain usage which the consumer would ordinarily have under copyright law. The problem is that the thing which gives these systems their strength, in allowing for their integration into most of the digital technology which consumers purchase, is also what leaves them susceptible to avoidance by consumers.

Ultimately, these systems, whether they are hardware based, software based or a hybrid of the two, are merely pieces of technology and code. These codes and technologies can be circumvented in various ways by consumers, for example by reverse engineering. The inevitable outcome of this scenario is that the content can be used in a way in which the copyright owner did not intend or allow.

The above obviously poses a threat to the rights of copyright owners and their interests in the content. This is especially so in situations where the protection of a DRM system has been circumvented by a user who does not have a legitimate copy of the work and therefore no legitimate usage rights. Thus the copyright industry, especially distributors, argues that this type of avoidance of the DRM systems present in their content should be prohibited. It is from this concern and the fear of piracy of their content on mass that the

copyright industries lobbied for greater protection of their works through anti-circumvention laws.

Gillespie defines anti-circumvention by stating "If a copyright owner were to distribute a digital work with some kind of technological protection barrier built in (i.e. password security, water-marking, encryption, anti-copying codes etc.), it should be illegal for a user to gain unauthorised access by breaking that barrier. Furthermore, it should be illegal to make or distribute a toll that facilitates such a breach."[256]

It is at this point that it is important to note that many countries have adopted anti-circumvention laws. For the purposes of this research the main legislation which will be discussed will be those from the US, the EU and Australia. The similarities and differences between these statutes will be analysed later in this chapter. An introductory aspect which needs to be explored to provide a contextual background for this chapter is where such legislation originated.

2 'The Copyright Grab'

Bechtold notes that although anti-circumvention legislation is not something which is completely novel, it is only recently that such legislation has been adopted on a global scale.[257] The question which one must ask is: Why? Stamatoudi notes that the importance of using technological means of protecting digital content protected by copyright can be seen in several legal instruments of both a national and international nature.[258]

[256] T Gillespie "Copyright and Commerce: The DMCA, Trusted Systems, and the Stabilization of Distribution" (2004) *The Information Society* 239 at 240.

[257] S Bechtold "Digital Rights Management in the U.S. and Europe" (2004) *American Journal of Comparative Law* 323 at 331.

[258] IA Stamatoudi *Copyright and Multimedia Works* (2002) 242. The author notes "Some examples of these are the US White Paper, the EU Green Paper and the European Commission Communication, the two recent WIPO treaties, and the EU draft Directive". Another noteworthy example would be the Australian – United States Free Trade Agreement (hereinafter "AUSFTA"). Chapter 17 of this agreement concerns Intellectual Property. Article 17.1.4 requires that "Each party shall ratify or accede to the *WIPO Copyright Treaty* (1996) and the *WIPO Performances and Phonograms Treaty* (1996) by the date of entry into force of this Agreement, subject to the fulfilment of their necessary internal requirements". Article 17.4.7 also requires the drafting of

This sudden global acknowledgement of anti-circumvention, as a major concern for intellectual property rights, can be seen as having its origins in the re-election of the Clinton administration in the US. In 1996 the Clinton administration released a white paper on "Intellectual Property and the National Information Infrastructure". Samuelson terms this 'the copyright grab'. She submits that the white paper represented the fears of the publishing industry in relation to the rise of digital technology.[259] Indeed, she notes that these fears were so great that the white paper aimed to strip the public of their normal usage rights which they had been given under copyright law.[260]

The paper itself is a fairly large and wordy document in which various goals are discussed.[261] Those which are the most relevant to the discussion in this chapter relate to copyright owners and their control over the use and transmission of their works in a digital form;[262] the importance of metadata for copyright works in digital form;[263] the need for the inclusion of technological protection of digital content;[264] the elimination of fair use rights for works in a digital form;[265] as well as the need for legislation making circumvention of technological protection illegal.[266]

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legislation for the purposes of providing protection of technological measures which are employed to protect digital content. The AUSFTA also requires various anti-circumvention measures to be put in place in order to prevent the circumvention of these technological measures.

[259] P Samuelson "The Copyright Grab" *Wired* February 1996 http://www.wired.com/wired/archive/4.01/white.paper_pr.html (accessed 12 March 2010).

[260] Samuelson "The Copyright Grab" *Wired*.

[261] US White Paper, B Lehman and R Brown "Intellectual Property and the National Information Infrastructure" *The Report of the Working Group on Intellectual Property Rights* (1996) http://www.uspto.gov/web/offices/com/doc/ipnii/ipnii.pdf (accessed 19 July 2010).

[262] US White Paper "Intellectual Property and the National Information Infrastructure" *The Report of the Working Group on Intellectual Property Rights* II. D – Controlling Use of Protected Works, II.

[263] US White Paper "Intellectual Property and the National Information Infrastructure – *The Report of the Working Group on Intellectual Property Rights* II. E – Managing Rights in Protected Works.

[264] US White Paper "Intellectual Property and the National Information Infrastructure – *The Report of the Working Group on Intellectual Property Rights* IV. 7 – Copyright Management Information.

[265] US White Paper "Intellectual Property and the National Information Infrastructure – *The Report of the Working Group on Intellectual Property Rights* IV. 6 – Technological Protection.

[266] US White Paper "Intellectual Property and the National Information Infrastructure – *The Report of the Working Group on Intellectual Property Rights* IV. 6 – Technological Protection.

The recommendations in the paper can be seen as being severely flawed and represent "a flagrant giveaway to copyright industries".[267] One must ask why the recommendations were pursued if they were so heavily in favour of the copyright industries and detrimental to the public interest. Samuelson argues, in what initially seems to be a conspiracy theorist proposition, that the Clinton administration exchanged the rights of consumers in relation to use of copyright material for funding for its re-election campaign.[268]

When one considers the submissions made in the white paper, it is clear that the approach which it adopts is one which heavily favours greater control at the expense of public interests. Samuelson points out that the white paper focuses on implementing the agenda of copyright owners through rewriting copyright legislation and aggressively interpreting the existing legislation and even goes so far as to ignore case law which does not allow for its maximalist approach.[269] In support of this supposition Samuelson identifies several examples. For the sake of brevity, only her example relating to fair use will be discussed.

a. What has come before isn't important

The white paper adopts the view that where any potential use for a copyright work can be licensed then fair use is not required. This is so because technology and the Internet allow for licensing on a mass scale for the smallest of uses and thus fair use rights are no longer needed. So for example, fair use in the US allows for a party to make a copy of a CD, which they have legally purchased, for their own personal use. Indeed, as discussed in chapter 3 of this thesis, the Audio Home Recording Act of 1992[270] requires that a form of copy protection be put in place to prevent unauthorised copying of digital audio recordings. The Serial Copy Management System (SCMS), which functions as this technological preventative measure,

[267] Samuelson "The Copyright Grab" *Wired*.
[268] Samuelson "The Copyright Grab" *Wired*.
[269] Samuelson "The Copyright Grab" *Wired*.
[270] Note that this Act actually forms part of the US Copyright Act of 1976 under Chapter 10 but is often referred to as the Audio Home Recording Act.

allows for a certain number of copies to be made from the original work.[271] Thus the law and technology in place both recognised the right of consumers to use their legitimately purchased content in particular ways, e.g. copying of an album for non-commercial purposes.

In accordance with the view which the white paper proposed, any unauthorised copying of a copyright protected work would constitute theft.[272] The white paper however ignores the fact that this supposition was rejected by the US Supreme Court in the *Betamax* case[273] in its discussion of the legality of time-shifting.[274] On this point Samuelson notes that the white paper ignores this aspect of the *Betamax* decision and reinterprets the decision on the basis that the Supreme Court merely found no infringement because the copyright owners had not yet created a licensing market for this particular usage.[275]

It is understandable that this interpretation, which the copyright holders adopt, could be found from the wording of the judgment where it was held that:

> "…a use that has no demonstrable effect upon the potential market for, or value of, the copyrighted work need not be prohibited in order to protect the author's incentive to create."[276]

[271] B Bahlmann and C Martz *Birds-Eye.Net* http://www.birds-eye.net/definition/acronym/?id=1154207915 (accessed 26 March 2010).
[272] Samuelson "The Copyright Grab" *Wired*.
[273] *Sony Corporation v Universal City Studios Inc.* 464 U.S. 417 (1984).
[274] *Sony Corporation v Universal City Studios Inc.* 464 U.S. 417 (1984) 450 – 451. The Court held "Even copying for noncommercial purposes may impair the copyright holder's ability to obtain the rewards that Congress intended him to have. But a use that has no demonstrable effect upon the potential market for, or the value of, the copyrighted work need not be prohibited in order to protect the author's incentive to create. The prohibition of such noncommercial uses would merely inhibit access to ideas without any countervailing benefit."

[275] Samuelson "The Copyright Grab" *Wired*.
[276] *Sony Corporation v Universal City Studios Inc.* 464 U.S. 417 (1984) 450.

Obviously where a market does not exist for the licensing of such usage then there could be no demonstrable effect on that market and such usage should therefore be allowed. This interpretation however envisages a system where every eventuality and usage should be licensed and therefore each usage constitutes a source of revenue for copyright owners. Samuelson notes that this interpretation is ill conceived as it is based on a faulty premise, i.e. that fair use rights will only apply where no market exists for the licensing of that particular use.[277] She identifies that this premise, in the context of case law in the U.S., is contrary to public policy as well as being historically inaccurate. In support of this submission she identifies two cases: *Time Inc. v Bernard Geis*[278] and *Sega v Accolade*[279].

i. Time Inc. v Bernard Geis

The facts of this case, briefly, concerned the assassination of US President John F. Kennedy. A man present at the scene on the day of the shooting had happened to be filming a home movie. This movie was subsequently sold to '*Life*' magazine. This magazine constituted a division of the Plaintiff's Company. The magazine later published still pictures from the footage in several subsequent publications. One of the defendants wrote a book, "Six Seconds in Dallas", about the assassination and used some of the stills. Various attempts to secure permission from plaintiffs for the use of the stills had failed. The defendants eventually used the required images without the permission of the plaintiffs. It should be noted that the photographic images were not themselves published in the book but rather artist-rendered charcoal sketches of the images.[280] The plaintiffs sued the defendants averring, amongst other things, that the defendants' conduct amounted to an infringement of its statutory copyright. Ultimately the court held that despite the copying of certain frames such copying amounted to fair use.

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[277] Samuelson "The Copyright Grab" *Wired*.
[278] 293 F. Supp. 130 (S.D.N.Y. 1968).
[279] 977 F2d 1510 (9th Circ. 1992).
[280] 293 F. Supp. 130 (S.D.N.Y. 1968). However the court notes at paragraph [76] "The Book relies heavily on the Zapruder pictures [Zapruder was the person who had initially filmed the event and from whom Time Inc. had purchased the video]. No Zapruder frame is reproduced in its entirety…". Wyatt later states, at paragraph [84], that "The reproductions in the Book of parts of Zapruder frames of which complaint is here made are not "sketches" but are in fact copies".

Two reasons for this decision can be gleaned. The first was that it could not be shown that the plaintiff suffered any injury as a result of the copying.[281] The second was that it was in the public interest to allow the use of the frames.[282] On this second point the court noted "The Book is not bought because it contained the Zapruder Pictures; the Book is bought because of the theory of Thompson [the author of the Book] and its explanation, supported by Zapruder pictures."[283]

Samuelson submits that when it comes to fair use, the white paper ignores important functions of this consumer right such as those relating to free speech and the public interest.[284] The *Time Inc*. case is provided as an example of these free speech and public interest functions.

It is respectfully submitted that the use of this case, as an example of where the public interest in allowing for fair use of works protected by copyright trumps the rights of the copyright owner, is perhaps an ill-advised choice for what the author is claiming. There are several criticisms which can be pointed out. In line with the first reason offered by the court, the case may have had a different outcome had the plaintiffs been able to show some sort of injury or loss suffered as a result of the copying. Had a licensing system been in place, the plaintiffs may have been able to show some sort of loss.

Perhaps an even greater challenge rests with the second reason for the decision given by the court. The problem which must be noted is that the outcome of this particular type of case is dependant on the particular copyrighted content which it is dealing with. This is not purely limited to the medium in which the work is embodied, but also the subject matter it contains. One is left wondering how successful the public interest argument would be when

[281] 293 F. Supp. 130 (S.D.N.Y. 1968) paragraph [134].
[282] 293 F. Supp. 130 (S.D.N.Y. 1968) paragraph [133].
[283] 293 F. Supp. 130 (S.D.N.Y. 1968) paragraph [133].
[284] Samuelson "The Copyright Grab" *Wired*.

attempting to use fair use to justify the copying of something with reduced importance to the promotion of knowledge and the access to public knowledge, for example music. While it could be argued that music may represent a form of cultural commentary which encourages debate and discourse within the sphere of public knowledge, such an argument is tenuous at best. One could also discuss this situation in relation to an e-book, for example *Harry Potter*. In this example, could it be argued that the text can be fairly used by another author lacking the consent of J.K. Rowling purely on the basis of public policy grounds? The success of such an argument in court seems highly unlikely.

Following this, the case represents a situation in which the copyright owner had repeatedly refused to grant permission for the use of its content.[285] Would this fair use defence be as successful where the copyright owner is willing to allow use? Such usage would more than likely require the payment of a fee, but the technology in place would allow for a market to exist for licensing and usage.

While I agree with Samuelson's submissions, it is respectfully submitted that her use of this case is not suitable for the purposes for which she is using it. While the outcome of the case supports her claims, the particular facts which govern the reasons behind the outcome are not considered. Therefore the author may be guilty of the same offence as the drafters of the white paper, i.e. ignoring certain aspects of the case law available. The attention now turns to the second case which Samuelson identifies in support of her argument, that being, *Sega v Accolade*.[286]

ii. Sega v Accolade[287]

[285] 293 F. Supp. 130 (S.D.N.Y. 1968) paragraphs [62] – [73].
[286] 977 F.2d 1510 (9th Circ. 1992).
[287] 977 F.2d 1510 (9th Circ. 1992).

This case concerned both copyright and trademark concerns. However, for the purposes of this discussion only the copyright component will be discussed. The plaintiffs in this case develop and market video entertainment systems, gaming consoles, as well as games which are played on these consoles. One of the consoles was the "Genesis".[288] The defendants were independent developers, manufacturers and marketers of computer entertainment software, including game cartridges compatible with the "Genesis".[289]

The defendants used a two stage process to decompile the code from the plaintiff's "Genesis" console and reverse engineer the code in order to allow its games to operate on these consoles. At the end of this process the defendants created a development manual for Genesis-compatibility. The defendants maintained that only functional descriptions of the interface requirements for the "Genesis" were present in the manual. The code which the defendants had reverse engineered was subject to copyright by the plaintiffs and as such the defendants, amongst other claims, were sued for copyright infringement.[290]

The plaintiffs in this case had a licensing scheme in place to licence the use of the code to other software developers for the purposes of making games compatible with its console. These other games would operate in competition with the plaintiff's game sales. The defendants decided not to enter into a license agreement with the plaintiff as the agreement required that the plaintiff be the exclusive manufacturer of all games produced by the defendant.[291]

The defendants argued that they had not copied any of the plaintiff's programs and that the code which had been obtained through their reverse engineering process merely related to

[288] 977 F.2d 1510 (9th Circ. 1992) at 1514.
[289] 977 F.2d 1510 (9th Circ. 1992) at 1514.
[290] 977 F.2d 1510 (9th Circ. 1992) at 1514.
[291] 977 F.2d 1510 (9th Circ. 1992) at 1514.

the interface specifications required for compatibility with the "Genesis".[292] They thus argued that this practice did not amount to copyright infringement as the code had been used to achieve compatibility of its software with the system and, as such, amounted to fair use.

The district court which first heard the case rejected this argument on the grounds that the defendant had reverse engineered the code for commercial purposes and as a result the plaintiff would have suffered loss through its own game sales being replaced by those of the defendants.[293] The district court further held that alternative means of obtaining this code existed, by entering into a licensing agreement with the plaintiffs, and therefore the defendants could not claim the defence of fair use.[294] On appeal, various arguments were raised by the defendants but the court disregarded all of these with the exception of the argument that decompiling the code amounted to fair use.[295]

In undertaking an analysis of the use of the code by the defendant the court, in terms of section 107 of the Copyright Act,[296] held that the outcome of the four stage test favoured the defendants. The court noted that when new technology has rendered certain copyright aspects ambiguous then a purposive approach should be adopted with regard to interpretation. Chapter 2 of this thesis discussed the dual purpose of copyright in providing incentive to create with the aim of promoting further creation for the public good. Part of promoting this public good involves allowing public access. On the basis of this purpose the court in the *Sega* case held that the Copyright Act encourages "…the production of original

[292] 977 F.2d 1510 (9th Circ. 1992) at 1515. The Court states that the defendants "…maintains that with the exception of the interface specifications, none of the code in its own games is derived in any way from its examination of Sega's code".

[293] 977 F.2d 1510 (9th Circ. 1992) at 1517.
[294] 977 F.2d 1510 (9th Circ. 1992) at 1517.
[295] 977 F.2d 1510 (9th Circ. 1992) at 1518. The court held"… we conclude based on the policies underlying the Copyright Act that disassembly of copyrighted object code is, as a matter of law, a fair use of the copyrighted work if such disassembly provides the only means of access to those elements of the code that are not protected by copyright and the copier has a legitimate reason for seeking such access."
[296] US Copyright Act of 1976.

works by protecting the expressive elements of those works while leaving the ideas, facts, and functional concepts in the public domain for others to build on."[297]

This case, more so than the *Time Inc*. case, serves as an apt example of Samuelson's argument that the drafters of the white paper ignored certain case law which it felt did not benefit its cause. It further supports her argument that fair use rights apply even when a licensing scheme exists for the particular use sought. This case also identifies the importance of the purpose of copyright when legislation is faced with new technologies. In doing this, the case provides a clear example of the importance of the public interest aspect of copyright law with regard to the purpose of copyright protection and its functioning.[298]

b. The New Order – Potential for Abuse

It is clear from the discussion of some of the cases which Samuelson identifies that the white paper indeed ignored certain decisions from case law and seemed to avoid the facets of the law which did not support its objectives. In doing so, the white paper ran contrary to the purpose of copyright law. Rather, it viewed the public solely as a market and its rights under copyright as an extended monopoly rather than the *quid pro quo* relationship, between creators and the public, which underlies copyright law in general. The pervasive nature of this market-based approach to the subject of copyright in the digital era is well illustrated by anti-circumvention legislation. It is in this light that anti-circumvention legislation should be analysed.

[297] 977 F.2d 1510 (9th Circ. 1992) at 1527.

[298] 977 F.2d 1510 (9th Circ. 1992) at 1527. The court identifies that its decision may seem somewhat odd given the facts of the case, but it noted "We are not unaware of the fact that to those used to considering copyright issues in more traditional contexts, our result may seem incongruous at first blush. To oversimplify, the record establishes that Accolade, a commercial competitor of Sega, engaged in wholesale copying of Sega's copyrighted code as a preliminary step in the development of a competing product. However, the key to this case is that we are dealing with computer software, a relatively unexplored area in the world of copyright law. We must avoid the temptation of trying to force "the proverbial square peg in [to] a round hole."

The impact of this kind of legislation coupled with the technological protection it allows for carries with it very real concerns over the abuse of these systems by those in control of them. The failure of copyright law to guard against rampant piracy has created a situation in which technology is being used to protect the author's rights. The problem with this type of situation is that "the person possessing the technology is usually also the one setting the rules".[299] This kind of scenario requires that the use of these technologies be strictly regulated by the State concerned. The drafting of the white paper, however, seems to grant the copyright industry extended powers to control their works without the concomitant strict regulation of that power by the State. In this way, the white paper allowed the copyright industry to further its aims of monetising each use rather than possession of the content.[300]

Generally, the recommendations made by the white paper carry the feel of parties lobbying for a change in the laws which do not support their cause. In other words, they argue that the rights of the public, as well as the importance of the public interests in copyright law, should give way to the newly acquired, and newly legislated, rights of the copyright industry. However, in spite of the misgivings noted above, the Clinton administration promoted this objective. On this type of political involvement in the copyright environment Benlker identifies that various parties in society engage in the production of information in varying ways. He further notes that

> "Once one recognises that intellectual property rules affect *how* our society produces information and *who* is likely to be an effective producer, not only *how much* information our economy produces, choices with respect to intellectual property rules become irreducibly normative, or political."[301]

[299] IA Stamatoudi *Copyright and Multimedia Works* (2002) 243.
[300] Gillespie 2004 *The Information Society* 241.
[301] Y Benkler "The Free Republic Problem: Markets in Information" (1999) Conference paper presented at *Private Censorship/Perfect Choice*, Information Society Project, Yale Law School in Gillespie 2004 The Information Society 249.

On the DMCA Benkler notes "when Congress passes a statute like the DMCA it is making a choice among types of information producers."[302] Thus, one could argue that greater control over digital content was provided to copyright owners in exchange for campaign contributions. Indeed, Okediji submits a similar proposition in viewing that the DMCA represents a shift away from the public interest and the public's rights in relation to copyright works. She notes that legislative enactments such as the DMCA should arouse the concerns of consumers, both in terms of the process of their formation as well as in their substance. These factors should give consumers reason to pause and consider just how committed law makers are to the protection of the public interest.[303]

Whatever the reasons were for the shift in the balance of rights, the intended effect was that the emerging superhighway would be transformed into a publisher-dominated toll road.[304] Bearing in mind the stage on which copyright operates, one would need to pursue a global application of the goals of the white paper in order to ensure complete implementation of the recommendations of the white paper. Marsland notes that "in a global, digital market place, the risk is high that any country not providing protection to minimum international standards will also supply pirated material to the rest of the world."[305] The recommendations made in the white paper were pursued not only on a national scale in the US but on a global scale through Global Information Infrastructure meetings, held by lobbyists of the white paper in the US, through WIPO.[306] Samuelson notes that it is from this situation that the main treaties, calling for anti-circumvention legislation from parties to these treaties, came about.[307]

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[302] Y Benkler "Intellectual Property and the Organization of Information Production" (1999) *Benkler.org* 46 http://www.benkler.org/Ipec99.pdf (accessed 1 August 2010).

[303] R Okediji "Givers, Takers and Other Kinds of Users: A Fair Use Doctrine for Cyberspace" (2001) *Florida Law Review* 107 at 111. The author further notes "one might express this state of affairs as a manifestation of the legislative capture of Congress by special interest groups and the bartering that took place at the bargaining table".

[304] Samuelson "The Copyright Grab" *Wired*.

[305] V Marsland "Copyright is a Global Issue" (1996) *Wired* http://yoz.com/wired/2.01/features/copyright.html (accessed 12 March 2010).

[306] Samuelson "The Copyright Grab" *Wired*. See also R Okediji 2001 *Fla. L. Rev.* 107 at 147. The author notes that "the legislative focus so far has been on protecting a domestic welfare agenda".

[307] Samuleson "The Copyright Grab" *Wired*.

3. International Recognition of Anti-Circumvention: Treaties

Treaties can be seen as one of the main mechanisms for protection and change in the volatile world of copyright law. With the ever-increasing connectedness of the world, through processes such as globalisation, the cultural products of various regions become more common in areas away from those where they were first produced. This homogenisation of culture carries with it an implication that the laws protecting these cultural products need to be homogenised themselves. This thinking is clear from the near global adoption of The Berne Convention for the Protection of Literary and Artistic Works.[308]

The Berne Convention represents an international effort to protect copyright with the aim of allowing the free flow of ideas to the public through this protection. On the Berne Convention Davies notes that its aim is to "…stimulate the intellectual effort of mankind through the legitimate protection of works, the protection of authors' rights being seen as one of the best means of developing letters and the arts and encouraging national production."[309] She goes on to point out "…it was also recognised that limitations on absolute protection were dictated by the public interest."[310] The Berne Convention thus recognises the importance of maintaining a balance between authors' right and the public interest. This balance has been thoroughly discussed in chapter 2 of this thesis.

The Berne Convention is comprised of a number of member states.[311] The large number of member states indicates a near global commitment to the application of copyright protection. It is out of this desire for global protection, in conjunction with the perceived threat of digital copying technologies, that the two main treaties relating to the implementation of anti-circumvention legislation emerged.

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[308] Hereinafter referred to as "The Berne Convention".
[309] G Davies *Copyright and the Public Interest* (2002) 264.
[310] Davies *Copyright and the Public Interest* (2002) 264.
[311] 164 Member States as of 2010. Contracting Parties – Berne Convention http://www.wipo.int/treaties/en/ShowResults.jsp?lang=en&treaty_id=15 (accessed 18 July 2010).

These two treaties are: the World Intellectual Property Organization Copyright Treaty[312] and the World Intellectual Property Organization Performance and Phonograms Treaty.[313]

a. The WCT

The *WCT* incorporates two anti-circumvention provisions in Articles 11 and 12 respectively. Article 11 relates to "Obligations Concerning Technological Measures"[314] while Article 12 relates to "Obligations Concerning Rights Management Information."[315]

Kruger submits that the *WCT* adopts a minimalist approach to anti-circumvention by providing a baseline from which member countries can develop their own anti-circumvention legislation.[316] The Treaty however lays out specific substantive points of law while largely leaving the procedural aspects up to signatories to the Treaty to decide for themselves. In order to understand the implications of Articles 11 and 12 one first needs to understand the so-called 'access right' which the *WCT* grants to the author.

