Queen Mary, University of London

Digital Rights Management and the Rights of End-Users

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Declaration

I certify that the thesis I have presented for examination for the PhD degree at the Queen Mary, University of London is solely my own work. The thesis presented is the one upon which I expect to be examined.

Abstract

Digital Rights Management systems (DRM) are frequently used by rightsholders in order to protect their works from the, very high indeed, possibility to be copied, altered or distributed without authorisation by users who take advantage of available state-of-the-art copying techniques. Because DRM are legally protected by anti-circumvention legislation both in the United States and in Europe, a debate goes on more than a decade now regarding their impact to the notion of "balance" among copyright stakeholders that traditionally underpinned copyright law. In this context, this study examines, in turn, the philosophical underpinnings of analogue and digital copyright law focusing of copyright exceptions, the development of a notion of a minimum of lawful personal use for the digital environment based on existing copyright exceptions and users' expectations of personal use, and the impact of the use of DRM and of the introduction of anti-circumvention legislation to this notion. While the European Information Society Directive 2001/29/EC (EUCD) is the main legal instrument analysed and criticised, the role of other Directives is also examined to the extent they address the relationship between lawful personal use and anti-circumvention legislation. Legal developments in the United States could not have been absent from this discussion since anti-circumvention legislation was introduced there much earlier than the EUCD and important case-law and legal commentaries have developed since. Following the identification of problems regarding the operation of a minimum of lawful personal use in digital settings, the proposal to introduce a right to engage in self-help circumvention afforded to users of DRM-protected works for Europe is put-forward. Such a right would not undermine rightsholders incentives to offer works online and develop new business models but would acknowledge the users' interest to interact and tinker with digital works taking full advantage of the new possibilities offered by digitisation.

To Kostas, for everything.

In the loving memory of my grandmother, Paraskevi.

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Part I. A Minimum Core of rights for Users of DRM-protected Work

Chapter 1. Introduction

As the digital environment facilitates the end-user to actively engage in creative processes, legal scholars started paying growing attention to the rights of users of copyrighted materials and a growing body of literature seeks to articulate the rights of recipients of copyrighted works, that is the users of embedded-software, the music fans who purchase songs on iTunes, the viewers for downloaded movies, the purchasers of ring-tones for mobile phone, and the subscribers to online journals. It has been suggested that internet law has both a technical and an economic context.[1] The economic context is closely related, among others, to the technical characteristic of digital transmission. Digital transmission has several economic consequences, one of which is the opening up of the possibility of a brand new area of economic activity by means of trading in a new type of economic good, the 'information good.'[2] From the moment that information can be transmitted in its 'pure' state, rather than recorded on some data carrier such as a book, a disk or a CD-ROM, it becomes more economic to sell it in small packages than as the larger bundle of information necessary to achieve the price which makes production and carriage of the data carrier economic.[3]

Concerns closely connected to information policy are raised by the use of digital rights management systems (DRM) to protect copyright works.[4] DRMs can be defined both from a technological and a legal aspect. However, knowledge of the technology is necessary to an extent in order to understand how the legal rules apply.[5] Therefore, from a technological

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[1] For the following discussion see Reed, Chris, *Internet Law, Texts and Materials* (Cambridge University Press 2005) 3-6.

[2] Ibid 5.

[3] Ibid 5.

[4] See discussion in Elkin-Koren, Niva, 'Making Room for Consumers under the DMCA' (Summer 2007) 22(3) Berkeley Tech. L. J. 1119.

[5] For information on technological issues and technological definition see the following chapters in Becker, Eberhard, et al. (eds), *Digital Rights Management-Technological, Economic, Legal and Political Aspects* (Springer 2003): Rump, Niels 'Definition, Aspects, and Overview' 3-15; Gooch, Richard 'Requirements for DRM Systems' 16-25; Paskin, Norman, 'Components of DRM Systems: Identification and Metadata' 26-61; Spenger, Gabriele, 'Components of DRM Systems: Authentication,

perspective, DRM covers "the description, identification, trading, protecting, monitoring and tracking of all forms of usages over both tangible and intangible assets."[6] Furthermore, it is argued that these DRM functions can be categorized as either "management" of digital rights or as "enforcement" of digital rights.[7] Regarding managing digital rights, it has been argued that