[312] WIPO Copyright Treaty, 20/12/1996. Hereinafter referred to as "*WCT*".
[313] WIPO Performances and Phonograms Treaty, 20/12/1996. Hereinafter referred to as "*WPPT*".
[314] Article 11 states "Contracting Parties shall provide adequate legal protection and effective legal remedies against the circumvention of effective technological 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."
[315] Article 12 states "(1) Contracting Parties shall provide adequate and effective legal remedies against any person knowingly performing any of the following acts knowing, or with respect to civil remedies having reasonable grounds to know, that it will induce, enable, facilitate or conceal an infringement of any right covered by this Treaty or the Berne Convention:
(i) to remove or alter any electronic rights management information without authority;
(ii) to distribute, import for distribution, broadcast or communicate to the public, without authority, works or copies of works knowing that electronic rights management information has been removed or altered without authority.
(2) As used in this Article, "rights management information" means information which identifies the work, the author of the work, the owner of any right in the work, or information about the terms and conditions of use of the work, and any numbers or codes that represent such information, when any of these items of information is attached to a copy of a work or appears in connection with the communication of a work to the public."
[316] CD Kruger "Passing the Global Test: DMCA s1201 as an International Model for Transitioning Copyright Law into the Digital Age" (2006) 28 *Houston Journal of International Law* 281 at 284.

i. The 'Access Right' Defined

The term 'access right' is perhaps a misnomer as it denotes the idea of the public having a right to access works. Of course, in keeping with the purpose of copyright law, the public do indeed have a right to access works in exchange for the limited monopoly granted to the copyright owner. Gasaway identifies that the term, in its digital context, refers to the right of copyright owners to control public access rather than the idea denoted by the 'access right' term.[317] The author goes on to point out that a right which allows for access control must invariably not only refer to general access to a work but also access to a work for specific purposes.[318] Therefore the control of use would be implicit in allowing for the control of access. On this point Ginsburg notes that the access right concerns "the right to control the manner in which members of the public apprehend the work."[319]

These access rights are said to represent a clarification of the rights of copyright owners rather than granting them rights which they did not previously have. Davies notes that the access rights were implicit in the rights of reproduction, communication and distribution which had always been available to copyright owners.[320] It has been argued that in an era prior to the availability of cheap copying technologies, which are now available to the general public, the access right was indeed implicit in other rights available to copyright holders. Ginsburg explains that copyright owners were able to control access by determining how their works would be made available.[321] With the emergence of mass market copying technologies, this determination was largely removed from the control of copyright owners and, as such, that right which had previously been implicit in their other rights necessitated some sort of legislative intervention in order to survive.

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[317] L Gasaway "The New Access Right and its Impact on Libraries and Library Users" (2002) http://www.unc.edu/~unclng/the%20new%20access.htm#_ftnref19 (accessed 20 July 2010).
[318] Gasaway "The New Access Right and its Impact on Libraries and Library Users" (2002) http://www.unc.edu/~unclng/the%20new%20access.htm#_ftnref19 (accessed 20 July 2010).
[319] Ginsburg "Development of an Access Right" in "U.S. Intellectual Property Law and policy" (2006) 47.
[320] Davies *Copyright and the Public Interest* (2002) 311.
[321] Ginsburg "Development of an Access Right" in "U.S. Intellectual Property Law and policy" (2006) 49.

ii. The Evolution of the 'Access Right'

Ginsburg argues that the *WCT* in effect, "rewove the increasingly disparate strands [of the other available rights] into a general right of communication to the public, including a public whose members are separated in both time and space."[322] Uses which copyright owners were previously trying to include under reproduction, distribution, performance or communication rights, which were not created to govern the sorts of uses which digital technology allows for, had to be broadly interpreted to allow for protection of the copyright owner. These approaches were often hit-and-miss in nature and as a result of this the so-called access right was created and given to copyright owners. These access rights were separate and distinct from the older rights under copyright law.[323]

iii. The WCT and the 'Access Right'

Article 8[324] of the *WCT* has been said to grant what has been dubbed the "access right".[325] Gasaway states that neither US legislation nor European Directives nor international treaties, such as the Berne Convention or the *WCT*, specifically mention this 'access right'.[326] This right is said to emerge from a reading of Articles 8, 11 and 12 of the *WCT* for literary and artistic works, and Article 10, 14 and 18 of the *WPPT* for music and performance-based works. The effect of this, with regard to the *WCT*, is that authors of literary or artistic works

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[322] JC Ginsburg "From Having Copies to Experiencing Works: The Development of an Access Right in U.S. Copyright Law" in "U.S. Intellectual Property Law and Policy" (2006) 46 http://books.google.co.za/books?id=wepc2ljYrJEC&pg=PA39&lpg=PA39&dq=Essay:From+Having+Copies+to+Experiencing+Works:the+Development+of+an+Access+Right+in+U.S.+Copyright+Law,&source=bl&ots=z5cT6_MLrB&sig=ALU3kKDdd7VIp991h8WujGu3rqk&hl=en&ei=ijpRTL_JCMzgOKDngNwI&sa=X&oi=book_result&ct=result&resnum=6&ved=0CC8Q6AEwBQ#v=onepage&q&f=false (accessed 20 July 2010).

[323] Ginsburg "Development of an Access Right" in "U.S. Intellectual Property Law and policy" (2006) 47. See also Ginsburg "Development of an Access Right" (2006) 49 where the author notes that in the digital era, it would be nearly impossible for an author to maintain the exclusive right to their work without an access right.

[324] Article 8 – Right of Communication to the Public "Without prejudice to the provisions of 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."

[325] Davies *Copyright and the Public Interest* (2002) 310.

[326] Gasaway "The New Access Right and its Impact on Libraries and Library Users" (2002) http://www.unc.edu/~unclng/the%20new%20access.htm#_ftnref19 (accessed 20 July 2010).

are granted the right to make their works available to consumers through mechanisms such as, but not limited to, the Internet.[327]

Article 8 makes reference to making a particular work available to the public in such a way as to allow access to these works from a place and at a time determined by that member of the public. Based on this wording, it seems that this access right is granted based on the convenience with which consumers can access copy protected works through these networks. Ginsburg submits that the wording of this Article seems to place the access decision in the hands of the public, however it is the copyright owner who can control the terms of that access.[328] Thus, control over what conditions the content may be accessed under are given to the copyright owner in exchange for the consumer being able to access the work at a time and place which best suits them.[329]

Thus the ability of the consumer to constantly access works digitally can be controlled according to how much is paid for the particular use. One can be limited to certain kinds of uses of the work, for example read-only or the inability to make changes to the work. One could also be limited to a certain number of uses of the work, or only have parts of the work available to them. This sort of system is built on varying licensing systems. Greater access to a work would likely be predicated on paying more for that ability to use more of the work. This type of system, as discussed in chapters 2 and 3 of this thesis, carries with it the problem of balance. While the so-called incentive aspect of the public/producer relationship is fulfilled the system may reduce public access. This argument is reliant on public access consisting of full access to a work. By that, it is meant that the public are able to make use of the fair use rights which serve to balance and protect the public interest aspect which copyright involves. Gillespie emphasises that "copyright is articulated in terms of social and

[327] Ginsburg notes that the right encompasses various exploitations, both current and possible future, ranging from "live theatrical performances to online delivery of individual songs to individual consumers…". Ginsburg "Development of an Access Right" in "U.S. Intellectual Property Law and policy" (2006) 46.
[328] Ginsburg "Development of an Access Right" in "US Intellectual Property Law and policy" (2006) 48.
[329] Although this is not always the scenario as can be seen in the *European Copyright Directive* where certain usage exceptions are afforded to users except where the system operates under an "on-demand' business model. See part 6 (b) (ii) of this chapter.

intellectual progress […] at its foundation, 'intellectual property' is a means to an end, not an end in itself."[330]

However such a right to control access would be rather hollow unless the author had some right of recourse were this right to be infringed. Thus, in conjunction with this access right of the author, member states are obliged to implement legislation allowing for the protection of the access right and grant recourse to the author should this right be infringed.

This protection can be found in Articles 11 and 12 of the *WCT*. These provisions provide a basis from which copyright owners can control access to their works over the Internet, i.e. providing the technical means for them to exercise the access right. The provisions of the *WCT* thus legitimatise the use of technological measures of protection by copyright owners. These measures of protection are largely those which were discussed in chapter 3 relating to access controls, anti-copying devices and digital rights management. Davies notes that the effect of the WIPO Internet Treaties, one of these being the *WCT*, is that they have "…encouraged these developments since they provide international recognition of the right to use such technical devices."[331] While the *WCT* sets the framework for the protection of literary and artistic works, the *WPPT* sets up a similar framework for the protection of phonograms and performances of music.

b. The WPPT

The *WPPT* incorporates similar provisions to those contained in Articles 11 and 12 of the *WCT*, in Article 18, but the *WPPT* specifically focuses on phonograms. Article 2.b of the *WPPT* defines a "phonogram" as

[330] Gillespie 2004 *The Information Society* 240.
[331] Davies *Copyright and the Public Interest* (2002) 311.

> "…the fixation of the sounds of a performance or of other sounds, or of a representation of sounds, other than in the form of a fixation incorporated in a cinematographic or other audio visual work." (i.e. music.)[332]

The *WPPT* makes similar provisions to those granted under Article 8 of the *WCT* in that it grants performers[333] and producers of phonograms[334] an access right, i.e. control over the access of their works in a digital form. The effect of this is much the same as that mentioned with regard to the *WCT*. The copyright owner is granted control over access. The measures set in place to control public access to a work will inevitably equally serve as a control on the public's use of that work. Ultimately, by controlling public use of the work, the copyright owner is able to control the use of the work beyond the original rights which they possessed.

c. Effects of the WCT and the WPPT

The effect which these Treaties ultimately have is that they serve to shape the copyright landscape in the digital age. It seems apparent that author rights, especially through the creation and/or clarification of the access right, promote and reaffirm the rights of the copyright owner in the uncertain digital environment. Commentators however criticise these treaties for failing to adequately address user interests.[335] This failure arises from the numerous aspects mentioned above, as well as the fact that the users of copyright works in the digital environment were in no way represented when the provisions of these Treaties

[332] *WPPT* Article 18 – Obligations Concerning Technical Measures - "Contracting Parties shall provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used by performers or producers of phonograms in connection with the exercise of their rights under this Treaty and that restrict acts, in respect of their performances or phonograms, which are not authorized by the performers or the producers of phonograms concerned or permitted by law."

[333] *WPPT* Article 10 – Right of Making Available of Fixed Performances "Performers shall enjoy the exclusive right of authorizing the making available to the public of their performances fixed in phonograms, 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."

[334] *WPPT* Article 14 – Right of Making Available of Phonograms "Producers of phonograms shall enjoy the exclusive right of authorizing the making available to the public of their phonograms, 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."

[335] See Okediji 2001 *Fla. L. Rev.* 148 who identifies that "none of these [treaties] adequately address the issue of fair use, at least not in its American conformation". See further Samuelson "The Copyright Grab" *Wired*.

were drafted. It is therefore inevitable that the interests of those parties involved in the drafting of such provisions, i.e. copyright owners, would greatly influence these Treaties and ultimately the digital landscape.

These Treaties merely serve as the mould from which member states can forge their own national legislation regarding copyright and the digital environment. In order for the provisions discussed above to be anything more than guidelines, and for them to have any real affect, they obviously need to be implemented within the States which are signatories to them.

As is the nature of public international law, signatories to these treaties are required to implement the various rules of the Treaties into their own domestic law. The national legislation implemented to give effect to these provisions varies according to the country concerned. These sorts of statues share many similarities however, as will be discovered hereafter.

The most notable piece of domestic legislation relating to the implementation of anti-circumvention laws is The Digital Millennium Copyright Act[336] of 1998 in the US. Kruger states that the DMCA was enacted to largely deal with two issues. Firstly, to protect digital works from piracy; and secondly, to provide the legal framework in which business models which had initially been structured for the analogue world could be altered to suit the digital environment in which this content now found itself.[337]

[336] Hereinafter referred to as the "DMCA".
[337] Kruger 2006 *Hous. J. Int.'l L.* 295.

4 The Digital Millennium Copyright Act

This legislation represents the culmination of the efforts of lobbyists for the white paper and an implementation of the requirements of the *WCT* as well as the *WPPT* in the US, these two Treaties themselves having been heavily influenced by the white paper. Gillespie argues that the DMCA represents a shift in the copyright doctrine as an area of law which had previously been concerned with use of the work had now shifted its focus to regulating access to a specific artefact.[338] Indeed, he even goes so far as to dispute the nature of the DMCA as being anything even closely related to copyright law. He submits:

> "…the DMCA shares neither the logic nor the strategy of copyright; instead, it anticipates a new technological regime where control depends on the tight coupling of technology and law, each sharing the task of regulation of not only copying, but access, use, and purchase."[339]

Some commentators believe that the paradigm shift which the DMCA represents is a positive step and this will be discussed in greater detail in part 5. i of this chapter.[340] Whether the impact of this paradigm shift is positive or negative in nature is a question which is largely dependant on which side of the debate the observer is sitting. Benkler states that this new legal framework for the production of information and the distribution thereof is largely being built on faith.[341] He further notes that such a leap of faith is socially irresponsible given the tremendous impact it is having on user rights.[342] For the copyright industry, the DMCA represents a somewhat greener digital pasture to the one which they were previously faced with. On this point Gillespie notes that by controlling copying it is only

[338] Gillespie 2004 *The Information Society* 240.
[339] Gillespie 2004 *The Information Society* 241.
[340] See Kruger who states "The DMCA provides a realistic solution to protect DRM and combat digital piracy." Kruger 2006 *Hous. J. Int.'l L.* 293.
[341] Y Benkler "An Unhurried View of Private Ordering in Information Transactions" (2000) *Vanderbilt Law Review* 2063 at 2064.
[342] Benkler *Vand. L. Rev.* (2000) 2064.

future sales which are protected whereas, by extending control to controlling access, future sales are protected and current sales can be better regulated.[343]

The Act itself contains fairly complex regulations concerning anti-circumvention. These are based on two facets. Of the first, Bechtold explains this to be way in which the DMCA differentiates between "access controls"[344] and "usage controls".[345] Following on from this first differentiation, the DMCA then distinguishes between actual circumvention of access controls[346] and the creation and dissemination of tools which can be used for the purposes of circumventing access controls.[347] Gillespie provides a usefully diagram to illustrate how this system operates. See Figure 1 below.

Circumvention for the purposes of unauthorized access: **ILLEGAL**	Circumvention for the purposes of unauthorized copying: **LEGAL**
Tools that aid in circumvention for the purposes of unauthorized access **ILLEGAL**	Tools that aid in circumvention for the purposes of unauthorized copying **ILLEGAL**

(Figure 1)

With regard to usage controls, however, the DMCA only prohibits the preparatory activity aspect. The Act basically prohibits the creation and dissemination of tools for the purposes of circumventing usage controls. Oddly enough the Act does not prohibit the actual circumvention of these usage controls by a user. Kruger submits that the ultimate effect of this distinction is that a user may personally circumvent the protection in place to allow for their fair use rights to be exercised.[348] This submission is predicated on technological

[343] Gillespie 2004 Gillespie 2004 *The Information Society* 241.
[344] Bechtold *Am. J. Comp. L* (2004) 332.
[345] Bechtold *Am. J. Comp. L* (2004) 332.
[346] DMCA 17 U.S.C. 1201 (a) (1) (A).
[347] DMCA 17 U.S.C. 1201 (a) (2).
[348] Kruger 2006 *Hous. J. Int.'l L.* 294. See also Samuelson who submits that "A careful study of the legislative history of the DMCA and the detailed structure of the anti-circumvention rules reveals that Congress intended for circumvention of copy-and use controls to be lawful when done for non-infringing purposes, such as to

protection measures being construed as usage controls rather than access controls.[349] Early decisions by US courts have interpreted technological protection as an access control rather than a usage control.[350] As such, fair use rights have been greatly limited.

It is submitted that even if the courts were to view technological protection as a usage control, then fair use rights would still be greatly hampered by the DMCA. Kruger submits that by prohibiting the manufacture and distribution of tools which circumvent usage controls, the Act ensures that circumvention is limited firstly to the situations in which it is allowed, i.e. the exceptions stated in the statute, and secondly that this circumvention is limited to a consumer-level rather than commercialising circumvention.[351] The dilemma which is immediately apparent is: How can the average home user circumvent the technological protection in place without making use of circumvention tools? Thus a distinction is made between those who have the technical know-how to circumvent technological protection measures and those who do not.[352] In such an environment the publics rights to fair use are limited to a select few and could no longer be said to be a right available to the 'public'.

Bechtold states that the reason for this omission is that traditional copyright covers those actions which fall into the circumvention of usage controls and as such legislating on this point would be redundant.[353] Ultimately it could be argued that this statutory exception isn't really an exception at all because it is covered by traditional copyright laws. The end

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enable fair uses. (Circumvention of access controls was treated differently on the theory that lawful access is a prerequisite for fair use rights)." P Samuelson "Digital Rights Management {and, or, vs.} the Law" (2003) http://people.ischool.berkeley.edu/~pam/papers/acm%20on%20drm.pdf (accessed 20 July 2010).

[349] Kruger 2006 *Hous. J. Int.'l L.* 294 footnote 81.

[350] See generally *Universal City Studios v Corley* 273 F .3d 429 (2nd Circ. 2001).

[351] Kruger 2006 *Hous. J. Int.'l L.* 295.

[352] Gillespie 2004 *The Information Society* 243. See further *Universal City Studios v Reimerdes* where the court held "The fact that Congress elected to leave technologically unsophisticated persons who wish to make fair use of encrypted copyrighted works without the technical means of doing so is a matter for Congress, unless Congress' decision contravenes the Constitution." 111 F. Supp. 2d 346 (S.D.N.Y. 2000) Footnote 170. See further Samuelson who states "Constitutional challenges to the DMCA anti-circumvention rules were unsuccessful in *Corley* but many scholars of intellectual property law continue to doubt their constitutionality." Samuelson 2003 *Communications of the ACM*.

[353] Bechtold *Am. J. Comp. L* (2004) 333. See also Kruger 2006 *Hous. J. Int.'l L.* 294.

result of this situation is that both access and use of digital works are strictly controlled with little leeway for consumers to make use of the rights which they have been guaranteed under copyright law.

a. Statutory Exceptions: Fair Use and Cases Considered

The DMCA does incorporate certain exceptions which allow for circumvention under certain circumstances, but these are limited to particular kinds of users. Samuelson submits that these exceptions "are very narrowly drawn and fail to recognize many legitimate reasons for circumventing technical measures."[354] These exceptions may face an even greater problem than those submitted by Samuelson in that they may not be able to be used at all.

In order to understand why technological protection measures have been viewed as access rather than usage controls and the subsequent impact of this on the rights of users, especially fair use, one needs to examine case law dealing with this issue. The Cases of *Universal City Studios v Reimerdes*[355] and *Universal Studios v Corley*[356] are useful in this regard.

i. Universal City Studios v Reimerdes[357]

This case concerned the use of CSS which, as mentioned in chapter 3 of this thesis, is a technological protection measure used in order to protect movies placed onto DVDs from being copied. A Norwegian teenager managed to crack this CSS protection, through a process of reverse-engineering, and created a computer program which he called 'DeCSS'. Briefly, DeCSS operates by decrypting the CSS protection on encrypted DVDs. The end result of this decryption is that the DVD can be played on non-compliant computers and further

[354] Samuelson 2003 *Communications of the ACM* 42.
[355] *Universal City Studios v Reimerdes* 111 F.Supp. 2d 294 (S.D.N.Y. 2000).
[356] *Universal City Studios v Corley* 273 F .3d 429 (2001)
[357] 111 F.Supp. 2d 294 (S.D.N.Y. 2000).

allows for the content of the DVD to be copied onto a computer hard drive.[358] Gillespie identifies that the technique which CSS employs is a digital lock rather than a digital block of the content. He states that "instead of recognizing and prohibiting certain uses, it prohibits access, until access can be granted under controlled circumstances."[359]

The copyright industry, spearheaded by the film industry, launched a suit seeking injunctions against some of the websites who either posted the program on their websites or placed hyperlinks to other websites hosting such works. These injunctions were based on an alleged contravention of the DMCA.[360] The defendants in the case relied on two defences. The first concerned the right to free speech, this discussion is possibly a thesis in itself and exceeds the bounds of this research, and the second defence was that DeCSS was protected under the right of fair use as it allowed users to use their traditional rights in terms of copyright law. In accordance with this second argument, the defendants submitted that the use of DeCSS allowed users of the Linux operating system, which had no authorised DVD player at the time the case was heard, to use their legitimately purchased DVDs on their computers. This claim, it has been argued, is probably more convenient than accurate.[361] What is important however is the basis for the rejection of the defence rather than the defence itself.

[358] See 111 F. Supp. 2d 294 (S.D.N.Y. 2000) 310. See also Gillespie 2004 *The Information Society* 241 where he explains "CSS is an encryption algorithm that scatters the digital data of the film around the surface of the DVD. For authorized playback, the necessary algorithm key is built into DVD players so that the machines can read the encrypted disc, recover the scattered data, and display the film."

[359] Gillespie 2004 *The Information Society* 241.

[360] Specifically S1201 (a) (2) of the DMCA which states (2) No person shall manufacture, import, offer to the public, provide, or otherwise traffic in any technology, product, service, device, component, or part thereof, that—
(A) is primarily designed or produced for the purpose of circumventing a technological measure that effectively controls access to a work protected under this title;
(B) has only limited commercially significant purpose or use other than to circumvent a technological measure that effectively controls access to a work protected under this title; or
(C) is marketed by that person or another acting in concert with that person with that person's knowledge for use in circumventing a technological measure that effectively controls access to a work protected under this title.

[361] Gillespie 2004 *The Information Society* 246.

In interpreting S1201 (a) (2) of the DMCA the court applied a literal interpretation to the section. The court saw CSS as being an access control. From this interpretation the use of DeCSS was immediately contrary to the DMCA and found to be a contravention of s1201 (a) (2). Gillespie argues that the because the court viewed CSS as an access control, the end result is that the DMCA prevented circumvention and as such DeCSS amounted to infringement.[362] The court failed to consider the more poignant question of whether the subsequent infringing circumvention was done fairly.

The court interpreted that the fair use defence, as was available to copyright users under traditional copyright law in terms of S107 of the US Copyright Act, was in theory available to parties under the DMCA but only in terms of the exceptions stipulated in the DMCA.[363] Regardless, the court held that fair use was not really in issue as the defendants were not being sued for copyright infringement but for offering to the public a tool which allowed for the circumvention of a technological protective measure which served to protect copyright. Thus the court rejected fair use as a defence to circumvention of a technological protective measure.

The court identified that due to the potential risk which access controls posed in preventing lawful as well as unlawful uses of works, that such a fair use defence had been specifically left out of the statute by the legislature. Had the legislature wished to allow for such a defence, they would have made express mention of this in the DMCA.[364] The outcome was that the defendants were found to have infringed the DMCA but not copyright infringement to which fair use applies. The court enjoined the defendants from posting DeCSS on their

[362] Gillespie 2004 *The Information Society* 246.
[363] See 111 F. Supp. 2d 294 (S.D.N.Y. 2000) 323.
[364] See 111 F. Supp. 2d 294 (S.D.N.Y. 2000) 323. See further H Mihet "*Universal City Studios Inc. v Corley*: The Constitutional Underpinnings of Fair Use Remain an Open Question" (2002) *Duke Law and Technology Review* http://www.law.duke.edu/journals/dltr/articles/2002dltr0003.html (accessed 23 July 2010).

website or from knowingly linking their website to any other website on which DeCSS is posted.[365]

The distinction seems rather technical. The court considers fair use to be a defence only where circumvention of a technological protection measure, such as CSS, is for the purposes of unauthorised copying, i.e. where it would be considered copyright infringement. The court, however, considers technological protective measures, such as CSS, not to be a 'usage control' but an 'access control'. The problem with this approach is that use first requires legitimate access. The ultimate effect being that a user will not be able make use of their rights in the manner which the court has envisaged in this judgment.[366]

Put differently, if all technological protective measures are interpreted in such a way, then it becomes difficult to imagine a scenario in which a user will not be infringing the DMCA when attempting to make use of statutory exceptions allowed for by the Act. Technological protection measures on this basis are thus not seen as directly being forms of 'usage control' but indirectly they seem to have this effect. The problem is that the courts view them as being 'access controls'. Thus they indirectly serve as 'usage controls' but enjoy the extended protection of 'access controls'.[367] This interpretation represents the best of both worlds for copyright owners. Mihet states that the decision in the *Reimerdes* case represents a first strike for fair use under the DMCA.[368] The second strike comes in the *Corley* case.

[365] See 111 F. Supp. 2d 294 (S.D.N.Y. 2000) 346.
[366] 111 F. Supp. 2d 294 (S.D.N.Y. 2000) 323. The Court explains that "the traditional defenses to copyright infringement, including fair use, [are] fully applicable provided the access is authorized."
[367] Gillespie notes that the type of encryption which CSS represents "is not itself a copy protection, at least not directly" *The Information Society* (2004) 241.
[368] Mihet 2002 *Duke L. & Tech. Rev.* paragraph 8.

ii. Universal City Studios v Corley[369]

Before discussing the *Corley* case one needs to first identify that the case arose as a result of an appeal from the case of *Universal City Studios v Reimerdes*. The *Corley* case was largely concerned with free speech but the importance of fair use was also raised by the appellant. It is the way in which the court dealt with this aspect which is of importance for the purposes of this discussion.

The facts of the case follow on from the problems of DeCSS discussed in the *Reimerdes* case. The appellant in this case was the owner of *2600* Inc and publisher of the magazine *2600: The Hacker Quarterly*. The magazine had a corresponding website *2600*.com on which the DeCSS code had been published and hyperlinks to other sites where either the DeCSS code or program could be found. The appellant had been enjoined from publishing this code on its website and had subsequently removed it. However, in what they termed an act of "electronic civil disobedience", the appellant left the hyperlinks to other websites up on its own website. They then launched an appeal against the judgment in the *Reimerdes* case.

This appeal was focused on three issues.[370] The first being that the DMCA in effect oversteps the bounds of copyright law by using technological protection measures to increase the duration of copyright. Secondly, they argued that the DMCA violates freedom of speech rights contained in the US Constitution as, so the argument went, code was speech. Finally, the appellants argued that certain rights in the US Constitution, especially those relating to free speech and copyright, were underpinned by the right to fair use in order to realise those other rights. Thus the DMCA, in terms of the narrow recognition of fair use rights held by the court in the *Reimerdes* case, had the effect of preventing users from accessing content and making use of their fair use rights, and this narrow interpretation was inconsistent with the constitution. It is clear that these three arguments attack the provisions of the DMCA itself rather than attempting to justify its actions under that law.

[369] 273 F .3d 429 (2nd Circ. 2001).
[370] 273 F .3d 429 (2nd Circ. 2001) 436.