> [r]ights holders need to identify their content (how else does a content or rights owner know what right he really owns?), they need to collect metadata to the content (how else should potential customers of such content be able find what they want to obtain?), they need to assert what rights they have in the content (only when knowing this can he actually attempt to distribute content), and they need to develop business models for distributing their assets.[8]

Regarding enforcing digital rights, this function aims mainly "to disable illegal distribution" of content.[9] The several tools that DRM use in order to fulfill this function contain "secure containers" that prevent the users who are not authorized to access the content from accessing it, "rights expression languages" that are used to express to whom access to the content wrapped in secure containers is permitted, "content "identification and description systems" that uniquely identify the content and associate descriptive metadata with the content, "identification of people and organizations" that intend to interact with the content, "algorithms authenticating" the person or organization that wants to interact with any content and which involve cryptography and usually need an agency referred to as a "Trusted Third Party" that certifies the DRM systems and components, "watermarking and fingerprinting technologies" that can follow a work in paths it takes and help prove that copyright has been infringed, "mechanism to report events" in order to allow payments,

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Identification Techniques, and Secure Containers – Baseline Technologies' 62-80; Petitcolas, Fabien, 'Components of DRM Systems: Digital Watermarking' 81-92; Herre, Jüen, 'Components of DRM systems: Content Based Identification (Fingerprinting)' 93-100; Guth, Susanne, 'Components of DRM Systems: Rights Expression Languages' 101-112; Sadeghi, Ahmad-Reza & Schneider, Markus, 'Components of DRM Systems: Electronic Payment Systems' 113-137; Hartung, Frank, 'Components of DRM Systems: Mobile DRM' 138-149; Guth, Susanne, 'A Sample DRM System' 150-161; Cheng, Spencer & Rambia, Avni, 'DRM and Standardization-Can DRM Be Standardized? 162-177; Kuhlmann, Dirk & Gehring, Robert A., 'Trusted Platforms, DRM, and Beyond' 178-205; Hauser, Tobias & Wenz, Christian, 'DRM Under Attack: Weaknesses in Existing Systems' 206-223; Haber, Stuart et al., 'If Piracy Is the Problem, Is DRM the Answer?' 224-233.

[6] *Rump* (fn 5) 4.

[7] Ibid.

[8] Ibid (footnotes omitted).

[9] Ibid 3.

known as “event-based payments, e.g. “pay-per-view”, to be processed, “payment systems” which involve either linking to a credit card or bank account and, finally, “obfuscation techniques or trusted systems” that prevent reverse engineering of the DRM, make it more secure and user-friendly.[10]

A legal definition of DRM can be found in Article 6(3) of the Directive 2001/29 on the harmonization of copyright in the information society (EUCD).[11] The term used in the EUCD to describe DRM is “technological measures” and therefore, in this work, the term DRM is used interchangeably with technological measures or “technological protection measures” (TPM) in certain instances. Article 6(3) provides that

> [f]or the purposes of this Directive, the expression "technological measures" means any technology, device or component that, in the normal course of its operation, is designed to prevent or restrict acts, in respect of works or other subject-matter, which are not authorised by the rightholder of any copyright or any right related to copyright as provided for by law or the sui generis right provided for in Chapter III of Directive 96/9/EC.

The same Article continues by defining DRM as “effective”

> […] where the 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.

Therefore, a DRM is designed to prevent acts that are not authorised by the rightsholder and is effective when a copy control, or an access control or protection process, such as encryption, scrambling, or other transformation of the work applies and achieves the protection objective.

In the United States, it has been argued that, “these new mechanisms for physical control over the use of copyrighted works may threaten intellectual freedom and fundamental liberties” highlighting in this way the important dimension of consuming digital cultural goods.[12] DRM not only limit certain rights of consumers of digital goods but also “affect their symbolic meaning. They shape […] practices of consumption and the meaning of cultural

[10] Ibid 7-10.

[11] Council Directive (EC) 2001/29 EC of 22 May 2001 on the harmonization of certain aspects of copyright and related rights in the information society, [2001] OJ L167/10-19.