This type of action is consistent with acts of civil disobedience which the appellant was attempting to emulate. Burk and Gillespie note that this kind of disobedience is an important tactic in pointing out the imperfection of systems because defying the law calls attention to its imperfections.[371]

The Court rejected the arguments advanced by the appellant, holding that their first argument was premature and speculative as the copyright work concerned was not work which had entered the public domain. As such, this issue was not discussed in any real detail.[372] The 'code as speech' argument was discussed by the Court at great length. The Court found that computer code constituted 'speech' in terms of the normal meaning of the word. The Court further explained that due to the nature of computer code it contained both a speech and a non-speech component.[373] The Court held that the DMCA served as a limitation on the non-speech component of computer code and this ultimately prevented it from falling foul of the Constitutional right to free speech.

The fair use argument was rejected by the Court for several reasons. Firstly, the appellants did not claim to be making fair use of any of the copyright material concerned. Following this, any evidence available regarding the impact of anti-trafficking provisions of the DMCA on fair use was minimal and unconvincing at best. The Court also held that the appellants failed to offer support for their submission that making fair use of work in a digital form

[371] DL Burk and T Gillespie "Autonomy and Morality in DRM and Anti-Circumvention Law" 2003 *Triple C* http://triplec.uti.at/files/tripleC4%282%29_Burk-Gillespie.pdf (accessed 1 August 2010).
[372] 273 F .3d 429 (2001) 445.
[373] See 273 F .3d 429 (2001) 451 where the court explained "Unlike a blueprint or a recipe, which cannot yield any functional result without human comprehension of its content, human decision-making, and human action, computer code can instantly cause a computer to accomplish tasks and instantly render the results of those tasks available throughout the world via the Internet. The only human action required to achieve these results can be as limited and instantaneous as a single click of a mouse. These realities of what code is and what its normal functions are require a First Amendment analysis that treats code as combining nonspeech and speech elements, *i.e.*, functional and expressive elements. […] the functional capability of computer code cannot yield a result until a human being decides to insert the disk containing the code into a computer and causes it to perform its function (or programs a computer to cause the code to perform its function). Nevertheless, this momentary intercession of human action does not diminish the nonspeech component of code, nor render code entirely speech, like a blueprint or a recipe."

required that the work be in its original form. On this point the court noted "We know of no authority for the proposition that fair use, as protected by the Copyright Act, much less the Constitution, guarantees copying by the optimum method or in the identical format of the original […] Fair use has never been held to be a guarantee of access to copyrighted material in order to copy it by the fair user's preferred technique or in the format of the original."[374]

The outcome of the appeal was that the Court viewed DeCSS as a tool in terms of s1201 (a) (2), i.e. a tool which is provided for the circumvention of access controls, rather than a tool in terms of s1201 (b) (1), i.e. a tool for the circumvention of usage controls. In terms of this finding, Gillespie notes that the argument of *Universal City Studios* was persuasive in that "DeCSS was a device designed to circumvent a technological protection, and posting it on a website was 'providing' it".[375]

The case attracted various *amicus curiae* for both sides.[376] Those supporting *Universal City Studios* were largely other copyright industry associations, while those supporting the appellants were largely made up of academics. Thus it is clear that this case was identified as an opportunity for those both for and against the DMCA to attempt to assert their interpretation of the law and thus ensure the evolution of the law in the direction which they preferred. Samuelson submits that the decision in the Corley case represents an adoption of the copyright industries preferred interpretation of the DMCA, in that its protection of DRM systems is almost unlimited.[377] Gillespie submits that:

> "The DMCA itself returns the power of distribution to the hands of the movie studios, the kind of culture providers that copyright law privileges. The DeCSS injunction returns the power to distribute information tools to the traditional press."

[374] 273 F .3d 429 (2001) 459.
[375] Gillespie 2004 *The Information Society* 242.
[376] Electronic Frontier Foundation "*2600* Court Asks for Further Briefing on First Amendment" (2001) http://w2.eff.org/IP/Video/MPAA_DVD_cases/?f=20010510_ny_eff_augment_order_pr.html (accessed 28 July 2010).
[377] Samuelson 2003 *Communications of the ACM* 43.

Mihet argues that what should be taken away from the decision in the *Corley* case is that fair use has some constitutional basis, however this is insufficient to allow it to invalidate the DMCA which allows for some forms of fair use, albeit rather ineffective.[378] From this, one should question the DMCA and its treatment of over-reaching, as well as the message which this sends out to copyright owners and users alike.

b. The DMCA and Over-reaching

The decisions of the courts in both the *Reimerdes* and *Corley* cases represent a watershed on the position of the DMCA and the protection it offers to users. This is clear when one views the reasoning for such decisions in contrast with section 1201 (c) (1) of the DMCA. Section 1201 (c) (1) specifically deals with the position of fair use rights under the DMCA. This section states:

> "Nothing in this section shall affect rights, remedies, limitations or defences to copyright infringement, including fair use, under this title."

The position of fair use rights under the DMCA are discussed in greater detail in part 5 (iii) of this chapter. The importance of this section, for the purposes of an analysis of over-reaching, is the manner in which the courts have interpreted user rights, as discussed in (a) (i) and (ii) above, and the message which this interpretation sends out to the copyright industry as well as users. Before beginning this discussion one first needs to understand what is meant by 'over-reaching'.

Wheatley identifies the problem which anti-circumvention legislation poses to user rights in that such legislation will protect the rights of copyright owners which, in turn, limits user

[378] Mihet 2002 *Duke L. & Tech. Rev.* paragraph 20.

rights.[379] This situation is acceptable as such relationships require a balancing of rights between parties. Indeed, provisions are put in place to protect user rights in such legislation, for example s1201 (c) (1). The protection of these rights will however be seemingly insubstantial in practice without a limitation being placed on the extent of the copyright owner's rights of protection. The problem is that copyright law and anti-circumvention provisions deal with different aspects of the same problem, yet there is an attempt to marry the two in certain situations. Anti-circumvention laws are used as a justification for prohibiting certain users access at the expense of certain user rights under copyright law.

This is primarily due to the preliminary step in exercising one's rights under copyright law in the digital environment, which predicated on being able to access the content. Thus, in order to be able to make use of certain rights, a user must first be able to have access to the content. However, if certain access is prohibited by the copyright owner, then a legitimate user cannot access the work for that particular usage due to anti-circumvention provisions. Over-reaching can thus be understood to mean a situation in which a DRM system is used to provide greater protection for a copyright owner than he is entitled to under copyright law. Wheatley articulates this problem as one in which the copyright owner distributes content in such a manner that the work is too encumbered, thus impeding legitimate uses by users of the content.[380] It is from this situation that over-reaching becomes a problem.

Wheatley submits that this over-reaching could be guarded against. He submits that where a DRM system exceeds the legitimate statutorily defined interests, then such systems should be capable of legal circumvention to the extent required to allow for the lawful use of these works.[381] A failure by the courts to recognise such a right, which arguably exists in the DMCA under s1201 (c) (1), has proved to be a staggering blow to user rights and a bolster to such over-reaching by copyright owners. The failure to interpret s1201 (c) (1) in

[379] See generally CT Wheatley "Overreaching Technologies Means for Protection of Copyright: Identifying the Limits of Copyright Works in Digital Form in the United States and the United Kingdom" (2008) 7 *Washington University Global Studies Law Review* 353.
[380] Wheatley 2008 *Wash. U. Global Stud. L. Rev.*359.
[381] Wheatley 2008 *Wash. U. Global Stud. L. Rev.*370.

this manner can be seen to have made an even graver error, in that the courts failed to take an opportunity to harmonise copyright law with anti-circumvention legislation and clarify the contradictions which currently exit between the two. On this issue Wheatley states that such a clarification of the law would "encourage copyright owners to harmonise DRM systems with the goals of copyright law" because a failure to do so would render that system legally circumventable.[382]

As the situation currently stands, a copyright owner may put a DRM system in place which prevents certain uses which the user is legally entitled to under copyright law, for example fair use rights. The courts, in viewing that sections such as s1201 (c) (1) do not grant a user rights to circumvent such DRM systems in order exercise their usage rights under copyright law, have in effect rendered the users rights under copyright law as discretionary at the behest of the copyright owner. Such a situation is dangerous as it encourages a privatisation of knowledge at the expense of those who it is supposed to benefit.

c. The *Napster* Case

Ginsburg argues that the *Napster* case "while sometimes portrayed as an assault on a new form of communication in fact also is best understood as an attempt to tame a new technology into copyright friendliness, rather than an attempt to suppress it all together."[383] As noted earlier in this research, the fear which digital technology carries with it is that of the viral dissemination in allows for and the implications this has for copyright owners. This fear is particularly present in the *Napster* case where the *Napster* MusicShare software was identified as a serious threat to the rights of copyright owners.

[382] Wheatley 2008 *Wash. U. Global Stud. L. Rev.*370.

[383] Ginsburg 2001 *Colum. L. Rev.* 1638. See also Ray Ku who notes that "the average consumer would find it difficult, if not impossible, to argue that her conduct should be protected because it is necessary for the pursuit of scholarship, or that restricting here ability to share files infringes upon her right to speak freely or invades privacy." Ray Ku 2002 *U. Chi. L. Rev.* 266.

The case of *A&M Records, Inc. v Napster, Inc.*[384] concerned an appeal against an injunction which the plaintiffs had obtained against the defendants. This injunction enjoined the defendants from "from engaging in, or facilitating others in copying, downloading, uploading, transmitting, or distributing plaintiffs' copyrighted musical compositions and sound recordings, protected by either federal or state law, without express permission of the rights owner."[385] The defendants had subsequently been granted a temporary stay of this injunction pending the outcome of the appeal.

The defendants created and controlled a computer program, *Napster*'s MusicShare Software. This software was available as a free download from the defendant's website. It enabled its users to share music files on their computers, in a format known as "MP3". This system is known as a peer-to-peer file sharing network or, more simply, P2P. The program further created an indexed database of these files on users' computers. This database was stored on centralised servers and could be searched by any user of the program. The court identified that this software allowed for three main processes.[386] Firstly it allowed for a user of the program to make available any of the MP3 files on their computers hard drives available for copying by other users. Secondly, users could search for MP3 files on other users' computers. Finally, users could transfer exact copies of other users MP3 files to their computers via the Internet.

It was on this basis and the type of actions which the defendant's software facilitated that the plaintiffs argued that they had infringed on their copyright both in the form of contributory infringement and vicarious infringement.

[384] 239 F.3d 1004 (9th Circ. 2001).
[385] *A&M Records, Inc. v Napster, Inc.* 114 F. Supp. 2d 896 (N.D. Cal. 2000) at 927.
[386] 239 F.3d 1004 (9th Circ. 2001) paragraph 5.

i. Contributory Infringement

The court noted that contributory infringement requires two conditions to be satisfied. Firstly, there must be knowledge that the conduct amounts to a direct infringement of copyright; secondly, the party must have encouraged such conduct or materially contributed thereto.[387] As to the question of knowledge, the defendants contended that they had no way of distinguishing between files which were protected by copyright and those that were not. Therefore they contended that they had no knowledge and could not be found liable for contributory infringement. The court found that the defendant had both actual and constructive knowledge that direct infringement was being carried out by its users as they were aware that music which was subject to copyright protection was being shared over its network. The defendants further argued that, if the court found that they did indeed have such knowledge, they were ultimately protected by the decision in the *Betamax* case.[388]

The court rejected this argument on the basis that a distinction could be drawn between the circumstances in the defendant's case and those in the *Betamax* case.[389] The court distinguished between the cases on the basis that the defendants had specific knowledge of direct infringement by its users while the same could not be said of the petitioners in the *Betamax* case.[390] The court further noted that the *Betamax* decision makes it clear that knowledge of infringement cannot be imparted merely because the creator is aware that the device/software etc. is capable of certain infringing uses. The presence of substantial non-infringing uses of the device/software is something which should also be taken into account.

[387] Put differently contributory infringement can be understood to mean "one who, with knowledge of the infringing activity, induces, causes or materially contributes to the infringing conduct of another, may be held liable as a 'contributory' infringer." *Gershwin Publ'g Corp. v. Columbia Artists Mgmt., Inc.*, 443 F.2d 1159, 1162 (2d Cir. 1971)
[388] 464 U.S. 417 (1984).
[389] 464 U.S. 417 (1984).
[390] 239 F.3d 1004 (9th Circ. 2001) paragraphs 51 -52.

The court departs from the decision of the district court in that it holds that the district court placed too great an emphasis "on the portion of current infringing uses [of the software] as compared to current and future non-infringing uses."[391] The court held "regardless of the number of *Napster*'s infringing versus non-infringing uses, the evidentiary record here supported the district court's finding that plaintiffs would likely prevail in establishing that *Napster* knew or had reason to know of its users' infringement of plaintiffs' copyrights."[392]

The court thus avoided treading on the toes of the *Betamax* decision and its implications for emerging technologies in two ways. It firstly noted that it was not the *Napster* system which was at issue, i.e. the P2P file sharing type system, but their conduct in relation to that system. The second means of alleviating fears of a crackdown on emerging technologies is that the court distinguished between the two cases and based its decision on this distinction.

Ginsburg notes that the effect of the *Napster* case was that it represented a shift in the courts' approach to dealing with emerging technologies and copyright infringement.[393] She argues that in the past, the situation was an all-or-nothing one. A machine which was capable of both infringing and non-infringing uses would inevitably require a determination of whether or not the device was allowed. The courts were reluctant to disallow the use of a technology purely on the basis that it allowed for certain infringing uses. The difference, as Ginsburg notes, could not be split in the past because certain uses could be deemed fair under specific circumstances but not under others and the device concerned was not sophisticated enough to make the distinction between the two.[394] The situation in the *Napster* case was different in that digital technology in an online medium is capable of identifying which situation prevails in a specific circumstance and as a result the difference

[391] 239 F.3d 1004 (9th Circ. 2001) paragraph 53.
[392] 239 F.3d 1004 (9th Circ. 2001) paragraph 53.
[393] Ginsburg 2001 *Colum. L. Rev.* 1638.
[394] Ginsburg 2001 *Colum. L. Rev.* 1641.

could be split as the implementation of a new technology could be policed. She ultimately concludes that the finding of the court in the *Napster* case means that "infringing uses need not be bootstrapped to lawful uses in order to maintain the availability of the desirable technological advancement."[395]

ii. Fair Use Defence

In order to try and exclude themselves from liability, the defendants argued that the users of their software were engaged in fair use of copyright material and were therefore excluded from liability under actions amounting to direct infringement. If its users were not found to be guilty of direct infringement, then the defendants could not have been liable for contributory or vicarious infringement. The court dealt with this issue in two parts.[396] They first applied the fair use doctrine to users of the defendant's software and then focused on the specific conduct which the defendants had identified as constituting fair use.

The fair use doctrine is governed by s107 of the Copyright Act[397] which stipulates that four factors need to be considered when determining whether use of a work constitutes fair use. These factors are (1) the purpose and character of the use; (2) the nature of the copyright work; (3) the amount and substantiality of the portion used and; (4) the effect of the use on the potential market for or value of the work.

As to the first question, the Court held that case law indicated that reformation in the manner which occurred in this case, i.e. the format shift concerned with transforming a copyrighted work from a CD to an MP3, was not transformative enough for a finding of fair use.[398] Furthermore, the Court held that this type of use was commercial in nature because it constituted a use which the user would otherwise have to pay for. As for point two, the

[395] Ginsburg 2001 *Colum. L. Rev.* 1641 – 1642.
[396] 239 F.3d 1004 (9th Circ. 2001) paragraphs 21 – 22.
[397] 17 U.S.C.
[398] 239 F.3d 1004 (9th Circ. 2001) paragraph 24.

Court identified that these constituted creative works and that such works usually necessitate against a finding of fair use. The third point was understandably dealt with rather swiftly by the courts as the users of the software engaged in wholesale copying of the work. The court did however note that in certain circumstances, wholesale copying would not militate against a finding of fair use.[399] As to the final point, the court identified that the sharing of MP3 files my serve to reduce the number of CDs sold by the plaintiffs and furthermore that the use of this program could operate as a barrier to the plaintiffs entering the MP3 market. Therefore the use would have an effect on the market and as such a finding of fair use by the defendant's users could not be upheld.

The specific instances of fair use identified by the defendants included: the downloading of music by users in order to sample it and from there purchase albums that they enjoyed; that downloading MP3's from *Napster* allowed users to make use of space-shifting and; that downloading constituted permissive reproduction of copyright works. For the purposes of this discussion the second argument will be analysed in greater detail.

The space-shifting argument advanced by the defendants relies on the premise that the users of its software make use of the software in order to download MP3 files for music which they have already purchased legal copies of in the form of a CD. Therefore the user, so the argument goes, does not infringe on the owner's copyright as they have purchased a legitimate copy of the music and are making use of the *Napster* program in order to obtain a copy of that content in a different format. The court dismissed this argument on the basis that once a user uploads a copy of an MP3 file, which they may have legitimately purchased, they make that file available to millions of other users, a large majority of whom may not own that content in the form of an audio CD. This constitutes infringement.

[399] The court cites the *Betamax* case as such an example. 239 F.3d 1004 (9th Circ. 2001) paragraphs 29.

Cimino submits that the use of this space-shifting argument was an attempt by the defendants to cash in on the decisions in the *Betamax*[400] and the *Rio*[401] cases in which copying of entire works for the purposes of time-shifting or space-shifting respectively for private use was deemed to be non-commercial in nature.[402] These decisions were premised on the idea that private use protected the manufacturers of such devices from liability for any infringing uses carried out by the users thereof. The distinction between these cases and the scenario in the *Napster* case was not lost on the court. The court identified that "Both *Diamond* and *Sony* are inapposite because the methods of shifting in these cases did not also simultaneously involve distribution of the copyrighted material to the general public; the time or space-shifting of copyrighted material exposed the material only to the original user."[403] In other words, those decisions hinged on the shifting being carried out by a single user for their own private use whereas users of *Napster*'s software were disseminating shifted material to a mass audience.[404]

iii. Criticisms of the Judgment

The judgment is seen as a landmark one in the digital era as it has been seen as a watershed for user and owner rights respectively under copyright law. One could consider it 'the *Betamax*' case of the twenty-first century. It is because of the perceived importance of this judgment that many have questioned its implications for the direction in which copyright law will head in the digital era. In deciding that *Napster* was guilty of contributory and vicarious infringement of the rights of certain copyright owners the courts were seen as siding with copyright owners and nudging the digital environment towards being dominated by a pay-per-use model. In order to understand these views, and in order to determine whether or not the situation is as doom-and-gloom as it is sometimes made out to be, one needs to analyse the various criticisms of this decision.

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[400] 464 U.S. 417 (1984).
[401] 180 F.3d 1072 (9th Circ. 1999).
[402] CM Cimino "Fair Use in the Digital Age: Are we Playing Fair?" (2002) 4 *Tulane Journal of Technology and Intellectual Property* 219.
[403] 239 F.3d 1004 (9th Circ. 2001) paragraph 45.
[404] Cimino 2002 *Tul. J. Techn. & Intell. Prop.* 219.

It should be noted at this point that the *Amicus* brief referred to below specifically refers to the decision of the district court which granted the initial injunction. The principles underlying these criticisms can however be levelled at the Ninth Circuit decision as well. The reasons which the Ninth Circuit gave for its decision endorse the district court's decision and in fact were based on much of the same reasoning. Where this reasoning does differ, these differences will be pointed out.

It has been argued that the *Napster* case arose out of copyright owners' fear of the viral dissemination which peer-to-peer networking systems were capable of. At the heart of this fear is the business model argument. The distributors of copyright works are primarily said to be reliant on centralised distribution. This allows them to maintain control over who obtains the work and certain usage thereof. Digital technology allows for these parties to have even greater control over not only usage but also access to copyright works. Peer-to-peer networking decentralises this distribution, which in turn limits the ability of copyright owners to exercise this extended control. An *Amicus* brief submitted to the court in response to the district court's initial injunction, prior to the decision by the Ninth Circuit *Napster* case, noted that the case had been brought before the court by copyright owners in an attempt to protect this centralised distribution business model.[405] Therefore any decision in favour of the copyright owners would be a judicially sanctioned protection of these business models. They submit that "this is not the sort of thing which copyright law was designed to redress."[406] They further state that a decision in favour of copyright owners in this case would have the effect of banning "…a new technology in order to protect existing business models, and would invoke copyright to stifle innovation, not to promote it."[407] Thus, this argument can be distilled into the submission that a decision in favour of copyright owners in the *Napster* case would be incongruent with the purpose of copyright law.

[405] *Napster Inc. v A & M Records Inc.* - Amended Brief *Amicus Curiae* of Copyright Law Professors in Support of Reversal. http://www-personal.umich.edu/~jdlitman/briefs/Amicus.pdf (accessed 22 August 2010).
[406] *Napster Inc. v A & M Records Inc.* - Amended Brief *Amicus Curiae* of Copyright Law Professors in Support of Reversal 11.
[407] *Napster Inc. v A & M Records Inc.* - Amended Brief *Amicus Curiae* of Copyright Law Professors in Support of Reversal 11.

One could argue that the above submission ignores the very rights which copyright law guarantees copyright owners. In other words, the limited monopoly granted to copyright owners to control their works in certain ways is to be ignored even where flagrant infringements of those rights are taking place. This consideration is taken up by the *amicus* brief where the authors note that, in misunderstanding the lessons of the *Betamax* case, the district court's decision broadly concluded that *Napster* was *prima facie* guilty of contributory and vicarious infringement.

The district court attempted to differentiate this situation from that in the *Betamax* case on the grounds that *Napster* maintained so-called 'ongoing control' over its software and, as such, was in a position to prevent users from infringing the rights of copyright owners. Therefore, *Napster* was in a position to prevent such infringement and failed to do so. As a result of this failure, they in effect allowed for their users to directly infringe the rights of copyright owners and were therefore guilty of contributory and vicarious infringement. The authors note that the lesson of the *Betamax* case is rather to be understood as meaning "'Copyright owners' interests in maintaining control over their works are very important, but not so important that society must forego useful technology capable of substantial non-infringing uses in order to protect those interests."[408] Furthermore, the idea that *Napster* had this ongoing control over their software is perhaps a misnomer. The basis of such a system is that it relies on peer-to-peer transfers. *Napster* provided the tools but it is the individual users who control what is placed on the network as they decide what to share from their own hard drives.

The Ninth Circuit agreed in part with the district court on this issue. They agreed with the district court on the point that *Napster* retained the right to control access to its system. This was evidenced by terms and conditions of usage on the *Napster* website which gave them the right to refuse service and terminate accounts at their discretion. This issue goes directly to a claim of vicarious liability as *Napster* could escape liability if it could be shown

[408] *Napster Inc. v A & M Records Inc.* - Amended Brief *Amicus Curiae* of Copyright Law Professors in Support of Reversal 13.

that the 'reserved right to police' had been exercised to its fullest extent.[409] The district court noted that *Napster* could alter its system in some way which allowed for infringing files to be located and removed or excluded from the system. Because they had failed to exercise these rights to their fullest extent, they were *prima facie* guilty of vicarious infringement. The Ninth Circuit however noted that the district court had failed to take into account that the ability of *Napster* to police its system was to be limited to the confines of the system's current architecture.[410]

The Ninth Circuit ultimately agreed with the district court anyway. The Ninth circuit contended that the architecture of the *Napster* system at the time did create indices of file names of files on the system. They argued that *Napster* could have searched those indices for infringing copies and removed them from the system. Does this not seem too heavy a burden for the defendants? Requiring them to search through every file name on the system and disregard those that were infringing copies seems to be a step too far in exercising one's right to police to the fullest extent. This task is made all the more difficult by the fact that *Napster* users named the files which were on the system. Therefore certain files may be incorrectly named which would make finding infringing copies even more of a strenuous task for the defendants.

The *Amicus* brief elaborates on the above point. They identify that the effect of the *Betamax*[411] case was the following: where "a technological tool facilitates copyright infringement, the 'Progress of science and the useful arts' precludes an injunction so long as the tool is capable of substantial non-infringing uses. The balance rests on the side of permitting new technology, not of stifling it."[412] Therefore, it is submitted that the strenuous view which the court adopted of how the defendants could have policed their system is too heavy a burden and ultimately leads to a stifling of a new technology. Therefore the finding in favour of the plaintiffs is incongruent with the decision in the

[409] 239 F.3d 1004 (9th Circ. 2001) paragraph 64.
[410] 239 F.3d 1004 (9th Circ. 2001) paragraph 66.
[411] 464 U.S. 417 (1984).
[412] *Napster Inc. v A & M Records Inc.* - Amended Brief *Amicus Curiae* of Copyright Law Professors in Support of Reversal 15.

Betamax[413] case if it can be shown that the system is capable of substantial non-infringing uses.

A further criticism of the *Napster* decision is that it equates unauthorised use with illegal use. In other words, the court held that any unauthorised use constituted an infringement of copyright. This, it was again argued, resulted from a misunderstanding of the *Betamax* case.[414] The premise of the argument rests on the foundation of the purpose of copyright law, in that it was never envisaged that copyright owners would receive total control over every individual use of their work. The situation, as discussed in chapter 2 of this thesis, is more akin to a *quid pro quo* relationship between owners and users. In other words, a limited monopoly is granted to copyright owners in exchange for these rights being subject to certain limitations. The *Betamax* case is seen as protecting this relationship.[415] Ray Ku submits that decisions, like that in *Napster*,[416] serves as an example of the limitations which underlie the system. The limitation he specifically refers to is that of relying on the social value of a use in order to justify it as an exception to copyright law, particularly when that exception relates to user copying.[417]

iv. Conclusion

The ultimate effect of the *Napster*[418] case is largely dependant on the side of the debate one sits. If one supports the distinctions drawn between this case and the *Betamax*[419] case then one would fall on the side of the copyright optimists.[420] They would argue that the message which this decision sends out with regards to, amongst other things, fair use rights could be seen as a positive one. The court dealt with the claims of fair use by making use of the

[413] 464 U.S. 417 (1984).
[414] *Napster Inc. v A & M Records Inc.* - Amended Brief *Amicus Curiae* of Copyright Law Professors in Support of Reversal 16.
[415] The Court noted that "even unauthorized uses of a copyrighted work are not necessarily infringing. An unlicensed use of the copyright is not an infringement unless it conflicts with one of the specific exclusive rights conferred by the copyright statute." *Sony Corporation of America v Universal City Studios, Inc.* 464 U.S. 417 (1984) paragraph 46.
[416] 239 F.3d 1004 (9th Circ. 2001).
[417] Ray Ku 2002 *U. Chi. L. Rev.* 292 – 293. The author notes that "In balancing copyright goals with the public's interest in obtaining music for free, 'free music' loses because there is no overriding societal interest in it."
[418] 239 F.3d 1004 (9th Circ. 2001).
[419] 464 U.S. 417 (1984).
[420] Coyright optimists can be defined as

traditional boundaries drawn by the courts.[421] In relying on these familiar means of determining whether fair use applied in this case, the court alleviated the concerns of manufacturers and users alike by distinguishing the *Napster* scenario from those in other cases in which a device or system clashed with the rights of copyright owners. This decision does not represent a stance by the courts that fair use will not apply in such systems or in the digital environment in general, but rather that the specific facts of the case did not necessitate a finding of fair use. Had the court found that the various uses by the users of *Napster* constituted fair use then this decision would be of little importance anyway as it would be bad law.

However, if one believes some of the criticisms of the judgment, particularly that it is based on a misunderstanding of the *Betamax* judgment, then one would likely fall on the side of copyright pessimists[422]. Proponents of the copyright pessimist approach would argue that the *Napster* judgement represents a disinterest by the courts in protecting user rights. This is as the *quid pro quo* basis of the copyright relationship is ignored in order to favour the business models of copyright owners. In this way, the original purpose of copyright becomes muddied. Ray Ku submits that the *Napster* decision along with the *Reimerdes*[423] case, and others, "demonstrates the degree to which the copyright optimists have succeeded in framing the terms of the debate […] these decisions turn on the perceived importance of copyright and Congress's determination that copyright owners should have the right to exploit any and all markets for copies."[424]

d. Conclusion

Ultimately, when one considers the impact which the *WCT* and the *WPPT* have had through the implementation of legislation such as the DMCA the loser always appears to be the consumers of digital copyright works. This has manifested itself, as demonstrated by the

[421] Cimino 2002 *Tul. J. Techn. & Intell. Prop.* 219.
[422] Copyright pessimist can be described as those who are critical of the so-called 'copyright grab'. By and large they "do not challenge the application of existing copyright law to digital works. Instead they are disturbed by efforts to expand copyright, especially in cases in which that expansion comes at the expense of other overriding societal interests." See Ray Ku 2002 *U. Chi. L. Rev.* 283.
[423] 111 F.Supp. 2d 294 (S.D.N.Y. 2000).
[424] Ray Ku 2002 *U. Chi. L. Rev.* 292.

case law on this issue, in the form of litigation over concerns of over-reaching by copyright owners and fair use rights in relation to these digital copyright works. In order to better understand this debate one first needs to understand what is meant by the term 'fair use'.

5 The Demise of Fair Use/Fair Dealing in the Digital Environment – Is it Fair?

Understanding fair use requires a reiteration of how anti-circumvention laws operate. It has been explained previously in this chapter that anti-circumvention laws serve to prevent consumers circumventing the systems, put in place by copyright owners, which control access and usage of content. These systems prevent certain kinds of use which would previously have been available to legitimate users under copyright law. These usage rights which are granted under copyright law have differing formulations throughout the world. These include fair use (in the US);[425] exceptions to copyright and fair dealing (in the EU[426] and South Africa[427] respectively). Despite these differing formulations it can be said that these doctrines all have the same objective.[428] The end result of anti-circumvention provisions is that a legitimate user is prevented from using the content which they have purchased in a way which is allowed under copyright law but technically barred by the DRM system and the circumvention of that system is made a crime.

With the above in mind, and given the reasons for the emergence of these anti-circumvention provisions, a question which immediately arises is whether or not this limitation on the fair use right is fair. In other words, does the supposed threat posed by the digital environment to copyright necessitate the derogation of the rights of consumers in order to 'protect' copyright owners? The answer to this question, like most in this debate, will depend on who is being asked.

[425] S107 US Copyright Act of 1976, 17 U.S.C.

[426] Article 6 (4) European Copyright Directive, Directive 2001/29/EC of the European Parliament and of the Council May 22, 2001 on the harmonization of certain aspects of copyright and related rights in the information society.

[427] Copyright Act of 1978 (Act 98 of 1978). See generally S12-S19B.

[428] See Wheatley who notes that "the United States fair use doctrine offers a flexible and pragmatic test form determining whether a particular use of a copyrighted work should be tolerated. By contrast, the United Kingdom's doctrine of fair dealing is remarkably narrow." Wheatley 2008 *Wash. U. Global Stud. L. Rev.* 362.

a. The 'Business Model Argument'

Benkler identifies that:

> "…we are moving towards law that supports the displacement of public determination of the scope and extent of exclusive private rights to information by private determination of that scope through a combination of technical control over the information and legal enforcement of contracts that must be signed as a condition of access to information so controlled. The most prominent expression of this trend is the DMCA…"[429]

With this in mind one can consider some of the arguments made in favour of this move, bearing in mind the broader effects which they have on user rights, as well as criticisms of these arguments.

One of the more common arguments used by those who advocate the use of anti-circumvention provisions is that such provisions, coupled with DRM technology, reduce piracy. Indeed, as noted earlier in part 3.C of this chapter, this is said to be one of the main reasons for the enactment of the DMCA.

Kruger adopts a stance which favours the copyright industry when considering the question above. His reasons for believing that the derogation of the rights of users should be allowed are largely based on what could be termed the 'business model argument'. A trend present throughout the literature on this topic is that many have adopted similar kinds of arguments to this business model argument in support of the copyright industries positive stance on both DRM use and anti-circumvention legislation. So, ultimately, one needs to know what this argument means. This argument can be seen as encapsulating three distinct sub-arguments. In order to understand some of these arguments and the criticisms thereof, one will need to bear in mind the public good aspect of copyright discussed earlier in chapter 2.

[429] Benkler 2000 *Vand. L. Rev.* 2078.

The first argument is often referred to as the simplistic defence. This argument advocates the use of DRM and anti-circumvention provisions on the basis that this pairing allows for the perfect exclusion from cultural products which in turn allows for more efficient production of information. This argument thus seeks to convert the partial excludability of copyright works into perfect exclusion and thus get rid of the problem of having a public good produced by private, rather than public, entities.[430]

The second argument is based on the idea that the private industries which control information production and dissemination have greater information on this than governments do and that they are thus in a better position to determine the course that information production and dissemination should take.[431]

The third argument relies on the importance of anti-circumvention provisions, in conjunction with DRM, in allowing for the use of price discrimination by the copyright owner. Kruger's explanation of the business model argument is hinged on the importance of this third argument and the importance of price discrimination. In order to deal with this issue one needs to understand what price discrimination entails.

This term can briefly be understood to mean selling the same product to different buyers at different prices.[432] An example of price discrimination in action would be the way in which movie theatres charge different prices depending on the age of the viewer for what is ultimately the same movie.[433] So access and use are determined according to different prices, depending on the user, for the same product. Furthermore, it acts by attempting to increase the excludability aspect of the cultural product in order for the owner to retain

[430] Benkler 2000 *Vand. L. Rev.* 2078.
[431] Benkler 2000 *Vand. L. Rev.* 2078.
[432] Business Dictionary http://www.businessdictionary.com/definition/price-discrimination.html (accessed 1 August 2010).
[433] See Investopedia where it is explained: "…movie theaters usually charge three different prices for a show. The prices target various age groups, including youth, adults and seniors. The prices fluctuate with the expected income of each age bracket, with the highest charge going to the adult population." http://www.investopedia.com/terms/p/price_discrimination.asp (1 August 2010).

greater control over it and be able to effectively price discriminate.[434] With this in mind one can begin to consider the business model argument.

This business model argument is premised on the idea that the analogue world did not allow for the sort of price discrimination which the copyright industry had in mind when it wanted to charge for various kinds of usage. On this basis, fair use was said to have been allowed only because of the failure of previous business models to allow for this extended price discrimination. The idea behind this was that the cost of setting up a means through which payment for these minor uses could be made would be too prohibitive and an unnecessary burden on the consumer due to the high transaction costs concerned. Thus certain uses were allowed for free. Basically, the copyright industry saw themselves as doing the consumer a favour.[435] The words of Dusollier are of interest in relation to this type of contention. The author notes that "more than being a defence against a claim of copyright infringement, an exception [such as fair use] is a natural boundary to an author's monopoly power […] their exclusive rights stop where the exception begins."[436]

There is a distinct absence of any explanation by Kruger as to why the analogue world did not allow for the expanded pricing discrimination which the copyright industry is now trying to impose. The author relies on the assumption that such price discrimination was not made use of purely because of a lack of a means of doing so. Okediji identifies that due to the public good nature of copyright, the claim by owners to stronger copyright rights is not necessarily more legitimate than the claims of users of copyright works.[437] One could indeed argue that such pricing discrimination was not available to the copyright industry out of recognition of the importance of not over-extending the monopoly of copyright owners and thus balancing the public interest with the interests of copyright owners.

[434] Benkler (2000) *Vand. L. Rev.* 2079.
[435] See Okediji 2001 *Fla. L. Rev.* 124 who notes that "fair use is often described like charity – a 'privilege' or an accommodation to subsequent users as though they were not contemplated in the welfare vision of copyright protection."
[436] S Dusollier "Fair Use by Design in the European Copyright Directive" (2003) *Communications of the ACM* 51 at 54.
[437] Okediji 2001 *Fla. L. Rev.* 116.

This business model argument claims that DRM coupled with anti-circumvention legislation is a potential cure for the market failures which initially gave rise to fair use. The advent of digital technology gave rise to technology capable of controlling access and usage of copyright content in digital forms. This kind of technology thus allows for the business model types which the copyright industry now states they initially wanted but were unable to have due to technological limitations. As a result of this, the use of this kind of technology, so the argument goes, should be allowed and protected.

The current importance of DRM systems and anti-circumvention legislation thus no longer requires consumers of digital copyright works to have fair use rights as the technology is available to allow for the copyright industry to practice the price discrimination it initially desired during the era of analogue technology. This argument basically can be distilled into the following: the copyright industry argues that it should be able to charge the appropriate price for any possible usage which a consumer may require because the technology is in place to allow it to do so.[438] This submission on its own seems insubstantial.

Kruger states that DRM reduces the transaction costs for the uses which previously fell under fair use exceptions in two ways.[439] The first is that DRM is able to automatically impose restrictions on the use of the content by embedding these restrictions in the content itself and secondly, DRM allows for the pricing discrimination desired. Whereas the technologically unlimited-use album of the analogue era was the norm, the business model argument eagerly awaits for the pay-per-use system to become the norm of the digital era. This argument focuses on pricing structures and the maximisation of profit through making the most of the intellectual property at one's disposal.[440] Kruger submits that "…price discrimination, as an enabler of multiple price points, including price levels that can reach

[438] Kruger 2006 *Hous. J. Int.'l L.* 297.
[439] Kruger 2006 *Hous. J. Int.'l L.* 302.
[440] Kruger 2006 *Hous. J. Int.'l L.* 304 .

low-value users, should diminish the importance of fair use as a response to market failure."[441]

b. The Fair User response

> *"If the fear of the digital age has impelled and justified a rise in technological and contract-based protections, fair use must be made stronger to counterbalance this trend. It ensures that the boundaries of the copyright grant are traversed only as envisaged by the notion of progress"*[442]

It is with this in mind that one should consider the arguments advocating the continued existence of fair use.

The argument which focuses on the importance of copyright owners being able to make use of pricing discrimination can be distilled into the following premise: the producers of cultural products will be better able to perform a public good if they are allowed to discriminate in terms of the prices they charge users for particular uses than if they cannot.[443] The empirical research required to make this claim, Benkler argues, has not been carried out. Benkler further identifies that price discrimination in the context of intellectual products is not perfect and, as such, there is no way to determine the effects which it will have by merely theorising.[444] The social welfare gain may increase in some cases and not in others. He argues that there are serious concerns with increasing the excludability aspect of digital information goods as it will negatively impact on public discourse and personal autonomy of users.[445]

[441] Kruger 2006 *Hous. J. Int.'l L.* 304.
[442] Okediji 2001 *Fla. L. Rev.* 152.
[443] Benkler 2000 *Vand. L. Rev.* 2079.
[444] Benkler 2000 *Vand. L. Rev.* 2079.
[445] Benkler 2000 *Vand. L. Rev.* 2079.

A further criticism of this argument is that it treats all users as potential copyright infringers while the copyright industry is treated as a victim in need of protection. This in turn skews possible solutions to user rights problems which the digital environment presents, such as the applicability of fair use rights in the digital environment. The end result being that these user rights are forced into being frozen in time and ultimately they diminish because their failure to evolve with the changing copyright climate renders them ineffective.[446] The problem is firmly entrenched by a reliance of these arguments on market-based analyses of consumer use within the digital environment. These sorts of analyses, Okediji argues, rely on the concepts of infringement arising out of an analogue era. However, the analogue era concept of infringement "is often a functional or technical aspect of just being in" the digital environment, i.e. the way in which the internet generally operates results in regular infringement by users, often without their knowledge.[447]

The so-called 'simplistic defence' argument is said to fail on the basis that it believes that the public good nature of information, particularly its non-excludability, can be altered. This theory argues that technology coupled with anti-circumvention provisions allows for the distributors of information to alter the character of information by excluding others from it. This creates confusion in that the public goods problem is said to be eliminated where in fact the argument concerns itself with an attempted elimination of the partial excludability of information.[448] Even if this argument were forgiven for its failure to promote the economic agenda, which it initially seeks to, one cannot ignore the broader social implications which the argument still ignores. The fact that information, particularly copyright works in a digital environment, is difficult if not impossible to render perfectly exclusive is not considered by proponents of this argument. Ultimately, the use of

[446] See generally on this point Okediji 2001 *Fla. L. Rev.* 112-113.
[447] Okediji 2001 *Fla. L. Rev.* 113. The author explains that "public interest tends to be evaluated by the same measurement used prior to the advent of new technology, namely how much rent a copyright owner can obtain from every possible use of a protected work. See also F Rasool "Keeping Up with Internet Laws" *itweb* (published 10 August 2010) http://www.itweb.co.za/index.php?option=com_content&view=article&id=35758:keeping-up-with-internet-laws (accessed 11 August 2010). The article notes that "even the simple act of opening a Web site is potentially an act of illegal copying".
[448] Benkler 2000 *Vand. L. Rev.* 2078.

technology and anti-circumvention provisions may hinder the progress of those attempting to access the works, whether legitimately or not, but they are unlikely to completely alter the nature of the public good which copyright is intended to promote.

The second argument is said not to fail but to be tenuous in that it cannot merely be proved by theoretical argument but also requires empirical analysis to truly be confirmed or denied.[449]

The proponents of these business model arguments are understandably critical of those that argue for the retention of fair use rights. Kruger submits that those who propose the retention of fair use rights fail to differentiate between fair use, which was present as a result of previous market failures, and fair use rights in general.[450] It is submitted that the argument put forward by Kruger is based on an incorrect view of the purpose of copyright law. The business model arguments which he and many others propose concentrate solely on the rights of copyright owners whilst completely ignoring the rights of the users of those works. On this point Cohen and others argue that the goal of copyright is merely to provide the author with some limited rights over the exploitation of their works and "not cover everyway of making money from, or of enjoying, a work of authorship."[451] Indeed Litman points out that copyright owners have never been entitled to control every use of their work.[452] She further notes that "copyright's current expansion has myopically focused only on the copyright holder's side of the bargain."[453]

[449] Benkler 2000 *Vand. L. Rev.* 2079. The author notes that "…it is not determined as a matter of theory by noting that private parties have better information about their own interests than public officials."

[450] Kruger 2006 *Hous. J. Int.'l L.* 305. See also Gillespie who submits that anti-circumvention provisions, specifically the DMCA, extends "its reach over the production and distribution of culture goes well beyond the traditional bounds of copyright law, to make possible a massive technological and commercial system that not only will limit copying, but will regulate every facet of the purchase and use of cultural goods". Gillespie 2004 *The Information Society* 239.

[451] Ginsburg 2001 *Colum. L. Rev.* 1615. See also Litman who notes that preserving existing fair use exceptions is consistent with the public's expectations and understanding of its bargain with copyright owners. J Litman "*The Herbert Tenzer Memorial Conference*:Copyright in the Twenty-First Century The Role of the Copyright Office - The Exclusive Right to Read" (1994) 13 *Cardozo Arts and Entertainment Law Journal* 29 at 40.

[452] Litman in Ray Ku 2002 *U. Chi. L. Rev.* 285.

[453] Litman in Ray Ku 2002 *U. Chi. L. Rev.* 285.

Again, the public interest aspect of this argument is ignored with both eyes firmly focused on the glittering prizes that are DRM systems and anti-circumvention legislation. Indeed, Benkler notes a similar trend where he explains that increasing the excludability of digital copyright works enhances the welfare of owners of information goods at the expense of the public whose welfare is adversely affected.[454] Okediji submits that the internet serves merely as a medium in which copyright law operates.[455] While the medium may alter the ways in which these laws operate, they still require the purpose behind these laws to be considered and the balance between owner and consumer rights to be maintained. The influx of measures for the protection of owner rights should thus, Okediji argues, be counter-balanced by the protection of consumer rights.[456] The means for this protection can be found in the doctrine of fair use which can serve as the means by which the public welfare can be ensured.[457]

Kruger raises various concerns in relation to the criticisms mentioned above. He challenges the general theme of these criticisms, in that the DMCA and anti-circumvention legislation in general give too much power to the copyright owner at the expense of the consumer, by identifying that they fail to acknowledge the bargaining power of the consumer in the market place.[458] He further submits that copyright markets, while lacking perfectly adequate substitutes, still provide a user with alternatives.[459] He further identifies how consumer interests have failed to enter into the digital domain because consumers argue for usage rights available to them in the analogue era, such as fair use, to be carried into the digital one. Various criticisms can be noted on these submissions.

Without wishing to sound overly dramatic, the submission by Kruger that consumers have failed to adapt with the times and enter into the digital domain is a rather hypocritical one. Consumers are berated for wanting to transpose rights which were available to them in the analogue era into the digital one. Copyright owners, in turn, desire to transpose business

[454] Benkler 2000 *Vand. L. Rev.* 2080.
[455] Okediji 2001 *Fla. L. Rev.* 114.
[456] Okediji 2001 *Fla. L. Rev.* 114.
[457] Okediji 2001 *Fla. L. Rev.* 114.
[458] Kruger 2006 *Hous. J. Int.'l L.* 316 -317.
[459] Kruger 2006 *Hous. J. Int.'l L.* 317.

models which are based in the analogue era into the digital domain. This situation is not seen as problematic by the author. Rather, he supports the contention that measures, such as DRM systems and anti-circumvention legislation, be put in place to protect the means of implementing those business models. Would it not be fair to argue then that the consumer is thus entitled to the implementation of similar provisions to protect their interests in the digital environment as is envisaged by copyright law?

With respect to the failure to recognise the consumer bargaining power argument, Linchoff identifies that, in relation to recorded music in particular, there has been a failure by record labels to adapt, as they display an unwillingness to change the way in which they do business.[460] He submits that DRM and anti-circumvention legislation worsens the problem as it provides a means with which the ailing analogue business model can continue to be kept alive.[461] On the issue of consumer bargaining power it has been noted that the private regimes, which DRM and anti-circumvention provisions allow for, are dependent on socioeconomic factors such as bargaining power, to reinforce and extend the analogue era inequalities into the digital era.[462] Thus the supposed cure that is said to save copyright and bring the copyright industry into the digital market place is the exact same thing which allows for its rigid adherence to its preferred sales based models and keeps it firmly entrenched in ideas of the analogue era. The end result of this is that it exists in limbo.

With specific reference to consumer demand, Lincoff submits that the strategy of record labels to salvage these "sales-based revenue-models" has resulted in them having to resist the consumer demand for DRM-free music access.[463] This in turn, he explains, has required a campaign to be waged against consumers, internet service providers and even the suppression of certain technologies and consumer electronic products.[464] In spite of these attempts to retain this way of doing business, more the 20 billion recordings were

[460] B Lincoff "Common Sense, Accommodation and Sound Policy for the Digital Music Market Place" (2008-2009) *Journal of International Media and Entertainment Law* 1 at 4-5. He explains that, particularly the music industry, viewed DRM as well as ant-circumvention laws as a means to contain the unauthorised access to and distribution of their works via the internet.
[461] Lincoff 2008-2009 *J. Int'l Media & Ent. L* 4.
[462] Okediji 2001 *Fla. L. Rev.* 116.
[463] Lincoff 2008-2009 *J. Int'l Media & Ent. L* 5.
[464] Lincoff 2008-2009 *J. Int'l Media & Ent. L* 5.

downloaded in 2006 without authorisation. The ratio of unauthorised to authorised downloads is placed somewhere near 40:1.[465] Based on these figures one has to question the efficacy of these business models in the digital environment. Furthermore, if one of the major players in the copyright industry is resistant to consumer demands, then Kruger's submission that consumer bargaining power and the effect which it can have on the promotion of their wants being underestimated seems unfounded.

The figures noted above also raise questions over the efficacy of anti-circumvention provisions and DRM usage in reducing piracy. The use of these two features to reduce piracy necessitates a counter-balance in favour of the legitimate users of content. Okediji notes that fair use would serve this function well as it concerns the fair use of works for legitimate reasons and only allows for part of a work to be used.[466] The author further identifies that "fair use vigilantly upholds the twin ends of the debate [these being the authors limited monopoly granted in exchange for their work being made available to the public] and forces a constant evaluation of each goal to ensure its nurturing as the work is accessed by takers and users."[467] Thus the rights of owners are maintained while still protecting the rights of the user.

The above criticisms and the responses to them mean little when viewed in the void that is academic theory. The true impact of anti-circumvention provisions on the rights of users with regard to copyright works in the digital environment, particularly fair use rights, can only be fully understood with reference to practical examples. It is important to note that due to the varying nuances present in this legislation, depending on the country which one is looking at, some of the criticisms may be more applicable than others.

The following discussion merely serves as an example of these various concerns in a specific situation. The DMCA seems an appropriate example as the purpose of copyright law is

[465] "Pirates Still Have All The Best Tunes" *The Guardian* 27 May 2007 http://www.guardian.co.uk/business/2007/may/27/musicnews.music (accessed 12 February 2010).
[466] Okediji 2001 *Fla. L. Rev.* 152.
[467] Okediji 2001 *Fla. L. Rev.* 152.

enshrined in the US Constitution. Furthermore, the extent of the monopoly granted to copyright owners is limited by the public interest. The way in which user rights are thus perceived in the US context, and the way in which copyright is transitioning into the digital age in the US, serves as a prime focal point in an analysis of copyright in the digital environment with particular reference to user rights.

The way in which courts have dealt with the questions raised over the continued applicability of these rights in the digital context are typified by the *Reimerdes* and *Corley* case. The way in which these cases were decided has severely limited any real access to those rights by consumers. Gillespie identifies that the argument which was adopted in the DeCSS cases was that the copyright industry was attempting to prevent consumers from making use of their fair use rights.[468] This sort of argument was successful in the *Betamax* case but failed in the *Reimerdes* as well as *Corley* cases. The question is: Why?

c. Fair Use under the DMCA

In order for the DMCA to be found to prevent consumers from making use of their fair use rights it would have to be shown that a particular use met the exact usage allowed for in terms of a consumers fair use rights under s107 of the US Copyright Act. Following this, it would have to be shown that the DMCA served to prohibit those uses.[469] These submissions were raised by the defendants in the *Reimerdes* and *Corley* cases but failed on the basis that the DMCA is not legislation which concerns possession, as copyright law does; rather it is legislation which concerns access. Gillespie states that this argument fails "precisely because the DMCA is a law of access and commerce masquerading as a copyright law…"[470]

[468] Gillespie 2004 *The Information Society* 242.
[469] Gillespie 2004 *The Information Society* 242.
[470] Gillespie 2004 *The Information Society* 242.

Thus the DMCA serves to protect copyright content in digital forms from any sort of fair use rights which a consumer would usually have under copyright law. The copyright industry can, in turn, charge for every usage which would usually constitute such fair use under copyright law. Gillespie identifies that there is nothing to prevent copyright industries from imposing microlimitations on all aspects of usage.[471] In other words the DMCA, in conjunction with DRM systems, creates a situation in which copyright owners can control the usage of their work by controlling access to that work. This is regardless of whether or not copyright is even concerned with such usage in any given scenario. He cites the idea of 'regional coding' as an example of such microlimitations.[472]

For the purposes of this discussion one needs to recognise that regional coding operates to ensure that a DVD, whether it be a console game or a movie, can only be used in a console or DVD player which corresponds to the particular 'zone' or 'region' of that DVD. Thus if one purchases a legitimate[473] copy of a movie on DVD from a region which differs from that of their DVD player, the regional coding prevents the playback of that DVD. It is clear that such a control does not represent copyright concerns because the copy purchased was legitimate. Such a control represents the protection of a business model as it allows the copyright industry to sell DVDs in different regions and different prices according to supply and demand in that region.

Another example of such a microlimitation, which allows for the imposition of a business strategy rather than concerning itself with copyright, was raised as an argument in the *Reimerdes* case. The argument concerns the circumvention of DeCSS, specifically, for the use of a legitimately purchased DVD movie for playback on computers using a Linux operating system. Users of this operating system would be prevented from making use of their legitimately purchased DVDs because Linux is an open source operating system and as such most of its software is user-created. Users creating DVD playback software for the

[471] Gillespie 2004 *The Information Society* 245.
[472] Gillespie 2004 *The Information Society* 245. See Chapter 3 for a discussion of "regional coding".
[473] Legitimate in that its production had been authorised by the copyright holder concerned.

operating system would likely be unable to pay the amount required for a CSS technology license.[474] On this point Gillespie notes "fair use gets hamstrung between access controls and hardware restrictions; there is simply no place for its consideration."[475] Thus technological protection measures in conjunction with the DMCA again prevent legitimate use not out of copyright concerns but from an attempt to preserve a business model.

A literary example of such microlimitations can be seen when examining the limitations imposed by Adobe's E-Book formats. One author identifies how the Glassbook format offered by Adobe has taken numerous classic novels, which have are freely available in the public domain, and digitised them.[476] These digitised novels are then sold to users. Adobe however places various restrictions on the use of these works. The following are some examples of these restrictions. "Copy: No text selections can be copied from the book to the clipboard. Print: No printing is permitted of this book. Lend: This book cannot be lent or given to someone else. Give: This book cannot be given to someone else. Read Aloud: This book cannot be read aloud."[477] The almost farcical nature of these restrictions add an element of irony when one considers that the transcripts of many of these literary works were taken from 'Project Guttenberg' by Adobe.[478] Adobe, in effect, downloaded these works from 'Project Guttenberg', repackaged them and stripped away the open permissions which 'Project Guttenberg' allows. They substitute these open permissions with their own restrictions on works and threaten to sue those who do not comply with these new restrictions.[479]

[474] See Chapter 3 for more information on these sorts of agreements.
[475] Gillespie 2004 *The Information Society* 246.
[476] "Read an E-Book to your Child, Go to Jail" December 2000 *MP3Newswire* http://www.mp3newswire.net/stories/2000/ebook.html (accessed 18 August 2010).
[477] "Red an E-Book to your Child, Go to Jail" *MP3Newswire*.
[478] Note that 'Project Guttenberg' is an online library containing digitised versions of classic literary works which are in the public domain. Project Guttenberg allows for the free download and viewing of these works. Thus the user can even view these works whilst offline.
[479] "Red an E-Book to your Child, Go to Jail" *MP3Newswire*. The author submits that this has the effect of taking a work in the public domain, planting a flag on it, claiming ownership, placing their own restrictions and litigating against those who don't pay.

These sorts of over-reaching actions are being carried out by the copyright industry under the guise of copyright law. Indeed, it has been argued that that Act is more akin to computer security statutes in that its priorities relate only nominally to copyright.[480] The technological protection in place allows for such control and the DMCA prevents a user from circumventing these controls. The effect of this is that a monopoly is granted to the copyright industry, as happens under copyright law. However, with none of the reciprocal rights being granted to consumers, the limited monopoly which serves as the foundation for copyright law is no longer a limited one. As a result, the balance of this monopoly and the public interest is shifted in favour of the copyright industry.

The end result being that the copyright industry can have their proverbial cake and eat it too. The greater issue is that this flagrant misuse of these measures of technological protection measures carries the backing of both the state and the courts. Are the rights which users had under copyright law now no longer important? The greater concern has to be whether the purpose of copyright law been ignored for a quick buck and campaign funds.

This conclusion may seem to be jumping the gun somewhat as these technological measures coupled with the DMCA still face the problem that was facing the copyright industry prior to both of these 'solutions'. The problem is one of sheer numbers. Technological measures for protection will never be 100 percent secure and the DMCA, while prohibiting certain actions, will not be adhered to by everyone. It is submitted that the problem which the DMCA does create, however, is that it creates a culture of civil disobedience. By merely paying lip service to the rights of consumers, it increases the disregard of consumers for the rights of copyright owners. Thus the problem is compounded by a cycle of the disregarding of rights by both the producers of cultural products and the

[480] Gillespie 2004 *The Information Society* 239.

consumers thereof. The net result of this problem is that the rights of citizens have become a question of the preferences of consumers as envisaged by the producers.[481]

It seems clear from the above that the contention by some commentators that fair use rights still apply under the DMCA seems ineffectual. The rights, in the form of limited exceptions allowing for circumvention of DRM systems, are technically there under US law, but they have been severely hamstrung by anti-circumvention provisions.[482] This is in spite of the arguments favouring anti-circumvention provisions being flimsy in nature when viewed in light of the criticism levelled against them. As a result of this, anti-circumvention legislation's disregard for user rights seems to have less to do with curbing piracy and more to do with the implementation of a system which allows for the copyright industry to charge for every conceivable usage of its content in the digital environment. This approach ignores not only user rights but the purpose of copyright as a whole.

6 Anti-Circumvention in Europe: The European Copyright Directive

The issue of anti-circumvention legislation in Europe is largely dealt with under the provisions of the European Copyright Directive.[483] Like the DMCA in the US, the European Copyright Directive represents the culmination of lobbying by the copyright industry for the implementation of the anti-circumvention provisions in the *WCT* and *WPPT.* Chapter 3 of the Directive deals specifically with the "Protection of Technological Measures and Rights-Management Information".

[481] Gillespie 2004 *The Information Society* 250. The author further submits that "What is lost are the venues in which the public interest side of copyright could effectively balance the interests of copyright owners, who can only envision the value of discourse through a lens of their own commercial survival and success […] the possibility that not only the act of expression, but the act of circulation, could be a valuable element of social participation and learning is obscured, shrouded by a system entrusted only to sell, deliver, and collect." See further chapter 2 on this point.

[482] See Wheatley who notes that "…it seems that the individual has a right to circumvent copyright protection systems for the purposes of making a fair use, but businesses may not seek to sell the tools of circumvention and rely on the DMCA's preservation of fair use as a defense." Wheatley 2008 *Washington University Global Studies Law Review* 368.

[483] The full title of this being the Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the Harmonization of Certain Aspects of Copyright and Related Rights in the Information Society. Other examples include the European Software Directive of 1991, The Conditional Access Directive of 1998.

a. The EUCD and the DMCA: A Comparison

The provisions of the Directive are markedly similar to those in the DMCA. Article 6 (1) of the Directive requires member states to implement legislation which prohibits the circumvention of effective technological measures which the owner has put in place to protect their rights in work in a digital form.[484] This provision is similar to s1201 (a) (1) (A) of the DMCA, in that is prohibits actual circumvention by a user of technological protection measures. The distinction which should be noted is that the DMCA refers specifically to technological protection which *controls access* to a work while the European Directive makes no such direct reference in Article 6 (1). However, access controls are specifically identified in Article 6 (3) along with protection processes generally. Kruger identifies that the provisions of the European Copyright Directive are broader in places than the DMCA. He notes the way in which the DMCA limits its ambit to access controls while the European Directive does not limit itself only to these access controls.[485]

In this way, the Directive is said to favour the user in that it does not approach user rights at the stage of sanctioning circumvention but rather deals with these rights at an earlier stage, specifically, by providing for certain exceptions constrained by technical measures. This in effect means that user rights are built into the DRM system as a whole, whether it is in the form of technological protective measures or through private contractual terms. The ultimate effect, Dusollier argues, is that "the EU seeks to preserve fair use even before the enforcement stage".[486]

Shah submits that the DMCA limits itself to access controls, purposely excluding rights control measures from its ambit, in order to preserve the fair use exception which would

[484] Article 6 (1) states: "Member States shall provide adequate legal protection against the circumvention of any effective technological measures, which the person concerned carries out in the knowledge, or with reasonable grounds to know, that he or she is pursuing that objective."
[485] Kruger 2006 *Hous. J. Int.'l L.* 312 see specifically footnote 199. See also A Shah "UK's Implementation of the Anti-Circumvention Provisions the EU Copyright Directive: An Analysis" (2004) *Duke Law and Technology Review* http://www.law.duke.edu/journals/dltr/articles/2004dltr0003.html (accessed 15 August 2010) paragraph 5.
[486] Dusollier 2003 *Communications of the ACM* 52.

face interference from rights control measures.[487] With the above distinctions in mind, one can undertake a comparison of these two anti-circumvention measures.

Article 6 (1) can be criticised for its definition of an 'effective technological protective measure'. Article 6 (3) defines an 'effective' technological protective measure to mean that "use of a protected work or other subject-matter is controlled by the rightholders through 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". This definition is exceedingly broad in its scope as the rights holder is protected because they have put in place any technological measure which has the purpose of performing the above. Therefore the standards by which the effectiveness of these measures are tested are almost non-existent. All that is required of the rights holder is that some attempt at putting protective measures in place must be present. Bechtold identifies that the problem with this definition is that nothing would be excluded from its ambit as the standard for testing effectiveness is minimal to the point that it ultimately appears that there would be no uneffective technological protective measures.[488]

If one looks at Article 6 (2) of the Directive, it deals specifically with the so-called 'preparatory aspects' relating to the trafficking of tools which facilitate and/or allow for the circumvention of technological protective measures.[489] The provisions of Article 6 (2) are similar to those in s1201 (a) (2) and (b)(1) of the DMCA in that they serve as a prohibition on the manufacture and dissemination of tools which facilitate the circumvention of technological protective measures. The effect of these sorts of provisions is that they limit

[487] Shah 2004 *Duke L. & Tech. Rev.* paragraph 5 footnote 22.
[488] Bechtold 2004 *Am. J. Comp. L* 335 see specifically footnote 64.
[489] Article 6 (2) states: "Member States shall provide adequate legal protection against the manufacture, import, distribution, sale, rental, advertisement for sale or rental, or possession for commercial purposes of devices, products or components or the provision of services which: (a) are promoted, advertised or marketed for the purpose of circumvention of, or (b) have only a limited commercially significant purpose or use other than to circumvent, or (c) are primarily designed, produced, adapted or performed for the purpose of enabling or facilitating the circumvention of,any effective technological measures".

the ability of the general consumer market to circumvent these measures as the average user would likely be unable to circumvent the protection without the aid of tools.

Ultimately these two provisions in Article 6 give one the impression that the European Copyright Directive operates by mandating broad protection of technological protective measures. This could lead one to believe that the Directive provides the copyright holder greater protection through its broad implementation of the anti-circumvention provisions of the *WCT* and *WPPT* respectively. There are, however, certain limitations imposed on this supposedly broader protection which distinguishes the Directive somewhat from the DMCA.

The Directive, in Article 6 (1), imposes what has been described as a 'knowledge-based criterion' on the party circumventing the technological protection.[490] This requires that the person circumventing the protection, knew or on reasonable grounds should have known, that they were circumventing an effective technological protective measure. Thus the Directive requires either intent or negligence on the part of the circumventing party before they can be deemed to have infringed this provision. The DMCA noticeably lacks this requirement as it imposes strict liability. The effect of this criterion is that the circumventor, under the Directive, would have a defence if they could prove that they lacked this required knowledge. Under the DMCA this lack of knowledge would not constitute an accepted defence.

b. User Rights under the EUCD: Fair Use by Mandate

The Directive adopts a different approach to the DMCA when it comes to the implementation of user rights in anti-circumvention legislation. The Directive, in Article 6 (4),[491] leaves the implementation of user rights largely up to the content providers, as does

[490] Shah 2004 *Duke L. & Tech. Rev.* paragraph 6.

[491] Article 6 (4) states: "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 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)(a), (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

the DMCA by and large. It seems strange to leave the ability to facilitate the limitation of the copyright owners' rights to the copyright owners themselves. It would seem that under most circumstances the content user would be unlikely to benefit from the rights to which they are entitled if, in accordance with the price discrimination argument, the reasons for the existence of those consumer rights had been remedied by the creation of DRM systems and the implementation of anti-circumvention legislation. In other words, if the copyright owner could charge for the particular use which the user sought, then why would they put in place a system which would allow them that use for free? It is here that the Directive is seen to differ somewhat from the DMCA.

This difference emerges in situations where the content providers fail to make certain uses available to the appropriate entitled users. More specifically, in situations where the copyright owner fails to voluntarily limit its own rights and make those uses available to the consumer, the member state concerned can takes steps to allow those users to enjoy the rights to which they are entitled. These provisions have been hailed as revolutionary in Europe, as exceptions to the rights of copyright owners are given a positive meaning and the author is left to implement exceptions to their own rights.[492] This is, however, a dangerous move which could prove to be ineffective and may in fact grant copyright owners even greater control at the expense of user rights.[493] Indeed, this process may prove revolutionary but this may not be for the right reasons from the perspective of content users at least.

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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".

[492] Dudollier 2003 *Communications of the ACM* 52.

[493] Wheatley submits that placing such an "unrestricted power to control use of copyrighted works in the hands of copyright owners presents an obvious problem". Wheatley 2008 *Wash. U. Global Stud. L. Rev.* 359.

i. Power of the state

The provision allowing for State intervention, in order to protect user rights where a copyright owner fails to make certain authorised uses available, seems a good one in theory. It seems to force copyright owners into an active recognition of user rights and to the limitations of their own rights. Indeed, this may be what copyright in the digital era needs. The problem with leaving copyright owners in control of this situation, and leaving member states to intervene where the copyright owner has been unwilling to facilitate the users access, is that states have generally attempted to distance themselves from the battle between the rights of owners of copyright and the users thereof in the digital environment. Any such debates which have arisen have largely gone in favour of the copyright owners.

A further problem is that member states are required to take necessary steps only when the copyright owner has failed to facilitate the user's benefit of the exceptions to which they are entitled. The problem is that the Directive does not indicate "when the default by rights holders is sufficiently patent as to necessitate a State taking action".[494] If even the slightest attempt was made by the copyright holder to facilitate this beneficial use, would the state then be excluded from intervening or having to intervene? Given the generally poor track record of states in seeking to protect public interest in this particular area, this system may prove to have a seriously negative impact user rights. Dusollier identifies that if this were the case then "too much unrestrained power would go to authors and other rights holders of copyrighted works".[495]

The Directive states that a member state may intervene only where the copyright owner has failed to implement those benefits "within a reasonable time" and the member state may take "appropriate measures" in order to implement these benefits.[496] The problem is that the Directive defines neither what would constitute a reasonable time nor does it qualify

[494] Dudollier 2003 *Communications of the ACM* 53.
[495] Dudollier 2003 *Communications of the ACM* 53.
[496] See Article 6 (4) paragraph 1 and 2 in note 177 above.

what would be considered an appropriate measure. Therefore the state is given the power to intervene but is not told when it can intervene or in what ways. This provision thus seems to be an oasis in the digital copyright desert, offering shelter to the weary user, but in effect it is nothing more than a mirage.

ii. The exceptions of article 6 (4) – A problematic provision

The purpose of article 6 (4) is to permit state intervention in the digital environment in order to protect user rights. Article 5, specifically article 5 (2) and (3),[497] identifies numerous

[497] 2. Member States may provide for exceptions or limitations to the reproduction right provided for in Article 2 in the following cases: (a) in respect of reproductions on paper or any similar medium, effected by the use of any kind of photographic technique or by some other process having similar effects, with the exception of sheet music, provided that the rightholders receive fair compensation; (b) in respect of reproductions on any medium made by a natural person for private use and for ends that are neither directly nor indirectly commercial, on condition that the rightholders receive fair compensation which takes account of the application or non-application of technological measures referred to in Article 6 to the work or subject-matter concerned; (c) in respect of specific acts of reproduction made by publicly accessible libraries, educational establishments or museums, or by archives, which are not for direct or indirect economic or commercial advantage; (d) in respect of ephemeral recordings of works made by broadcasting organisations by means of their own facilities and for their own broadcasts; the preservation of these recordings in official archives may, on the grounds of their exceptional documentary character, be permitted; (e) in respect of reproductions of broadcasts made by social institutions pursuing non-commercial purposes, such as hospitals or prisons, on condition that the rightholders receive fair compensation.
3. Member States may provide for exceptions or limitations to the rights provided for in Articles 2 and 3 in the following cases: (a) use for the sole purpose of illustration for teaching or scientific research, as long as the source, including the author's name, is indicated, unless this turns out to be impossible and to the extent justified by the non-commercial purpose to be achieved; (b) uses, for the benefit of people with a disability, which are directly related to the disability and of a non-commercial nature, to the extent required by the specific disability; (c) reproduction by the press, communication to the public or making available of published articles on current economic, political or religious topics or of broadcast works or other subject-matter of the same character, in cases where such use is not expressly reserved, and as long as the source, including the author's name, is indicated, or use of works or other subject-matter in connection with the reporting of current events, to the extent justified by the informatory purpose and as long as the source, including the author's name, is indicated, unless this turns out to be impossible; (d) quotations for purposes such as criticism or review, provided that they relate to a work or other subject-matter which has already been lawfully made available to the public, that, unless this turns out to be impossible, the source, including the author's name, is indicated, and that their use is in accordance with fair practice, and to the extent required by the specific purpose; (e) use for the purposes of public security or to ensure the proper performance or reporting of administrative, parliamentary or judicial proceedings; (f) use of political speeches as well as extracts of public lectures or similar works or subject-matter to the extent justified by the informatory purpose and provided that the source, including the author's name, is indicated, except where this turns out to be impossible; (g) use during religious celebrations or official celebrations organised by a public authority; (h) use of works, such as works of architecture or sculpture, made to be located permanently in public places; (i) incidental inclusion of a work or other subject-matter in other material; (j) use for the purpose of advertising the public exhibition or sale of artistic works, to the extent necessary to promote the event, excluding any other commercial use; (k) use for the purpose of caricature, parody or pastiche; (l) use in connection with the demonstration or repair of equipment; (m) use of an artistic work in the form of a building or a drawing or plan of a building for the

exceptions and limitations to the rights of copyright holders. The problem is that the protection of these exceptions and limitations are not mandatory but rather voluntary in nature. One can only assume that the voluntary nature underscoring the adoption of these exceptions is out of a fear of treading on the sovereignty of member states. Whatever the reason, the end result is that it is left to member states to decide which of these exceptions they wish to enforce in their own national legislation. Certain of the exceptions identified in article 5 (2) and (3) were earmarked by the EU as requiring mandated protection rather than merely allowing for member states to voluntarily elect whether or not to protect them.

It should be noted at this point that the Directive provides for certain exceptions. These exceptions are only available to those users who have a legitimate right to the use concerned. Article 6 (4) should not be seen as granting free access but rather serves as a means of allowing a user to benefit from any exceptions they may be entitled to once legitimate access has been obtained. In this way, as stated previously, the Directive does not specifically concern itself with access control, as does the DMCA, but rather concerns itself with measures of technological protection which control use of that work after legitimate access has been obtained. Dusollier submits that one must not interpret this as allowing for circumvention in order to exercise the exception.[498] Rather the situation is one in which circumvention is not required due to either the voluntary implementation of user rights or, failing that, state intervention.

The provisions of article 6 (4), in line with its purpose, provide for the mandated implementation of certain identified exceptions which the copyright owner may either voluntarily implement or face state intervention. So in effect, the exceptions in article 6 (4)

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purposes of reconstructing the building; (n) use by communication or making available, for the purpose of research or private study, to individual members of the public by dedicated terminals on the premises of establishments referred to in paragraph 2(c) of works and other subject-matter not subject to purchase or licensing terms which are contained in their collections; (o) use in certain other cases of minor importance where exceptions or limitations already exist under national law, provided that they only concern analogue uses and do not affect the free circulation of goods and services within the Community, without prejudice to the other exceptions and limitations contained in this Article.

[498] Dusollier 2003 *Communications of the ACM* 53.

must be allowed for by the copyright owner. The mandated exceptions are those falling into seven broad categories. Shah identifies these as relating to: "photocopying, archival copying, broadcaster's, non-commercial broadcast, teaching and research, disability-related and governmental."[499] Dusollier notes that the preferential treatment received by only some of the exceptions in article 5 cannot be explained by the Directive or its legislative history.[500] It is important to note that Article 6 (4) does not extend the state's obligation to intervene when content is made available in the form of on-demand services.[501] This has been identified by some as the Directive's greatest flaw.[502] In order to understand the true relevance of this, one needs to first understand what an on-demand service is.

The concept of an on-demand service is encapsulated in the example of a pay-per-use type system.[503] The content is made available to the consumer at a time and place chosen by them. The convenience which underlies the use and market for digital copyright content, and in a way controls the direction in which the market is developing, is excluded from mandated state protection under the European Copyright Directive. The problem with this is that a loophole is left in the Directive which could lead to exploitation by the copyright holder.

The copyright holder in the normal course of events under the Directive is left to voluntarily facilitate user rights. If a particular business model allows for the copyright holder to remove the various exceptions to their rights, which users are entitled to, then it is submitted that this is the option which they would pursue.[504] Dusollier identifies that the

[499] Shah 2004 *Duke L. & Tech. Rev.* paragraph 9. See also Articles 5 (2) (a),(c),(d),(e) and (3) (a), (b) or (e).
[500] Dusollier 2003 *Communications of the ACM* 53.
[501] Article 6 (4) paragraph 4 states: "The provisions of the first and second subparagraphs 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 individually chosen by them."
[502] Dusollier 2003 *Communications of the ACM* 53.
[503] See Kruger 2006 *Hous. J. Int.'l L.* 313.
[504] See the argument put forward by the International Federation of the Phonographic Industry where they note that enabling exceptions would ruin their new business models for distribution. The type of business model to which they refer concerns making music available to a user for a limited period of time and then removing that music from the user's device. In Dusollier 2003 *Communications of the ACM* 54.

inclusion of click-wrap licences is prevalent in most digital products. The presence of these agreements would meet the requirements for falling within this loophole. This in turn would mean that falling within the definition of this loophole would in no way be difficult for copyright holders. Thus the inclusion of this loophole could in effect derail the overall milieu of user protection which the Directive is striving to achieve. Even more concerning is that the loophole implies an acceptance by the EU that the privatisation of digital copyright content, in the form of DRM systems, outweighs the importance of copyright law in general. Specifically, this stance by the EU can be seen as having a disregard for the purpose of copyright law and the balancing of the rights of the parties concerned.[505]

Despite the problems discussed above, article 6 (4) mandates the exercise of state power only with respect to certain exceptions mentioned therein. The adoptions of any other limitations are left up to each member state. One could envisage problems emerging from preferring certain exceptions to others. The Directive, it could be argued, in mandating the specific exceptions in article 6 (4) may have in effect diminished the importance of the remaining twenty or so exceptions in article 5. This would also be problematic in that the purpose of the Directive was to harmonise copyright law in Europe, specifically with regard to anti-circumvention legislation. If certain exceptions were merely voluntary then some member states would adopt them and others not. This would surely fracture copyright law in Europe rather than lead to a harmonisation thereof. A further problem with adopting this type of approach to limiting the rights of copyright owners is that the use of "such pigeonholed exemptions relating to technological developments tends to ossify the law in a constantly evolving area."[506]

[505] See Dusollier who submits that "excluding the safeguard clause of article 6 (4) […] means European Lawmakers want such contracts to prevail on fair use principles" 2003 *Communications of the ACM* 54.
[506] Shah 2004 *Duke L. & Tech. Rev.* paragraph 10.

c. Conclusion

The provisions in article 6 of the European Copyright Directive are said to be aimed at balancing the rights of both copyright owners and users. The Directive promotes the idea that it champions the users more than other anti-circumvention legislation, such as the DMCA. By focusing on use rather than access the Directive attempts to protect the users' rights before the enforcement stage is reached. This is further promoted by requiring that the copyright holder voluntarily facilitates these user rights and therefore implement the limits to their own monopoly. In doing this, the Directive can be seen as attempting to reduce the animosity which generally characterises the owner-user relationship in the digital environment.

The numerous problems which arose from the poor implementation of the above has characterised discussions on the Directive. These problems range from the lack of definitions and general uncertainty as to the meaning of the terms 'reasonable time' and 'appropriate measures'; the loophole excluding the requirement for exceptions where an on-demand service is concerned; and the distinction drawn between voluntary and mandated exceptions to the copyright owners' monopoly. These issues have all contributed to the apparent unsubstantiality of the promise that the Directive would protect user rights in the digital environment.

In discussing the effects of the voluntary nature of some of the exceptions in the Directive, Shah submits that the Directive allows for member states to tailor the chosen exceptions to their specific national needs.[507] Thus the Directive should be seen as providing the framework in which member states can distil their own legislation rather than as a definitive statement on what their national law should be. Shah further identifies that the Directive should be seen as a step in the right direction despite its ambiguities. He submits that these ambiguities should not be an issue as it is up to the individual member states to implement

[507] Shah 2004 *Duke L. & Tech. Rev.* paragraph 10.

the provisions of the Directive in a manner which not only clarifies these ambiguities, but also approaches such implementation optimistically.

Whilst not completely in agreement with the almost unworried manner in which Shah views the various ambiguities in the Directive, his submission concerning the importance of the implementation of the Directive on a national level should not be discounted. Indeed, due to this Directive being implemented on a near continental level, its overall impact is difficult to understand without making reference to specific examples. In order to view these provisions in action the attention of this research now turns to the UK and the Copyright and Related Rights Regulations of 2003.[508]

7. Implementation of the EUCD in Europe: The UK Example

During August 2002 a consultation paper was released in the UK proposing various changes to its Copyright, Designs and Patents Act[509]. The consultation paper served two primary functions. The first was that it proposed to implement amendments to the Copyright, Designs and Patents Act in order to bring copyright legislation in the UK in line with its obligations under the European Copyright Directive. The second purpose of this consultation paper was to gauge public reaction to these amendments and to field comments in this regard. These comments were to be submitted to the UK patent office by the 31st of October 2002. The implementation date however was subsequently extended on numerous occasions as a result of the numerous comments received from the public.[510] This is perhaps indicative of the public interest in copyright and the effect which legislative changes would have on them. Ultimately, most of the proposed changes identified in the consultation paper came into effect on the 31st of October 2003 and were implemented through the

[508] Hereinafter "the 2003 Regulations".
[509] Copyright, Designs and Patents Act 1988.
[510] Shah notes that this implementation was postponed on several occasions, firstly until the 31st of March 2003, then to the 18th of June 2003 and then on an "as soon as possible" basis. See Shah 2004 *Duke L. & Tech. Rev.* paragraph 12.

2003 Regulations.[511] For the purposes of this discussion, the most important amendments stated are those in regulations 24 and 25 of the 2003 regulations. It is these regulations which concern "technical measures and rights management information" which will be focused on in this analysis.

a. UK Legislation Prior to the EUCD

Regulation 24 contains certain amendments relating to the circumvention of protection measures. This regulation makes amendments to s296 of the Copyright, Designs and Patents Act as well as to the heading of "Devices designed to circumvent copy-protection" which appears in the Act. Prior to the 2003 Regulations, s296 – s299 included provisions pertaining to the prohibition of the circumvention of copy-protection devices.[512] These provisions only applied to a copyright work issued to the public in an electronic form which had copy protection in place.[513] Most importantly, the provisions of s296 did not extend to the use of circumvention devices but rather only to the creation and distribution of these devices.[514]

b. UK Legislation Post EUCD – The Impact

The 2003 Regulations can be seen as having a tremendous impact on s296 by broadening its ambit from the previous position of only applying to 'copyright works issued to the public in an electronic form which was copy protected'. Three distinct changes to s296 of the Act can be identified. Firstly, the 2003 Regulations broaden the ambit to include all technological measures of protection. Secondly, the 2003 Regulations extend the legal protection of

[511] See Shah who notes that the 2003 Regulations "by and large, maintain the same provisions for the prevention of circumvention of technological measures on works other than computer programs". Shah 2004 *Duke L. & Tech. Rev.* paragraph 28.

[512]See Esler who identifies that prior to the 2003 Regulations, s296 "broadly [prohibited] unauthorized circumvention of copy-protection devices, descrambling of encrypted transmission or reception of conditional access services, including trafficking in devices or services to aid in such endeavors". BW Esler "Technological Self-Help: Its Status Under European Law and Implications for U.K. Law" (2002) *Presentation at the 17th BILETA Annual Conference* accessed http://www.bileta.ac.uk/Document%20Library/1/Technological%20SelfHelp%20%20Its%20Status%20under%20European%20Law%20and%20Implications%20for%20U.K.%20Law.pdf (accessed 15 August 2010).

[513] Shah 2004 *Duke L. & Tech. Rev.* paragraph 13.

[514] Shah 2004 *Duke L. & Tech. Rev.* paragraph 13.

these laws to include copyright works which are released in any form. Thirdly, the 2003 Regulations include the actual act of circumvention as well as the use of tools which allow for such circumvention under its scope rather than limiting itself to the creation and distribution of circumvention tools only.[515]

Specifically, the 2003 Regulations add sections 296ZA – 296ZF. Like the DMCA and the European Copyright Directive, on which the 2003 Regulations are based, a distinction is made between circumvention and the tools of circumvention. This can be seen in s296ZA which deals with the actual act of circumvention while s296ZB concerns the facilitation of circumvention (i.e. any act concerning tools which facilitate circumvention). In order to better understand these sections they will be briefly discussed in greater detail.

Section 296ZA (1) is based almost verbatim on Article 6 (1) of the European Copyright Directive.[516] Section 296ZA (2) includes one of the two main exceptions to S296ZA (1). This exception is noted as having eventuated from the public comments arising out of the consultation paper and constitutes one of the few criticisms of the consultation paper which was properly considered.[517] Section 296ZA (2) applies to a person whose actions fall within the parameters of S296ZA (1). Those person's actions are excluded from liability on the basis of them having undertaken such an action for the purposes of cryptographic research, so long as their actions do not prejudicially affect the rights of the copyright owner.[518] The 2003 Regulations further provides for the protection of rights other than those of the owner by allowing for a concurrent action of the copyright owner and any other person noted in S296ZA (3).[519]

[515] See Shah 2004 *Duke L. & Tech. Rev.* paragraph 14.
[516] S296ZA (1) This section applies where – (a) effective technological measures have been applied to a copyright work other than a computer program; and (b) a person does anything which circumvents those measures knowing, or with reasonable grounds to know, that he is pursuing that objective.
[517] Shah 2004 *Duke L. & Tech. Rev.* paragraph 28.
[518] See also Regulation 15 which amends the Copyright, Designs and Patents Act by including s50BA which allows for the reverse engineering of a computer program by a user. Such an action even where it results in the circumvention of a protection measure of the kind envisaged in s296A. See s50BA (2) in this regard.
[519] See also s296ZA (4).

The provisions of s296ZB are those pertaining to the prohibition of facilitating circumvention through “devices and services designed to circumvent technological measures”, i.e. tools. The section identifies various actions in relation to devices which allow for circumvention including selling, hiring, importing (other than for their own private domestic use) and distributing such devices. The specific wording of the section relates to “any device, product or component which is primarily designed, produced, or adapted for the purpose of enabling or facilitating the circumvention of effective technological measures.” The net of this amendment seems as though it has been cast too wide as the provisions would catch the manufactures of products which are capable of circumvention, even though this may not be the main purpose of these products.

Shah identifies that the phrasing of this subsection may offer some relief. He submits that the use of the word ‘primarily’ could be used to exempt manufacturers of the types of devices above which are indeed manufactured for a legal purpose but are capable of facilitating circumvention. Furthermore, a person found to have conducted themselves in a manner which falls under s296ZB has a defence in terms of subsection 5 of that section. This subsection provides:

> (5) It is a defence to any prosecution for an offence under this section for the defendant to prove that he did not know, and had no reasonable ground for believing, that -
>
> (a) the device, product or component; or
>
> (b) the service,
>
> enabled or facilitated the circumvention of effective technological measures.

Therefore the 'knowledge criterion' of the European Copyright Directive is carried over into the UK legislation in both the provisions relating to actual circumvention as well as those relating to tools facilitating circumvention.

From the above it is clear that the 2003 Regulations implement the provisions of the European Copyright Directive in the UK in a manner which, so far, has seemed to require very little alteration to the provisions of the Directive. The true test for the 2003 Regulations however is how it deals with the ambiguities inherent in the Directive. This is especially so when one considers that these teething problems were earmarked for correction when they were implemented by the various member countries in their own national legal systems.

c. Does National Implementation Remedy the Ambiguities of the EUCD?

The 2003 Regulations, as noted earlier in this chapter, takes the provisions of s296ZA (1) (a) and (b) almost directly from article 6 (1) of the Directive. This renders s296ZA (1) (a) and (b) subject to the same problems which article 6 (1) faced. The most notable of these problems being the failure of the Directive to properly define what constitutes an 'effective' measure. To this end, the drafters of the 2003 Regulations included a section to aid in the interpretation of the s296 amendments.

This interpretation section is dealt with in s296ZF.[520] The section defines both 'technological measures'[521] as well as what would render such measures 'effective'.[522] Technological measures are defined as being "any technology, device or component which is designed, in the normal course of its operation, to protect a copyright work other than a computer program."[523]

[520] S296ZF – Interpretation of Sections 296ZA to 296ZE.
[521] S296ZF (1).
[522] S296ZF (2).
[523] S296ZF (1).

i. Technological Measures Defined

The reason for excluding computer programs from this definition can largely be said to result from the fact that computer programs have been the subject of their own legislative branch in both the UK as well as the EU.[524] While s296 still pertains to the circumvention of technical devices applied to computer programs, the section does not alter the law as it stood prior to the 2003 Regulations. Thus the 2003 Regulations definition of 'technological measures' in no way includes computer programs in any way.

The problem with this is that any technology or device which protects copyright works but which is a computer program will be subject to different protection to those technological measures which are not computer programs. In relation to computer programs, the facilitation of circumvention of copy-protection[525] was prohibited only where the device or means used was specifically intended for such circumvention.[526] Therefore copyright works which make use of computer programs as a technological measure of protection will enjoy less protection than other technological measures which do not. Such a distinction can lead to often absurd results as most encryption of digital content makes use of some form of computer program.[527]

Shah submits that this problem is somewhat alleviated by s296 broadening its scope to include any technical device.[528] This definition is said to afford greater protection to the use of computer programs, such as encryption, in the protection of copyright content.[529] Although this definition does indeed broaden the scope of protection it does not materially alter the protection itself. S296 still relies on the means used for the facilitation of circumvention of the technical device to have been manufactured, sold, hired etc. solely for

[524] See EU Software Directive.
[525] Note this does not include access controls.
[526] Shah 2004 *Duke L. & Tech. Rev.* paragraph 30.
[527] Shah 2004 *Duke L. & Tech. Rev.* paragraph 31 for an example of such incongruence's.
[528] S296 (6) – "In this section [s296] references to a technical device in relation to a computer program are to any device intended to prevent or restrict acts that are not authorised by the copyright owner of that computer program and are restricted by copyright."
[529] Shah 2004 *Duke L. & Tech. Rev.* paragraph 34.

the intended purpose of circumvention.[530] Thus a party may still avoid this provision where the means of facilitation of circumvention has other purposes.

ii. Effectiveness Defined

The 2003 Regulations, in terms of s296ZF (2), state that a 'technological measure' will be 'effective' where "the work is controlled by the copyright owner through –

(a) An access control or protection process such as encryption, scrambling or other transformation of the work or,

(b) A copy control mechanism, which achieves the intended protection."[531]

The drafters of the 2003 Regulations take this definition straight from article 6 (3) of the Directive. Thus the criticisms levelled at this definition under the Directive still hold true to the definition in the 2003 Regulations.

A further issue which can be noted with both the definitions of 'technological measures' and what makes such measures 'effective' is that the definition of 'technological measures' specifically excludes computer programs from its ambit while the definition of 'effective' identifies encryption as an example of an effective technological measure. As noted earlier, encryption is largely based on computer programs. So while the definition of a technological measure excludes computer programs, the definition of an effective technological measure specifically refers to one. This could lead to tremendous uncertainty on this point.

d. Conclusion

It is clear from an analysis of the 2003 Regulations that the drafters of these provisions have managed to incorporate the provisions of the European Copyright Directive into UK

[530] S296 (1) (b) (i).
[531] S296ZF(2).

copyright legislation. The drafters of the 2003 Regulations have however failed to take into account the shortfalls of the Directive and seem to have blindly implemented article 6 without rectifying the issues inherent in that article. It is therefore submitted that the 2003 Regulations fail to build on the framework which the Directive provides and, as such, are riddled with ambiguities. Such a situation does not bode well for user rights. A failure by legislators to clearly define user rights and the limits of the powers of copyright owners in relation to the digital environment has shown itself to be one in which the courts tend to narrowly interpret anti-circumvention provisions. This type of interpretation inevitably favours copyright owners at the expense of users.

8. Conclusion

In this chapter, the origins of anti-circumvention legislation have been explored. The underlying purpose for the creation of this legislation was noted by authors such as Samuelson. She identified that the copyright grab which the digital era brought on resulted in lobbying by copyright industries for anti-circumvention legislation in order to allow them to protect the extended control they wished to exercise over their content. This extended control would come at the expense of consumer rights. The purpose of copyright law would need to shift from a balancing of the copyright owners' limited monopoly in exchange for certain usage rights by users to being based on a right by copyright holders to exploit all uses of their works.

These parties identified that, given the global nature of copyright content, lobbying for extended control would be useless unless anti-circumvention legislation was implemented on a global scale. In this vein the *WCT* and the *WPPT* were created. These Treaties identified the so-called 'access right' which they submitted was implicit in other rights of copyright owners and its mention in the Treaties merely represented a clarification of their rights. The parties recognised that if you could control access then you could in effect control usage of the work. The effect of this was that it allowed for the prevention of usage which the user would ordinarily be entitled to under copyright laws and as such the copyright owner could

exploit all uses of their works, even those which extend beyond the scope of their rights under copyright laws.

The two Treaties require member states to implement anti-circumvention legislation within their own countries. Examples of such legislation include the DMCA, the EUCD and the 2003 Regulations in the UK. While the specifics of these pieces of legislation differ somewhat, the overall tone is the same. By examining certain case law it is apparent that this legislation represents a sufficient smoke screen in which the courts are forced to shift their focus largely from the *quid quo pro* of copyright to circumvention. Therefore, decisions in this field largely favour copyright owners as they have changed the rules of the game. Users' rights technically still exist under copyright law, but anti-circumvention serves as a barrier which criminalises the access and usage of those rights. Therefore, the current incarnations of anti-circumvention legislation serves as a boon to user rights in the digital era.

Following this analysis, the next chapter aims to discuss anti-circumvention legislation in South Africa, specifically, whether or not South Africa should implement such legislation and, if so, the possible forms such legislation could take in order to best serve the purpose of copyright in balancing user and owner rights.

Chapter 5

Copyright in the Digital Environment and the Ramifications for Developing Nations: A South African Perspective

1. Introduction

The global nature of copyright content, as noted in chapter 4, requires the international adoption of measures to protect this content. These measures include DRM systems as well as anti-circumvention legislation which allow these systems to operate effectively by prohibiting any attempts to circumvent these measures. In order for these measures to operate effectively, the international adoption of these measures would require a relatively standard set of legislative principles in order to ensure the optimum protection of copyright content in the digital environment.

Completely preventing copyright infringement is an impossible dream which even the copyright industry does not buy into. The goal is rather to limit the infringement potential which the digital environment provides. The copyright industry identified that the means of achieving this goal would be through the use of DRM systems and the protection thereof through anti-circumvention legislation. A nation which failed to adopt certain basic anti-circumvention provisions, such as those laid out in the *WCT* and *WPPT* respectively, could emerge as a safe haven for piracy.

South Africa, through the Department of Trade and Industry, has signed both of these Treaties but has not yet ratified them. Some have argued that the failure to ratify these Treaties has resulted in copyright law in South Africa stagnating.[532] This stagnation, so the argument goes, has petrified our law as it stood in the 1990s with local artists being the ones to suffer. One must ask whether the failure to ratify these Treaties is as grave as it has been made out to be.

[532] "SA Copyright Law Under Fire" *Techcentral.co.za* 3 March 2010 http://www.techcentral.co.za/sa-copyright-law-under-fire/13185/ (accessed 4 March 2010).

This thesis has analysed the approaches adopted by various nations and pan-national bodies in implementing the protection measures laid down in the *WCT* and *WPPT*. These analyses serve to provide a backdrop to the issue of whether South Africa should adopt anti-circumvention provisions and, if so, the form which these provisions should take. This chapter will also discuss the implications of anti-circumvention provisions for user rights and the steps which could be taken in South Africa in order to provide greater protection for these rights than have been afforded in other countries. In order to truly understand the South African context, one needs to recognise its status as a developing African country and the importance of this will be also discussed.

2. Developing Nations and Copyright Laws

The rise of digital technology carries great potential for the development of developing nations. It allows for the dissemination of information relatively cheaply and more efficiently than in the analogue era. This is positive for developing nations in that one of the main keys to development is knowledge. This dissemination of knowledge is given greater credence when one considers that the purpose of copyright law is to promote the furtherance of the public knowledge. This is done, as explained in chapter 2, by recognising the dynamic tension which exists between the rights of owners and the rights of the public. The balance between these tensions is maintained by allowing copyright owners a limited monopoly over their work in exchange for certain usage rights being made available to the public. Pistorius notes that this balance has been upset by copyright works in digital form as copyright owners are able to limit the size of the public domain, because technology allows them to control access to works as well as demand payment for access and various uses of their works.[533] It is apparent that this is in complete contrast to the purpose of copyright. This total control is detrimental to developing nations such as South Africa.

[533] T Pistorius "Developing Countries and Copyright in the Information Age: The Functional Equivalent Implementation of the *WCT*" (2006) *Potchefstroom Electronic Law Journal* 10 http://www.puk.ac.za/opencms/export/PUK/html/fakulteite/regte/per/issues/2006_2__Pistorius_art.pdf (accessed 3 September 2010).

The arguments put forward by proponents of this total control, see Kruger and others in chapter 2 on this point, submit that exceptions to copyrights were merely present in the analogue era because of the inability of the system to allow for owners to charge for every conceivable use of their works. The submission that because the means exist to allow for owners to charge for every usage of their works that this should be done and is in fact the natural order of things, is absurd. This type of argument conflates the purpose of copyright with economic incentives only, and fails to recognise the public interest aspect of the works. The sort of total control which DRM systems and anti-circumvention legislation allows for has the potential to further entrench western dominance of global commerce. Nwauche submits that this total control over works by copyright owners is problematic for African countries, as Africa is a net consumer of intellectual property.[534] This means that poor countries are at the mercy of copyright owners with respect to access to information, as these parties can determine how their works can be used and at what price. The knock-on effect of this is that the dissemination of knowledge and the development of these nations is kept at bay by DRM systems and anti-circumvention provisions which limit information to those who can pay for it.[535]

The idea which is being alluded to above is that of the digital divide. In the age of digital technology – where information is valuable and highly prized – the distinction exists between those who have access to information and those who do not. The situation is almost cyclical in nature, as information allows for the creation and dissemination of further information, while not having access to information can lead to stagnation of the public knowledge. The problem with allowing copyright owners total control over their works is

[534] ES Nwauche "A Development Orientated Intellectual Property Regime for Africa" (2005) *Paper Presented at the General Assembly of the Council for Development of Social Science Research for Africa* http://www.codesria.org/IMG/pdf/nwauche.pdf (accessed 29 August 2010).

[535] See "Limitations and Exceptions to Copyright and Neighbouring Rights in the Digital Environment: An International Library Perspective" *International Federation of Library Associations and Institutions - Committee on Copyright and Other Legal Matters* (2004) http://archive.ifla.org/III/clm/p1/ilp.htm (accessed 8 June 2010) "Recent expanded use of technological protection measures (and the laws that protect them) and the emerging licensing environment are converging to shift the use of copyright materials to a pay per view environment, which limits access to those who can pay".

that it allows for the creation of an information elite and the further division between the 'haves' and the 'have-nots'.[536]

Indeed, the ability of stringent copyright laws to stifle development has been argued in a recent study. This study attributes Germany's rise as an industrial power to its lax copyright laws of the 19th century.[537] The researcher contrasts Germany and England during the same period and indentifies that publishers in England exploited their monopolies to the point where books were regarded as luxury items.[538] New works which were published in limited editions would often exceed the weekly wage of an educated worker. In contrast, published works in German were often plagiarised because of the lack of stringent copyright protection. Publishers were able to stay in business through the publication of different works aimed at different customers.[539] For example, the publishing of cheap paperback copies for the masses and special edition hardcovers for the wealthy.

It should be noted that the above is merely an example of the effect which stringent copyright laws, with very few if any limitations or exceptions thereto, can have on the public knowledge and the development of a nation. At this point it should be noted that what is being submitted is not that copyright laws should be abolished in their entirety, as authors deserve remuneration for their works. What is being submitted is that this remuneration should not be the overriding feature of copyright law and that the public interest be considered, as the purpose of copyright requires. The International Federation of Library Associations and Institutions Committee on Copyright and Other Legal Matters notes that this is especially so in the context of developing nations. They submit that "if there were no

[536] Indeed the G8 Digital Opportunities Task Force define the digital divide as reflecting "…broader socio-economic inequalities and can be characterized by insufficient infrastructure, high cost of access, inappropriate or weak policy regimes, inefficiencies in the provision of telecommunication networks and services, lack of locally created content, and uneven inability to derive economic and social benefits from information-intensive activities." Report of the Digital Opportunities Task Force "Digital Opportunities for All: Meeting the Challenge" 2001 http://www.g7.utoronto.ca/summit/2001genoa/dotforce1.html (accessed 3 September 2010).
[537] "No Copyright Law: The Real Reason for Germanys Industrial Expansion?" *SpiegelOnline* 18 August 2010 http://www.spiegel.de/international/zeitgeist/0,1518,710976,00.html (accessed 20 August 2010).
[538] "No Copyright Law: The Real Reason for Germanys Industrial Expansion?" *SpiegelOnline*.
[539] "No Copyright Law: The Real Reason for Germanys Industrial Expansion?" *SpiegelOnline*.

effective public interest exceptions, especially in the digital environment, this would lead to an even greater divide than already exists between the information rich and the information poor in both the developed and developing nations."[540]

a. The Dangers of the WCT for Developing Nations

The Commission on Intellectual Property Rights was established by the British government in order to determine how intellectual property rights could better serve poor and developing nations. The Commission, based in London, identifies that developing nations should not lightly consider implementing the *WCT*.[541] Where a developing nation, however, elects to implement the provisions of the *WCT,* they should avoid following the examples of the DMCA and the EUCD.[542] The approaches encapsulated in these pieces of legislation are inconsistent with a balanced approach to copyright regulation, as they carry the potential to seriously undermine the existing limitations and exceptions to copyright law in those countries.[543]

This means that a developing nation which elects to implement the provisions of the *WCT,* should do so according to the specific requirements of their own country.[544] Okediji submits that "developing countries that have joined the *WCT* must carefully consider ways to

[540] "Limitations and Exceptions to Copyright and Neighbouring Rights in the Digital Environment: An International Library Perspective" *International Federation of Library Associations and Institutions - Committee on Copyright and Other Legal Matters*.

[541] Commission on Intellectual Property Rights "Integrating Intellectual Property Rights and Development Policy" http://www.iprcommission.org/papers/pdfs/final_report/CIPR_Exec_Sumfinal.pdf (accessed 1 September 2010). See further pg 20 where it is noted on the effectiveness of copyright law generally to achieve its purpose in developing nations that "There are examples of developing countries, which have benefited from copyright protection. The Indian software and film industry are good examples. But other examples are hard to identify.

[542] See Van Coppenhagen who notes "where article 11 of the *WCT* tiptoes where it might legitimately tread, however, the anti-circumvention protections of the European Union and the United States may be tramping roughshod over copyright limitations and exceptions." 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 Measures" (2002) 119 *South African Journal of Law* 429 at 442.

[543] RL Okediji "The International Copyright System: Limitations, Exceptions and Public Interest Considerations for Developing Nations" (2006) *United Nations Conference on Trade and Development* 32 http://www.unctad.org/en/docs/iteipc200610_en.pdf (accessed 30 August 2010).

[544] Nwauche 2005 *Paper Presented at the General Assembly of the Council for Development of Social Science Research for Africa*.

implement anti-circumvention provisions to ensure that the considerable potential of information technologies to facilitate use, access, and distribution of knowledge goods will not be unduly constrained."[545]

A problem emerges, however, when nations are required to tailor the provisions of the *WCT* to their individual contexts, as they seem to follow in the footsteps of the DMCA and the EUCD regardless of being cautioned against such an approach.

i. The WCT and National Implementation – Lessons from up North

Pistorious notes that the wording of article 11 of the *WCT* strikes a fine balance in which the rights of both copyright owners and copyright users are catered for.[546] These provisions, however, merely serve as the framework in which individual nations may construct their own legislation. Where the construction of this legislation is done in accordance with purely economic principles, and ignores the public interest concerns which underscore copyright legislation, then the legislation is likely to reflect the economic interests of copyright owners only. Legislation concerning copyright content which is purely informed by such principles may exceed the minimum guidelines laid out in article 11 and as such the delicate balance which it creates is upset. It has been argued that the reason for this imbalance is largely the result of the provisions extending beyond those outlined by article 11 of the *WCT*.

The provisions of article 11 focus on acts of circumvention. In other words, the provisions of this article are said not to extend to devices which allow for circumvention. Some authors note that in order to effectively protect the rights of copyright owners, anti-circumvention legislation should include prohibitions against devices which facilitate circumvention of technological protection measures.[547] This submission is based on the private manner in

[545] Okediji 2005 *UNCTAD* 32.
[546] Pistorius 2006 *PER* 3.
[547] Van Coppenhagen 2002 *SALJ* 442. See also DS Marks and BH Turnbull "Technical Protection Measures: The Intersection of Technology, Law and Commercial Licences" (2000) *European Intellectual Property Review* 198.

which acts of circumvention are often undertaken and the reliance of the average user on devices to circumvent technological protection measures. By only prohibiting the conduct of circumvention, a heavy burden is placed on the copyright owner to monitor the private conduct of users of their works. This immediately raises issues of the right to privacy of users of copyright content. If devices which allow for circumvention are prohibited in anti-circumvention legislation, then this burden is removed from the copyright owner.

The prohibition against anti-circumvention devices, however, carries its own set of problems. The main issue is that the prohibition prevents legitimate users of copyright content from making use of that content as their rights under copyright law allow for. In implementing legislation which prohibits the use of circumvention devices, the legislator is valuing the rights of the copyright owner over those of the user. This type of thinking is encapsulated in Van Coppenhagen's article where she notes that "simply because technology makes unauthorised reproduction and distribution and other uses of copyrighted works possible, however, does not mean that this should be condoned."[548] The author fails to note, however, that the converse is also true.[549]

Thus, the tailoring of the provisions for each nation's context ensures that the maintenance of the balance established in article 11, which is required by article 10 of the *WCT*, is not possible where the creation legislation of individual nations is framed purely by the concerns of copyright owners' rights. The justification for this submission can be seen in various examples of the implementation of anti-circumvention provisions in other developing nations.

[548] Van Coppenhagen 2002 *SALJ* 432.
[549] I.e. Simply because technology makes it possible for copyright owners to exercise total control over access, and vicariously usage, of their works does not mean that this should be condoned.

ii. Examples of Implementation in Developing Nations

An example can be seen when considering several developing nations which have amended their copyright legislation in order to accommodate the provisions of the *WCT*.[550] Botswana serves as an example of such a country. In 2005 Botswana amended its copyright legislation to incorporate the provisions of the *WCT*.[551] The implementation of these provisions protects technological protection measures and provides for effective remedies where this technology is circumvented. Other examples include certain Asian Pacific countries[552] which amended their legislation to include anti-circumvention provisions. The group "Consumer International" carried out a study in which it was noted that when implementing anti-circumvention provisions into national legislation, legislators should ensure that these provisions are linked to copyright infringement or without the inclusion of limitations.[553] The reason for these two recommendations is to allow for the protection of user rights against overly broad anti-circumvention legislation. The study further noted that out of those Asian Pacific countries which implemented anti-circumvention provisions, none of them linked the provisions with copyright infringement.[554]

The examples above, like most of the amendments made in various other developed and developing nations, fail to incorporate any real limitations or exceptions to the rights of copyright owners. This is indicative of the over-reaching nature which copyright owners' rights have acquired in the digital environment. Furthermore, the manner in which these nations have implemented the provisions of the *WCT* grants copyright owners much greater protection than the Treaty requires. The extension of these rights comes at the expense of user rights. In other words, the over-reaching effect of the implementation of the provisions of the *WCT* has lead to the erosion of the rights of users. This is because it prevents the circumvention of technological protection in order to access content in a manner which the

[550] Pistorius 2006 *PER* 6.
[551] See Botswana Copyright and Neighbouring Rights Act 8 of 2000.
[552] These include Bhutan, Cambodia, China, Indonesia, Malaysia, and Papua New Guinea.
[553] *Consumer International* "Copyright and Access to Knowledge – Policy Recommendations on Flexibilities in Copyright Law" (2006) http://www.cr-international.com/2006_Consumer-International_Copyright_and_Access_to_Knowledge_16.2..pdf (accessed 1 September 2010).
[554] *Consumer International* "Copyright and Access to Knowledge – Policy Recommendations on Flexibilities in Copyright Law".

users were entitled to under copyright.[555] Conroy identifies that international experience has unfortunately shown that copyright limitations and exceptions have not been reworked in the digital environment to ensure that user rights are not curtailed.[556]

Where to from here? If the implementation of the *WCT* has lead to the diminishment of user rights in both developed and developing nations, then how should signatories to the WIPO treaties go about implementing the provisions of the *WCT* in their national legislation if they wish to continue to protect user rights in their country?

iii. Article 10 - A Tailored Suit or a Straightjacket?

A signatory to the *WCT,* wishing to implement its provisions into their own national legislation, should take cognisance of article 10 of the *WCT*. This article allows for signatories to the Treaty to put in place limitations and exceptions to the other provisions of the Treaty. It could be argued that this article provides the means through which a nation could protect user rights and return the balance which copyright law requires. The application of article 10, in the implementation of various national legislative endeavours, seems to either be totally absent or merely being paid lip service, as the provisions do not serve to protect the rights of users as they should do.[557] The question which needs to be asked is: Why?

There are numerous problems which can be indentified when considering article 10. The first of these problems is that the provisions of article 10 can be seen as incorporating the three-step test relating to limitations and exceptions to the rights of copyright owners.[558] In other words, the three-step test relates to the protection of users' rights as they appear

[555] Pistorius 2006 *PER* 6.
[556] M Conroy *A Comparative Study of Technological Protection Measures in Copyright Law* (LLD thesis, UNISA, 2006) 227 http://uir.unisa.ac.za/bitstream/10500/2217/1/thesis.pdf (accessed 9 September 2010).
[557] See the DMCA S1201.
[558] This three-step test is present in various intellectual property treaties including the Berne Convention, the TRIP'S Agreement, the *WCT* and the *WPPT*.

under the Berne Convention. Okediji argues that the limitations and exceptions, as they exist under the Berne Convention, are insufficient to meet the bulk access needs of developing countries. She further argues that these limitations are necessarily broad and vague in order to allow nations to tailor them to their specific context, however, these limitations and exceptions are often incorporated in a wholesale manner by developing nations, without tailoring them to the specific circumstances of the particular nation. This only serves to inhibit the access to information required by these nations.[559]

Another problem is that the Berne Convention relates to the rights of both copyright owners and copyright users, but its basis lies in the analogue era in which the tangible embodiments of works were the primary focus of copyright law. In order to give effect to the rights of users, a country is required to create and incorporate limitations and exceptions to the rights of owners, in order to give effect to these user rights. The way in which the Convention deals with rights, especially user rights, is that it makes reference to these rights with regard to certain *uses* of a work and not to *access* thereof. The problem, which has been identified on numerous occasions in this thesis, is that technological protection measures effectively operate by controlling access.

The difficulties which result from this application can be summarised as follows. Anti-circumvention provisions prevent the circumvention of technological protection measures. This creates a paradoxical situation in which the user is given rights, in terms of the Berne Convention and national implementation thereof, which they are prevented from using because of further legislation, in other words the *WCT* and national implementation thereof, which prevents the user from being able to make use of those rights. The ramifications which these alterations have are, thus, detrimental to the rights of users as they stand under the Berne Convention.

[559] Okediji 2005 *UNCTAD* 30-31.

The question which then arises is whether article 10 serves the purpose which it was designed to fulfil. The *WCT's* reliance on the three-step test appears to be problematic for developing nations. This is especially so as the three-step test under the Berne Convention, and various other international agreements, dealt with content in an analogue environment and not a digital one. The shift in focus from use to access, which has become a key feature of the digital era, has resulted in uncertainty and an inability to convert the vague provisions of the three-step test into concrete limitations and exceptions which can be practically applied in the digital environment. Thus, it could be argued that the *WCT* fails to properly provide protection for the rights of users.

Despite the failure noted above, it could be argued that article 10 does provide one lifeline for the protection of user rights. The article makes reference to "certain special cases" in which signatories thereto may grant limitations and exceptions. Can this proviso go so far as to preserve user rights in the digital environment? In order to properly determine this, one needs to take note of the provisions of article 10.

Article 10 states that

> "(1) Contracting Parties may, in their national legislation, provide for limitations of or exceptions to the rights granted to 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.
>
> (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."

While subsections 1 and 2 make reference to the right of a signatory to the Treaty to make certain limitations and exceptions in special cases, these rights may not be exercised where they would unreasonably prejudice the legitimate interests of the author or conflict with the normal exploitation of the work. It was noted earlier in this chapter, and indeed elsewhere in this thesis, that the effect which the *WCT* has had on copyright is to shift the purpose of copyright. This purpose has shifted from maintaining a balance between user rights and the rights of copyright owners, which are authorised by the limited monopoly that copyright provides, to the economic imperatives of copyright owners and the maintenance of the author's incentive to create.[560] This shift has been characterised by a reduction in the rights of consumers of digital copyright content.

The shift, while already undermining user rights, could further be used to diminish these rights by validating claims of copyright owners. This is because copyright owners could argue, as has been done by various authors,[561] that the use of DRM systems in relation to digital copyright content represents the normal exploitation of the work in the digital context. Furthermore, the author's legitimate interests would be unreasonably prejudiced by not being able to make use of the business model which the digital environment allows for. This is premised on the idea that user rights were only present in copyright law in the analogue era because the mechanisms to allow for the business model which copyright owners desired were not present. In other words, because digital technology creates a situation in which it is possible for every conceivable use of a work to be charged for, and that this would have been the *status quo* in the analogue era had it been possible, that the limitations and exceptions which constitute user rights under copyright law are no longer required because a pricing scheme exists in which every user and their desired use can be included.

[560] See Chapter 2 where the validity of the incentive argument is discussed in depth.
[561] See Chapter 4 and the comments of Kruger noted therein.

It could be argued, therefore, that any attempt to incorporate limitations or exceptions which seriously aim to protect the rights of users under the provisions of article 10, could not be justified by this article. Indeed they would be contrary to those very same provisions.

When dealing with the *WCT* it is important to remember its origins, as discussed in depth in chapter 2 of this thesis. It is, in short, a Treaty which arose as the result lobbying by one of the world's major producers of copyright content. Conroy notes that the US and the EU have adopted an aggressive approach to the protection of copyright by entering into bilateral trade agreements with various nations.[562] These agreements establish a new minimum standard of protection which is higher than that which emerges out of multilateral agreements, such as the *WCT*.

The author notes that the interaction between the *TRIPS* agreement and members of the World Trade Organization[563] creates a situation in which a nation is required to provide the same protection to all other member nations equally and unconditionally.[564] In other words, the interaction between the *TRIPS*, the *WCT,* and the standards established in bilateral trade agreements means that the higher standards established in certain trade agreements should then be afforded to the nationals of all other *WTO* member states.[565] The author notes that the danger with this process is that these higher standards then become the minimum standards.[566]

[562] Conroy 2006 *Thesis* 225.
[563] Hereinafter referred to as the "WTO".
[564] Conroy 2006 *Thesis* 225-226.
[565] Conroy 2006 *Thesis* 225-226.
[566] Conroy 2006 *Thesis* 225-226.

b. Protection of User Rights in Developing Nations

The increasing growth of the digital divide represents a danger to the development of knowledge societies in developing nations, especially in the African context.[567] The provisions of the *WCT*, while providing for an effective means of protecting the rights of copyright owners, fail to provide the same level of protection to the rights of users.[568] In a globalised environment, which is becoming more and more dependent on digital technology as a means of mediating not only societal interactions but also the dissemination of knowledge, how can the digital 'have-nots' prevent themselves from falling on the wrong side of the digital divide?

c. Limiting the Growth of the Digital Divide

The right of an author of intellectual property is subject to protection under the Universal Declaration of Human Rights.[569] The nature of this right precipitates that it be linked to various other rights such as freedom of expression, development and education.[570] The rights to development and education are linked as both require knowledge in order to be realised. Various international development programs, committees, agendas, treaties and other mechanisms for global back-patting identify that when considering the rights of users in the digital environment in developing nations, the right of access to information should be of paramount importance.[571] Thus, the interests of developing nations would be well

[567] Nwauche 2005 *Paper Presented at the General Assembly of the Council for Development of Social Science Research for Africa*. Nwauche defines a knowledge society as "…one in which the diffusion, production and application of knowledge are at their utmost and form the driving force for society [he continues] all components of a knowledge society depend critically on information, which is organised and represented in knowledge products that become commodities by virtue of copyright protection" (2005) *Journal of World Intellectual Property* 361 at 363.

[568] See Okediji who notes that the situation is ironic when one considers that the "[*WCT*] has a membership comprising mainly of developing countries with limited Internet penetration rates and significant levels of illiteracy and poverty." 2005 *UNCTAD* 32.

[569]The Universal Declaration of Human Rights - Article 27(2) states "Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author."

[570] Conroy 2006 *Thesis* 227.

[571] See for example WIPO Development Agenda – 45 Adopted Recommendations Under the WIPO Development Agenda – Cluster C: Technology Transfer, Information and Communication Technologies (ICT) and Access to Knowledge http://www.wipo.int/export/sites/www/ip-development/en/agenda/recommendations.pdf (accessed 10 September 2010). See also 'A2K Draft Treaty'

served by basing their intellectual property regimes on the right of access to information as it would assist in the continued development of that nation.

On the role of access to information as a foundation for the protection of user rights in developing countries in the digital environment, two things should be noted. Firstly, it is not being argued that authors should not be entitled to benefit from their works, but rather that the interests of distributors muddy the waters of this debate, as it is their interests which anti-circumvention provisions and DRM systems largely serve to protect. Secondly, it is important to note that these regimes should relate to digitised content only. This form of dissemination has a greater potential for user-based dissemination over the prohibitive costs of analogue distribution methods, which are primarily dependent on distributors independent of authors and users.[572] As chapter 2 of this thesis submits, the greatly reduced investment from distributors which the digital environment allows for, provides a mechanism through which users can internalise the costs of distribution while allowing for the author of a work to derive real benefits from their monopoly, rather than allowing these benefits to accrue to distributors.

With the above in mind, one can begin to determine what practical measures could be implemented in developing nations, premised on the right of access to information, in order to provide user rights with greater protection than they have generally been afforded in the digital environment.

Article 3.6 – Digital Rights Management and Measures Regarding Circumvention of Technological Protection Measures http://www.cptech.org/a2k/a2k_treaty_may9.pdf (accessed 10 September 2010) as well as the UK Commission on Intellectual Property www.cptech.org/ip/wipo/uk-iim.doc (accessed 10 September 2010). See further World Summit on the Information Society – First Phase Document: Declaration of Principles and Plan of Action A.10 – 18 http://www.itu.int/dms_pub/itu-s/md/03/wsis/doc/S03-WSIS-DOC-0004!!PDF-E.pdf (accessed 10 September 2010).

[572] See Pistorius who notes that the benefits which the digital environment provides, with respect to the dissemination of information for educational purposes, are not being fully realised in developing African nations due to "…the practices of large publishing and content houses, supported by international and national intellectual property law…" 2006 *PER* 14.

3 Stagnation of the Law and the Rights of Artists in South Africa

In a recent article, Dr Owen Dean stated that "SA is failing to keep up with international copyright treaties due to government 'ineptitude and negligence' and, as a result of this, the country's musicians, filmmakers and other creators of content do not enjoy the same protections as their peers in other countries."[573] Others identify that, given the nature of digital technology and the global stage on which it operates, South Africa's failure to implement the provisions of the *WCT* creates an environment which is less attractive to investors and purchasers of intellectual property.[574] This situation creates further problems as local employment and international trade are then affected.[575]

It is on the basis of some of the concerns noted above that Dean identifies that South Africa has an obligation to update its law and adopt anti-circumvention provisions because of its obligations under the Berne Convention. These submissions are correct but, it is respectfully submitted, they do not represent the entire issue – the situation is more nuanced than he makes out.

a. Does Anti-Circumvention Legislation Achieve its Goals?

The issue which can be taken up with Dean's submission is that the international adoption of anti-circumvention legislation has not been shown to reduce piracy in any significant way. The measures adopted to protect digital content fail to achieve the goals of protecting the rights of artists in that their intended effect has not been achieved, i.e. they fail to offer any real reduction in piracy levels. Recently, at the Technology Policy Institute's Aspen Forum, the groups which spearheaded the creation of anti-circumvention legislation identified the inefficacies of legislation of this type.

[573] "SA Copyright Law Under Fire" *Techcentral.co.za*.
[574] Van Coppenhagen 2002 *SALJ* 429.
[575] Van Coppenhagen 2002 *SALJ* 430.

It was stated that "the DMCA isn't working for content people at all".[576] These groups argue that Internet Service Providers (ISPs) and search engines should be made liable for any failure to remove content which infringes copyright which has been posted by their company.[577] The current situation is that these companies cannot be held liable so long as they have procedures in place for the removal of infringing content once notified by the owner of that content. Put differently, the copyright industry is now lobbying for legislation or, absent this, agreements with these so-called intermediaries which require them to police copyright infringement and hold them liable to copyright owners where they fail to do so. This sort of argument is akin to holding manufacturers of motor vehicles liable for the speeding fines attributed to the drivers of their cars, as they could have built mechanisms into the car which prevented them from exceeding certain speeds. It seems completely inappropriate to argue that intermediaries should be required to police copyright infringement because of the inability of copyright owners to effectively do so.

In other words, the argument by the content industry has shifted from requiring that anti-circumvention legislation be adopted globally, in order to protect their content, to arguing that this approach is not enough on its own. It could therefore be argued that this type of legislation, of which the DMCA represents one of its strictest implementations, fails to achieve its intended purpose. It could be argued, however, that the purpose of such anti-circumvention is not limited to the protection of digital copyright content, but has other functions which the implementation of such legislation would fulfil.

In this vein, Van Coppenhagen argues that the importance of the provisions of the *WCT* lie in the maintenance of incentives for creators in the digital environment. If incentives to create

[576] "RIAA: U.S. Copyright law isn't working" CnetNews.com 23 August 2010 http://news.cnet.com/8301-13578_3-20014468-38.html (accessed 1 September 2010). C Sherman of the RIAA explains that "You cannot monitor all the infringements on the Internet. It's simply not possible. We don't have the ability to search all the places the infringing content appears."

[577] For an example of such legislation see the Digital Economy Act 2010 in the UK which has recently been enacted.

are maintained, then the purpose of copyright will be served as these creations will promote the public interest by ensuring the progress of the public welfare.[578]

Van Coppenhagen's submission that the implementation of the *WCT* provisions in South Africa will sustain the incentives of creators is debatable. If one refers to chapter 2 of this thesis, it was noted that the incentives maintained by copyright and especially those arising from the implementation of anti-circumvention legislation, such as that proposed by the *WCT*, fail to provide any real incentive to creators and mainly serve as a means of ensuring the livelihood of distributors. Furthermore, the author fails to consider the effect which technological protection measures and anti-circumvention legislation has on the rights of users. Copyright law's success in improving public knowledge is hinged on the balance being maintained between the rights of copyright owners and users thereof. The implementation of anti-circumvention provisions serves to shift that balance greatly in favour of copyright owners. The argument put forward by the author in this regard is thus, it is respectfully submitted, incorrect. The question which must then be asked is: Should South Africa be required to enter into the often lengthy process of implementing such provisions, despite the noted failures of such provisions in other countries?

With regard to the South African context, Dean acknowledges the ineffectiveness of anti-circumvention legislation and DRM systems, but submits that South Africa should tow the line of the major nations despite the ineffectual nature of these measures.[579] It seems strange to promote the idea of implementing such legislation when it has been shown that such legislation is ineffective in countries which have greater and more diverse digital environments than our own. It requires that South African legislation inherit problems which have already been evidenced with such protection measures in order to be up-to-date. The main reason for doing so, according to Dean, is to protect the rights of local

[578] Van Coppenhagen 2002 *SALJ* 432.
[579] "SA Copyright Law Under Fire" *Techcentral.co.za*.

artists. This of course requires that these provisions provide greater protection for artists, not only in theory but in practice.

b. Do DRM Systems and Anti-Circumvention Provisions Protect Artists?

The short answer to the question posed in this heading is no. The position of the creation incentive in the digital environment has been discussed in great detail in chapter 2 of this thesis.[580] In that chapter, it was noted that artists at various levels rely on monetary revenue gained through live performances and the emergence of secondary markets in order to survive, rather than on royalties, as few performers actually benefit from these royalties. The protection of works in digital forms through DRM systems and anti-circumvention provisions largely serve to protect the interests of distributors rather than the artists themselves. It is submitted that this situation would be no different for local artists, especially in a developing nation such as South Africa.

Van Coppenhagen submits that "for a developing country such as South Africa, which finds itself in a global information economy, the core of which is creativity and its dissemination, intellectual property protection, and particularly copyright protection, is vital."[581] It is respectfully submitted that this argument fails to take into account the status of most developing nations, including South Africa, as being net consumers of intellectual property.[582]

As pointed out earlier, there is a strong link between the use of intellectual property, such as copyright, and the improvement of public knowledge. The provisions of the *WCT* and technological protection measures, however, firmly place control over all conceivable uses

[580] See Chapter 2 Section 6. iii.
[581] Van Coppenhagen 2002 *SALJ* 430.
[582] Nwauche 2005 *Paper Presented at the General Assembly of the Council for Development of Social Science Research for Africa*.

of copyright in the hands of copyright owners. Thus Van Coppenhagen's submission, while correct, requires the implementation of legislation which will further entrench South Africa's dependency on imported intellectual property. The dangers of this situation, as identified above, are that the public knowledge and the development of a nation are at the mercy of copyright owners who are intent on charging for every conceivable use of their works.[583] This ultimately means that money, which developing nations could be spending on other much needed areas of development, is spent on the whimsical pricing determined by distributors for uses which a user would ordinarily have a right to under copyright law.

Despite the criticisms noted above, one cannot merely argue that anti-circumvention legislation fails to achieve its purpose and then leave the argument at that. This type of approach would represent an analysis of the situation in a purely academic manner, as the situation is then only discussed in a theoretical vacuum without contributing anything real to the debate. In order to avoid this type of analysis and, in order to discuss these issues in any sort of practical sense, one is still required to consider where South Africa stands with regard to the protection of copyright content in the digital environment.

c. *The Electronic Communications and Transactions Act*

It has been argued that the anti-circumvention provisions of the *WCT*, although not adopted in the specific context of copyright in South Africa, have been adopted in South African law under the *Electronic Communications and Transactions Act*.[584] Chapter XIII of the Act deals with the issue of cyber crime and implements provisions which prohibit the unauthorised access to, interception of or interference with data.[585] The provisions of this section refer

[583] See footnote 5.
[584] Act 25 of 2002 (hereinafter the ECTA). See Pistorius 2006 *PER* 7.
[585] Section 86 States:
(1) Subject to the Interception and Monitoring Prohibition Act, 1992 (Act 127 of 1992), a person who intentionally accesses or intercepts any data without authority or permission to do so, is guilty of an offence.
(2) A person who intentionally and without authority to do so, interferes with data in a way which causes such data to be modified, destroyed or otherwise rendered ineffective, is guilty of an offence.

specifically to 'data' which the Act defines as "electronic representations of information in any form".[586] This definition is wide enough to include within its scope copyright works in various digital forms, including E-books as well as music in various digital formats.

i. The Provisions – Similarities and Differences with other Jurisdictions

The provisions of section 86 incorporate prohibitions against acts of circumvention, s86 (1), as well as devices which facilitate such circumvention and the use of these devices, s86 (3) and (4) respectively. These provisions generally reflect the approach adopted under the DMCA, as they prohibit both acts of circumvention as well as tools which facilitate such circumvention. The prohibition against acts of circumvention, like the DMCA, are limited to access controls, while the prohibition against devices which circumvent include both access and copy controls. As a result of these similarities to the DMCA, one would expect these provisions to be subject to similar kinds of criticisms as those levelled at the DMCA.[587]

Some noteworthy distinctions exist between the ECTA and other anti-circumvention legislation which has been discussed. Firstly, the ECTA requires that intent be present for the commission of an offence. This can be distinguished from the DMCA which imposes strict liability,[588] and the EUCD which requires either intent or negligence as a basis of

(3) A person who unlawfully produces, sells, offers to sell, procures for use, designs, adapts for use, distributes or possesses any device, including a computer program or a component, which is designed primarily to overcome security measures for the protection of data, or performs any of those acts with regard to a password, access code or any other similar kind of data with the intent to unlawfully utilise such item to contravene this section, is guilty of an offence.
(4) A person who utilises any device or computer program mentioned in subsection (3) in order to unlawfully overcome security measures designed to protect such data or access thereto, is guilty of an offence.
(5) A person who commits any act described in this section with the intent to interfere with access to an information system so as to constitute a denial, including a partial denial, of service to legitimate users is guilty of an offence.

[586] Section 1.
[587] See chapter 4 for examples of such criticisms.
[588] S1201 (a) (1)(A) - No person shall circumvent a technological measure that effectively controls access to a work protected under this title.

fault.[589] Secondly, the ECTA specifically includes computer programs under the ambit of a device used for circumvention. This differs from the implementation of the EUCD in the UK in which the specific exclusion of computer programs from the ambit of circumvention devices was recognised as having the potential for creating two different standards of protection.[590] While the ECTA avoids some of the pitfalls inherent in anti-circumvention legislation, as it was implemented in other countries, it is not without its faults.

ii. Criticisms

Certain criticisms can be noted when one analyses the provisions of s86 of the Act. A general criticism relates specifically to the definition of the term 'access'. Section 85 of the Act defines access as including

> "actions of a person who, after taking note of any data, becomes aware of the fact that he or she is not authorised to access that data and still continues to access that data."

The first issue which can be taken up with this definition is that the Act defines what constitutes access by referring to 'access' in that definition.[591] There access is defined by way of reference to access. The definition is thus circular in nature. Secondly, the definition does not properly identify when a party would fall foul of its prohibitions. It fails to identify at what stage a party must become aware of the fact that their access is unauthorised but continues to access that data.[592] Therefore, this section fails to properly define an integral term on which the anti-circumventions provisions of the Act rests and, as such, is of little use until these details are clarified through greater inquiry by a court.

[589] Article 6 (1) - Member States shall provide adequate legal protection against the circumvention of any effective technological measures, which the person concerned *carries out in the knowledge*, or with *reasonable grounds to know*, that he or she is pursuing that objective (*emphasis added*).
[590] See s296ZF Copyright, Designs and Patents Act of 1988 (UK).
[591] Pistorius 2006 *PER* 7.
[592] Pistorius 2006 *PER* 7.

The Act, unlike other anti-circumvention legislation, avoids the criticism of being computer law masquerading as copyright law.[593] While the provisions of the Act are broad enough to incorporate digital copyright works under its ambit, the issues which plague anti-circumvention legislation in other countries are still of relevance to these provisions. The main criticism is that concerning the protection of user rights under anti-circumvention provisions. Although the Act does not proclaim itself to be copyright law, it could be seen as constituting so-called 'para-copyright' law. As such, it still has far reaching implications for the use of copyright content in the digital environment by South African consumers.

The fundamental question which remains to be answered is whether the circumvention of a security measure by a person attempting to make use of particular content, in terms of certain user rights available to them under copyright law, would constitute a contravention of the provisions of s86. In other words, would a user, who has a legitimate right of fair dealing in particular digital copyright content, be able to circumvent protection measures preventing such access without being liable for the commission of an offence under the provisions of the Act?

iii. User Rights Under the ECTA

Section 86(1) of the Act stipulates that 'access', as defined in s85, must be carried out without authority or permission to do so. Would one's right to fair dealing constitute authority or permission and, as such, allow a party to escape such liability? This question is not an easy one to answer in the absence of a judicial ruling. It has been argued that because the ECTA is legislation governing an area of IT law, that this means it is too far removed from the Copyright Act for the rights of fair dealing to constitute sufficient 'authority or permission'.[594] Conroy argues that South African law is far stricter than the

[593] See generally T Gillespie "Copyright and Commerce: The DMCA, Trusted Systems, and the Stabilization of Distribution" 2004 *The Information Society* 239.
[594] Conroy 2006 *Thesis* 235.

provisions of either the DMCA or the EUCD. She argues that the only means of ensuring that user rights are protected, is through a Constitutional challenge.[595] It is respectfully submitted that this approach is perhaps 'jumping the gun', as the Constitution should only be used to protect rights where the legislation enacted to give effect to those general rights, which the Constitution contains, fail to do so. It is submitted, as such, that the use of a Constitutional challenge is somewhat premature.

It could be argued that the nature of copyright law in the digital environment necessitates a close interaction between copyright and the digital forms in which it appears. Any reference to an author's 'authority or permission', where the data concerned relates to copyrighted material, would necessitate a consideration of whether the author has either granted a licence for such use or whether a particular use had been authorised. In terms of copyright law, as noted previously, the author's rights are limited by certain exceptions. These limitations, as such, could constitute a form of 'authority' in terms of which the user's action could be said to be authorised and, as such, the rights of users would be maintained while copyright owners would be prevented from over-reaching. Again, this is an issue which can only be clarified through judicial intervention.[596]

In the absence of any judicial clarification on these issues, other practical measures which have been proposed and identified as possible measures should be explored, which could effectively maintain the balance between owner and user rights which copyright requires, in order to successfully fulfil its purpose.

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[595] Conroy 2006 *Thesis* 235. The author notes "Under certain circumstances, the provisions of section 86 of the ECTA could curtail users' privileges in such a way that would impact on their rights of freedom of expression, education and access to information."

[596] See *African Copyright and Access to Knowledge Project* (*ACA2K*) where it is noted "This protection of technological protection measures is remarkably comprehensive and ultimately even exceeds the protection required by the WIPO Internet Treaties and granted in most other countries. Effectively, such blanket protection of rights-holders technological protection measures can have the effect of undermining existing and well-established copyright exceptions and limitations if such permitted uses are prohibited through technological protection measures." *ACA2K* "Country Report – South Africa" (2009) http://www.aca2k.org/attachments/154_ACA2K%20South%20Africa%20CR.pdf (accessed 15 August 2010).

4. Practical Measures for Maintaining Balance

The maintenance of this balance has been the subject of much debate. The issues are divergent and include concerns over whether or not this balance is being maintained in the digital environment. The extent of this debate has received much consideration throughout this thesis, with both sides of the argument being discussed. It is submitted that sufficient evidence has been produced which supports the submission that this balance is not being properly maintained in the digital environment. This section aims to identify and discuss some of the varied practical measures which have been proposed to alleviate the degradation of user rights in the digital context, while maintaining the balance which copyright requires. The approaches identified are largely those applicable to developing countries as this is the context in which the maintenance of the copyright balance in South Africa needs to be understood.

a. *The Functional-Equivalent Approach*

The first approach to be discussed is the 'functional-equivalent approach'. The differing nature of copyright content in the analogue and digital eras is problematic in that the way in which works present themselves, operate and are distributed in these environments, are not identical.[597] Pistorius identifies that these differences require that the imposition of legislation, designed to extend the principles of copyright applicable in a paper-based environment into the digital environment, should not undertake a direct importation of those principles by attempting to identify and import analogous practices.[598] The approach, the author submits, is better served by focusing on the objectives which specific copyright provisions in the analogue era aimed at achieving, and transplanting these objectives into the digital context.[599] In this way, the practical problems which arise from trying to identify and transpose analogous practices into an environment which operates differently to the paper-based environment are avoided.

[597] See chapter 2 for an in-depth discussion of these differences.
[598] Pistorius 2006 *PER* 14-15.
[599] Pistorius 2006 *PER* 15.

Pistorius submits that "the rights of users and owners should be functionally equivalent irrespective of the media of embodiment."[600] Certain incongruence arises as a result of attempting to directly import legislation applicable in the analogue era into the digital environment. This type of legislation was not drafted to deal with the kinds of situations and media present in the digital environment. It is on this basis that the 'functional-equivalent approach' is identified as a possible way forward. What is this approach and what does it entail?

The approach emerged from the 'Guide to Enactment'[601] which was published by the United Nations Commission on International Trade Law.[602] The guide was created in order to help alleviate the problems which were created by electronic commerce and the application of legislation which had been drafted for application in paper-based commerce.[603] The means of alleviating these problems, proposed by the Guide, is to identify the objective which underlies a provision relating to paper-based forms. This objective relates to the purpose of the provision in its paper-based form. Once this purpose has been indentified, one can identify the requirements which the paper-based form needs to meet in order to obtain legal recognition and/or protection. From this, one can then determine the threshold which electronic communications, fulfilling the same purpose as the paper-based provision, would be required to meet, in order to obtain the equivalent legal recognition of the paper-based form. On this point, section 1 (E) of the Guide notes:

> This process "singles out basic functions of paper-based form requirements, with a view to providing criteria which, once they are met by data messages, enable such

[600] Pistorius 2006 *PER* 18.
[601] *UNCITRAL* Model Law on Electronic Commerce 1996 with additional a 5 *bis* as adopted 1998 (General Assembly Resolution 51/162 of 16 December 1996) http://www.uncitral.org/pdf/english/texts/electcom/05-89450_Ebook.pdf (accessed 10 September 2010).
[602] Hereinafter "*UNCITRAL*".
[603] Pistorius notes that the uncertainty which electronic commerce created was not that the legislation required pieces of paper and thus the electronic alternatives where excluded but rather, that legislation had been written in an analogue era which did not contemplate technologies which would replace "documents in 'writing' with email messages, or signatures with encrypted data blocks." 2006 *PER* 15.

data messages to enjoy the same level of legal recognition as corresponding paper documents performing the same function."[604]

This approach provided a means through which legislation could adapt to new technologies and scenarios which that technology created. This was done by providing a standard means through which the purpose of a legislative provision could be interpreted. With a standardised approach, the purpose for a provision would be maintained when interpreting it in a digital context. The result of this process was that the effect of digital technology on commerce, although not having been considered when certain legislation had been drafted, was incorporated into the law. This served to limit the uncertainty which new technologies created in this environment by clarifying the application of the law.

The drafters of the Guide were quick to identify the potential of new technologies, as they were not only able to perform the equivalent function of paper-based equivalents, but they also allowed for greater degrees of security, reliability and efficiency. While identifying these possibilities, the Guide also states that the use of the functional equivalent approach, in effect the use of electronic commerce, should not come at the expense of users of electronic commerce.[605]

The characteristics embodied in this approach, functional equivalence and technological neutrality, are seen as two of the key principles underscoring the Guide.[606] These features could serve to alleviate the copyright imbalance which the digital era has produced. Pistorius argues that the functional-equivalent approach is the type of measure which is

[604] *UNCITRAL* Model Law on Electronic Commerce 1996 with additional a 5 *bis* as adopted 1998 paragraph 18.
[605] "The adoption of the functional-equivalent approach should not result in imposing on users of electronic commerce more stringent standards of security (and the related costs) than in a paper-based environment." *UNCITRAL* Model Law on Electronic Commerce 1996 with additional a 5 *bis* as adopted 1998 paragraph 16.
[606] Pistorius 2006 *PER* 17.

envisaged by article 10 of the *WCT*.[607] While this submission is accurate in theory, as discussed earlier, it certainly does not represent the situation in practice, as the rights of owners are read as superseding those of users. The functional-equivalent approach offers a practical and sensible means for dealing with copyright in the digital environment and by adopting such an approach, the traditional balance of copyright law can be maintained.

b. *The Implementation of a 'Foreseeability' Criterion*

It has been suggested that South Africa should adopt legislation with regard to acts of circumvention and direct infringement of copyrights.[608] In other words, acts of circumvention should be prohibited subject to an infringement clause and this would maintain the balance copyright law requires, as users' rights of fair dealing would still be accessible.[609] The difficulty which arises from this is that a user would be entitled to circumvent technological protection measures where this would not amount to infringement, not withstanding that, the majority of users would require a device which allows for the circumvention of the technological protection measures. According to Van Coppenhagen, the provisions of section 23(1) of the Copyright Act[610] can be interpreted as including any person who provides or makes available a technological device for the purposes of circumventing a technological protection measure. Section 23 (1) would have the effect of prohibiting the provision of circumvention devices without which most users would not be able to make use of their rights under South African copyright law. The solution to this approach then requires one to implement provisions relating to devices which facilitate circumvention. This legislation then enters the realm of DMCA-like legislation.

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[607] Pistorius 2006 *PER* 17. See Okediji on this point where she submits that the *WCT* allows for limitations from the print environment to be incorporated into the digital environment as well as for the creation of further limitations and exceptions relevant to the digital environment. 2005 *UNCTAD* 32-33.

[608] Van Coppenhagen 2002 *SALJ* 450.

[609] Van Coppenhagen 2002 *SALJ* 450.

[610] Act 98 of 1978. Section 23 (1) states "Copyright shall be infringed by any person, not being the owner of the copyright, who, without the licence of such owner, does or *causes any other person to do*, in the Republic, any act which the owner has the exclusive right to do or to authorise" (emphasis added).

The implementation of this type of legislation would be required to take into account the criticisms which have been levelled at the DMCA, and incorporate a few nuanced alterations in order to remedy the shortfalls. The main contention with this approach concerns the implementation of anti-circumvention provisions which exceed the minimum requirements of article 11 of the *WCT*. The situation, in other words, concerns the implementation of provisions which prohibit acts of circumvention, as well as devices which facilitate circumvention. Given the argued impact of Section 23(1) of the Copyright Act, one is required to ignore the way in which the copyright balance is upset by exceeding the minimum requirements of article 11. Even where one ignores such considerations, however, the implementation of such legislation is still subject to several major flaws.

The first issue which one must consider is that legislation prohibiting both acts of circumvention and devices which facilitate such acts inevitably necessitates a level of interplay between the two. This is because of the way in which acts of circumvention are carried out by users possessing devices which allow them to do so, rather than possessing the knowledge of how to circumvent protection measures themselves. In other words, the "scope of the device prohibition affects the scope of the prohibition against acts of circumvention."[611] If the device prohibition were too strict, then most users would be unable to circumvent technological protection measures. They would, therefore, be unable to give effect to their rights in terms of fair dealing. This would result in the copyright balance, therefore, not being maintained.

The success of this approach hinges on ensuring that provisions prohibiting devices which facilitate circumvention are not so strict that they remove the ability of users to make use of their rights to fair dealing. Van Coppenhagen argues that the way in which this can be achieved is by incorporating a foreseeability criterion into provisions which prohibit circumvention devices.[612] Such a foreseeability criterion immediately denotes that the

[611] Van Coppenhagen 2002 *SALJ* 450.

[612] The author submits that "legal protection could be provided against the manufacture and distribution of devices which:

standard of liability can be determined with regard to negligence. [613] If the ECTA were to constitute South Africa's implementation of the *WCT*, then the imposition of a forseeability criterion would have the effect of increasing the scope of the Act by including negligence. It has already been identified that the ECTA determines the standard of liability by requiring the presence of intent.

The implementation of a foreseeability criterion into provisions which prohibit devices which facilitate circumvention is further problematic when one considers the following. Every device of this kind, due to its nature, would foreseeably be capable of an infringing use. Van Coppenhagen argues that, if such a criterion is adopted then, it should be left to the manufacturer of a device to show why an infringing purpose was not reasonably foreseeable.[614]

The issue of infringement is one, as noted earlier, which largely depends on the specific circumstances of the user and the usage of the content. By implementing a foreseeability criterion, the party in charge of either manufacturing or distributing the device is then required to monitor the usage of their device by users in order to avoid liability because, in a practical sense, their device would always foreseeably be capable of an infringing use. Placing this responsibility in the hands of these parties may be too heavy a burden as it would require monitoring the use of every user who obtains the device. This seems too

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- Are promoted, advertised or marketed *to circumvent, where it is reasonably foreseeable that such circumvention is for the purposes of infringement; or*
- Have only la limited commercially significant purpose or use other than *to circumvent, where it is reasonably foreseeable that such circumvention is to facilitate infringing acts*; or
- Are primarily designed, produced, adapted or performed, for the purposes of enabling or facilitating *circumvention, where it is reasonably foreseeable that such circumvention is for the purpose of infringement*." Van Coppenhagen 2002 *SALJ* 450.

[613] The general test with regard to negligence in South African Law is stated in the case of *Kruger v Coetzee* 1966 (2) SA 428 (A) 430E-F. Holmes, J.A. held:

"For the purposes of liability *culpa* arises if –

(a) A *diligens paterfamilias* in the position of the defendant –
    (i) Would foresee the reasonable possibility of his conduct injuring another in his person or property and causing him patrimonial loss; and
    (ii) Would take reasonable steps to guard against such occurrence; and
(b) The defendant had failed to take such steps."

[614] Van Coppenhagen 2002 *SALJ* 450 – 451.

onerous. Furthermore, issues of privacy and the global application of monitoring measures would be problems in the practical implementation of such a criterion.

Van Coppenhagen notes that these problems may be overcome by the manufacturer of a device incorporating a licensing agreement into the use of their device. This licence agreement could incorporate conditions of usage of the work, which prohibit use of the device for the purposes of infringement, as well as allowing for the manufacturer to monitor usage of the device. In other words, the incorporation of such a licensing agreement could be a reasonable step taken by the manufacturer of a device and as such, they could avoid liability on this basis.

It is respectfully submitted that the incorporation of such an agreement would have little effect on the usage of devices. One could look at the discussion of shrink-wrap and click-wrap licence agreements, in chapter 3, in this regard.[615] The licensing agreement would basically serve as a means through which device manufacturers could shield themselves from liability through the assent by users of their devices to these licensing agreements. If the usage of the device would not really be affected in any practical sense by the implementation of a licensing agreement, and the implementation of such a licensing agreement would allow for the manufacturer of a device to avoid liability, then the adoption of provisions which incorporate a foreseeability criterion seems to be a superfluous exercise and, ultimately, a redundant one.

5. Conclusion

The calls for South Africa to amend its current copyright legislation in order to keep pace with the current global anti-circumvention trends are largely uncalled for. Although South

[615] Particular attention should be paid to the public perception of these types of agreements and their compliance, or lack thereof, with the provisions of these agreements.

Africa has not approached the issue of anti-circumvention through amendments to the Copyright Act, it could be said that it has taken steps to implement such provisions through the ECTA. Section 86 of the ECTA could be seen as allowing for the protection of copyright users' rights in the digital environment, depending on how these provisions are interpreted by a court, when/if such a case comes before the courts.

South Africa's dual position as both a developing country and a net importer of copyright content, places it in a precarious position when it comes to copyright law and the implementation of anti-circumvention legislation. Any such legislation should be interpreted in a manner which ensures that user rights are maintained in the digital environment. A failure to do so would result in a degradation of the rights of users to copyright works. This has the knock-on effect of negatively impacting on access to information. By limiting the access to information of a developing country, that countries development would likely become stagnated.

Various approaches have been identified when it comes to the protection of user rights and the maintenance of the copyright balance in the digital environment. The application of a foreseeability criterion seems too strenuous a burden to place on manufacturers of devices. The functional-equivalent approach perhaps offers the best means of preventing the degradation of user rights, which characterises anti-circumvention legislation in most nations which have implemented such provisions.

Chapter 6

Conclusion

1. Introduction

So, do DRM systems represent the end of the road for copyright law? This issue has been dealt with throughout this thesis in discussing both the theoretical underpinnings of copyright, as well as the practical implications of this for DRM systems, anti-circumvention legislation and the South African context. Two questions have constantly informed these analyses. The first being: What effects, if any, do DRM systems have on the operation of copyright? Second: if any effect is to be found, what are the ramifications of these for user rights and the rights of owners under copyright law?

As to the first question, it cannot be doubted that the impact of DRM systems, in conjunction with anti-circumvention legislation, on copyright is rather dramatic. Indeed, various examples of this impact have been identified throughout this thesis. For example, some authors have argued that certain factors which make up a DRM system, such as click-wrap licence agreements, have allowed for the privatisation of the law in this field.[616] This so-called privatisation operates in a way which allows copyright owners to bypass those aspects of copyright law which do not suit their needs.[617]

As has been discussed throughout this thesis there are various strands which make up the 'mesh' that is a DRM system. These various strands work in conjunction with one another to allow for copyright owners to maintain control over works in the digital environment. The protection offered by these systems would be ineffectual, however, in the absence of anti-circumvention legislation. This legislation protects the integrity of DRM systems by

[616] See S Bechtold "Digital Rights Management in the United States and Europe" (2004) 52 *American Journal of Comparative Law* 323 at 356. See also MJ Madison "Legal-Ware: Contract and Copyright in the Digital Age" (1998) 67 *Fordham Law Review* 1025 at 1143.

[617] Madison submits that "by framing shrink-wrap as a nominal contract, publishers cannot only avoid copyright law but can define the scope of legitimate debates about what society values in access to and use of information." Madison 1998 *Fordham L. Rev.* 1143.

prohibiting either acts of circumvention, devices which facilitate circumvention, or both. The prohibition against circumvention creates a scenario in which the owners of works in the digital environment can legitimately determine every usage of those works. In other words, they can determine what uses are allowed and what uses are not. This includes the ability to control uses which do not fall within the scope of their rights.

Copyright owners are placed in a position to establish any hierarchy they desire with regard to both their rights and the rights of users. It seems obvious that this is a tremendous power which has been granted to one party. This is problematic as this power then becomes open to abuse by copyright owners. The abuse of this power carries with it its own set of problems. First, copyright operates on the basis of a *quid pro quo* relationship existing between users and owners of copyright works.[618] Second, granting such a power to owners often leads to situations where the extent of the limited monopoly which copyright law is supposed to provide is exceeded. Why then has such a power been granted when its provision clearly runs contrary to the purpose and fundamental principles of copyright law?

2. The Dangers of the Digital Environment

Copying technologies were not widely available to the average consumer in the analogue era. This was largely due to restrictive factors such as the cost of this technology and the amount of space which this technology required. Copyright law was thus suited to the analogue era as it protected the physical embodiment of works and made provision for the rights of both the users and owners thereof in accordance with this protection.

The rise of digital technology made copying technologies available to the average consumer in a manner which was cheap and easily accessible. Added to this, the Internet provided a platform from which copyright work could be sent around the world almost instantly and *en*

[618] CM Cimino "Fair Use in the Digital Age: Are We Playing Fair?" (2002) 4 *Tulane Journal of Technology and Intellectual Property* 203. See chapter 2 – Section 2 ii for a detailed analysis of this relationship.

masse. This presented a problem for copyright owners. The ability to control the copying of copyright works allowed copyright owners to control the physical embodiment of a work in the analogue era. This, in turn, allowed copyright owners to control the dissemination of a work. By controlling dissemination, the copyright industry was able to ensure that it benefitted from copyright. Digital copying technology allows for work to be copied on a large scale and distributed virally over the Internet. The digital era allows for the users of copyright to gain a greater level of control over the dissemination of work. How has this problem been dealt with?

As was noted in chapter 4, it was argued by copyright owners that the digital environment posed a danger to the rights of copyright owners.[619] This danger, it was argued, could only be remedied through DRM systems and the legitimation of these systems through anti-circumvention legislation. Therefore, in an environment which is perceived, and indeed portrayed, as being hostile to copyright law and largely ambivalent to the rights of owners, it is important that owners are able to exercise some level of control over their works.

One could respond to this argument with a simple "fair enough". It seems fair that the owner of a copyright work should be entitled to benefit from the ownership thereof and the rights which this ownership entails. The problem is, however, not the argument being made by the copyright industry but the approach which they have adopted to remedy the situation.

3. The Erosion of User Rights

The level of control which DRM systems allow for exceed those which copyright law provides owners. The power granted to copyright owners is thus open to abuse. They go

[619] See P Samuelson "The Copyright Grab" *Wired* February 1996 http://www.wired.com/wired/archive/4.01/white.paper_pr.html (accessed 12 March 2010). See chapter 4 – Section 2 for a detailed discussion on this issue.

beyond merely seeking to protect their rights under copyright law and instead grant themselves greater rights in order to secure new markets for themselves. The inevitable effect of this process is that user rights are eroded in order to give way to the expanded rights of owners.

The justification for this abuse takes various forms.[620] It is often argued that such stringent controls are required as users are unable to police themselves. Even if one were to accept the premise of this argument, the problem is that the argument still stumbles at one very basic question. Why does the level of control required exceed that which copyright law grants copyright owners? One possible answer proposed by copyright owners answer to this question can be found in another argument which supports the erosion of user rights in the digital environment.

Kruger submits that the erosion of user rights is of no consequence.[621] He argues that user rights were only present in the analogue era because of a failure of the technology of the time. Technology in the analogue era, so the argument goes, did not allow for the pricing mechanisms necessary to charge users for particular uses. As a result of this failure, certain usage rights were granted to users as rights to fair dealing. This argument is said to justify the extension of owner's rights at the expense of the rights of users.

The types of arguments noted above fail to take into account the purpose of copyright law. Providing both an incentive to creators to continuing creating while simultaneously providing a public good in adding to the public knowledge is the fundamental purpose of copyright law. Contracts drafted by copyright owners tend to favour copyright owners at the expense of authors. Authors therefore receive very little in terms of an incentive to continue creating because the royalties from which they supposedly benefit barely cover the costs of

[620] A detailed analysis of some of these arguments is undertaken in chapter 4 – Section 5.
[621] C Kruger "Passing the Global Test: DMCA as an International Model for Transitioning Copyright Law into the Digital Age" (2006) 28 *Houston Journal of International Law* 281 at 297.

producing the creation. Agreements between authors and owners have led to the continued applicability of the 'incentivist purpose' of copyright being questionable.[622]

The uncertainty over the applicability of the incentive to create is not immediately apparent unless one distinguishes between the incentive to create and the incentive to distribute.[623] As discussed in chapter 2, the nature of the digital environment diminishes the need for the rights of authors to be bundled with those of distributors. In this scenario, the rights of authors are not connected to the physical embodiment of works. The role of distributors is therefore diminished as the bulky and expensive copying technology of the analogue era, which required investment from distributors in order to allow authors to mass produce their works and disseminate them, has since become cheap and easily available to home users. Add to this scenario the distribution capabilities of the Internet and the function of the analogue era, and the distributor becomes largely obsolete.[624] The erosion of user rights in the digital environment thus seems rather ironic when one considers that the group whose rights have been expanded are the very same group which the digital environment may no longer require.

A great danger emerges where, as Cohen submits, a system equates property with progress. In such a scenario "…the public good nature of creative and informational works cannot assume equivalency between private wealth and social gain."[625] By focusing entirely on the incentive aspect of the purpose, and ignoring the public good aspect thereof, copyright owners and legislators alike have muddied the waters of the true nature of copyright law.

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[622] See RS Ray Ku "The Creative Destruction of Copyright: Napster and the New Economics of Digital Technology" (2002) 69 *University of Chicago Law Review* 263. See further Chapter 2 – Section 6.
[623] See chapter 2 – Section 6.
[624] JP Barlow "The Economy of Ideas" (1994) *Wired* http://www.wired.com/wired/archive/2.03/economy.ideas.html (accessed 13 May 2010).
[625] J Cohen "Lochner in Cyberspace: The New Economic Orthodoxy of Rights Management in Cyberspace" (1998) 97 *Michigan Law Review* 462 at 560.

4. The Necessity of User Rights in Developing Nations

The digital environment carries distinct implications for developing nations. These implications relate indirectly to the development of these nations. They carry the potential to either educate the citizens of those nations or to set them back even further in the development process. The digital environment carries with it the potential to improve the dissemination of, and access to, information in developing nations. The acquisition of the physical embodiments of ideas, for example books, which characterises the analogue era is not necessarily easy or cost-effective for many citizens in developing nations. As noted above, digital technology removes the hindrance of only having access to information where the physical embodiment of that information is available. One access point, for example one or two computers with an Internet connection in an indigent community, would allow for access to information in a manner which is much wider and more cost-effective than in the analogue era.

This potential, however, is largely underutilised because of the expansion of the rights of copyright owners through international mechanisms such as the *WCT* and the *WPPT*. Mechanisms such as these facilitate the erosion of user rights and the expansion of the rights of copyright owners in the digital environment. The knock-on effect of this erosion, as noted above, is that the public good aspect of copyright is diminished. Few users in developing nations will have the means to pay for the numerous conceivable uses which copyright owners have become entitled to charge for. Furthermore, user rights which had previously been available under the analogue era allowed for certain uses where that use was required for research or educational purposes.

The potential which the digital environment holds for developing nations is being undermined by the erosion of user rights. The diminishment of user rights has become an international trend through international mechanisms such as the *WCT* and the *WPPT*. These mechanisms serve to widen the gap in the digital divide, further increasing the division between the information 'haves' and 'have-nots'. Ultimately, this enforces a system

of dependence on the producers of information, i.e. the US, the UK and the EU.[626] The encroachment of the rights of owners on those of users thus presents a real threat to the development of developing nations. In light of this, what should South Africa's response be if it indeed wishes to promote the development of its citizens while maintaining some level of protection for copyright owners?

5. The South African Perspective

Certain South African academics have called on the country to implement the provisions of the *WCT* and the *WPPT*.[627] These authors argue that doing so will provide incentives for foreign copyright owners to expand their markets in South Africa. This, the authors submit, will stimulate investment in South Africa and thus benefit the economy. It is respectfully submitted that such calls fail to perceive the full ramifications of these actions.

As discussed in chapter 5, the implementation of the *WCT* should be avoided by developing nations. The repercussions for these nations after the implementation thereof tend to result in user rights being trampled on.[628] The erosion of user rights, as probably seems a banal statement at this stage, is damaging to the development of public knowledge and contrary to the purpose of copyright law.

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[626] ES Nwauche "A Development Orientated Intellectual Property Regime for Africa" (2005) *Paper Presented at the General Assembly of the Council for Development of Social Science Research for Africa* http://www.codesria.org/IMG/pdf/nwauche.pdf (accessed 29 August 2010). See also RL Okediji "The International Copyright System: Limitations, Exceptions and Public Interest Considerations for Developing Nations" 32 http://www.unctad.org/en/docs/iteipc/200610_en.pdf (accessed 30 August 2010).

[627] "SA Copyright Law Under Fire" *Techcentral.co.za* 3 March 2010 http://www.techcentral.co.za/sa-copyright-law-under-fire/13185/ (accessed 4 March 2010). 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 Measures" (2002) 119 *South African Law Journal* 429.

[628] Consumer International "Copyright and Access to Knowledge – Policy Recommendations on Flexibilities in Copyright Law" (2006) http://www.cr-international.com/2006_Consumer-International_Copyright_and_Access_to_Knowledge_16.2.pdf (accessed 1 September 2010). See Nwauche 2005 *Paper Presented at the General Assembly of the Council for Development of Social Science Research for Africa*. See also Okediji 2005 *UNCTAD* 32.

South Africa's status as a developing nation places it squarely in the context described above. One might argue that South Africa's context differs somewhat from that of other developing nations as the distribution of wealth in the country could be seen to create pockets of 'developed areas'. It could thus be argued that the only parties who benefit from South Africa not having amended its copyright legislation and implementing the *WCT* or the *WPPT* are those who fall within these 'developed pockets'. Whether or not this assumption is true is a matter open to debate. Even if one were to assume that this assumption was correct, this would still not change the benefits which the digital environment holds for the development of both citizens and the country.

The benefits of the digital environment for users are hamstrung by the implementation of DRM systems and the protection thereof through anti-circumvention legislation. In order to truly benefit from the advantages of dissemination which this environment allows for, user rights need to be preserved in a manner which goes beyond merely paying lip service to these rights. By maintaining those user rights, available in the analogue era, in the digital environment the advantages of the digital environment are available to users in a meaningful manner, i.e. absent the severe curtailments on usage implemented by copyright owners through DRM systems.

The above should not be seen as a complete disregard for the rights of copyright owners in the digital environment. Rather, what is being argued for is a balancing of the rights of users and owners in a manner consistent with the purpose of copyright law. The functional-equivalent approach argued for by Pistorius is perhaps one of the best means of achieving this balance.[629]

[629] T Pistorius "Developing Countries and Copyright in the Information Age: The Functional Equivalent Implementation of the *WCT*" (2006) 11 *Potchefstroom Electronic Law Journal* 10. See Chapter 5 – Section 4.a for a detailed analysis of this approach.

6. Conclusion

The analyses undertaken in this thesis indicate that the implementation of anti-circumvention legislation and DRM systems are a hit and miss affair. The balancing of the rights of owners with the rights of users is discussed in great detail in many debates concerning this issue but the end results, i.e. actual implementation, greatly favour the rights of owners. The required implementation of anti-circumvention legislation by the *WCT* and the *WPPT* pose a tremendous risk to user rights on a global scale. Although the greatest loss of these rights will be felt by users in developed nations who have the means and access to technology of the digital age, the greatest travesty will be that the benefits which digital technology provides will be prevented from aiding those who require it most.

On this basis, it is submitted that South Africa should not ratify the *WCT* or the *WPPT,* as the digital environment, in conjunction with copyright works and if managed correctly, has the potential to greatly assist in the dissemination of knowledge and the education of South Africa's citizenry.

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