[12] *Elkin-Koren* (fn 4) 1119.

artifacts."[13] Thus, more general considerations arising from information policy are invoked by DRM and there is a need to define and protect the scope of the information consumers' interests against erosion.[14] It has been argued that this can be done by incorporating a legitimate interest in access to standard copyright analysis in order to balance the scope of rights shaped by the legal regime that strongly protects DRM.[15]

In the context of the United States law, if uses involve a fixed reproduction, an adaptation, or a public distribution, performance or display then they infringe copyright unless they are excused by the fair use privilege codified in Section 107 of the United States Copyright Act.[16] However, it has been argued that the statutory fair use test is unhelpful in identifying which uses are, or should be, legal for information products, mainly because it was designed in "an era when copyright covered only the right to print, reprint, publish, and vend and most personal uses required no excuse to be lawful."[17] The fair use factors were designed to address whether and when it is appropriate to make a public and often commercial use without permission and they "[…] are not devised to evaluate the legitimacy of personal uses."[18] Litman argues that the fair use test may not be enough to resolve the lawfulness of the personal use and therefore the conclusion that "[…] lawful personal uses that don't fit the fair use rubric may be legal, but they shouldn't be. Instead, they must be unprincipled exceptions that should not be allowed to spread" may be incorrect.[19]

Litman, argues that in the controversial area of personal use it was always accepted "that some uses are lawful even though they are neither exempted or privileged in the copyright statute nor recognized as legal by any judicial decision."[20] According to Litman, examples of personal uses that don't seem to fall within any of the US copyright exceptions are the back

[13] Ibid 1120.

[14] Ibid.

[15] Ibid 1119-1121.

[16] Litman, Jessica, 'Lawful Personal Use' (2007) 85 Tex. L. Rev. 1871, 1898.

[17] Ibid 1901-1902.

[18] Ibid.

[19] *Litman* (fn 16) 1903.

[20] Ibid 1878-1879.

up of her hard disc every week, knowingly that this act does not fall under Section 117 of the United States Copyright Act which exempts back up of computer programs since the hard disk is not a computer program, the use by her husband of computer programs that allow him to record, scan, manipulate, transpose, revise, and generate sheet music or audio files for musical compositions, which are used by him to create easier versions of songs for their son to sing, the use of her sister's family and her mother of a TiVo, the forwarding of several emails from her friend that her friend finds interesting, and the reading aloud by her neighbor across the street to his triplets who, at the same time, edits the content of books to become appropriate and to fit his ideas about what his kids should hear.[21] In other words, some uses are legal under the conventional fair use analysis, others are illegal and the rest occupy "a murky middle ground."[22]

Moreover, it is argued that "the conventional paradigm of copyright statutory interpretation, under which all unlicensed uses are infringing unless excused" must be rejected as being "not only inaccurate, but potentially destructive of copyright's historic liberties."[23] Litman believes that the creation and dissemination of works of authorship is not the ultimate goal of copyright and that something more is required in order to "promote the Progress of the Science" as required by the United States statute.[24] In particular, she argues that "in order for the creation and the dissemination of a work of authorship to mean anything at all, someone needs to read the book, view the art, hear the music, watch the film, listen to the CD, run the computer program, and build and inhabit the architecture."[25]

Historically, copyright law left personal uses like reading, listening, and viewing unregulated because traditionally only reproduction, preparation of derivative works, distribution, public performance, or public display was prohibited and the aforementioned personal uses did not entail any of these acts. Moreover, traditionally copyright law aimed to protect right

[21] *Litman* (fn 16) 1897-8 (footnotes omitted).

[22] Ibid 1901.

[23] Ibid 1879.

[24] Article I, Section 8, Clause 8 of the United States Constitution empowers the Congress to "promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Investors the exclusive Right to their respective Writing s and Discoveries."

[25] *Litman* (fn 16) 1880.

owners against commercial and industrial entities and not so much against individuals who did not have the means to engage in a large scale copying activity. It is argued that the aforementioned activities of members of the public implied

> […] historic copyright liberties, implicit in the copyright statutory scheme and essential to its purpose. Copyright scholarship has tended to view these liberties as lacunae in copyright owner control; this tendency may obscure their affirmative importance in the copyright scheme […].[26]

Examples of unregulated uses would be to open a book, read it from cover to cover, repeatedly read some sections while skipping others, annotate its pages with notes, physically remove pages, read it in a foreign country or simply close it, listen to a music CD in one's car, at home, at office, in another person's car, listen to it with family and friends or lend it to friends or strangers.[27]

In sum, according to Litman, a comprehensive definition of personal use would cover uses that are excused under the statutory copyright exceptions, the fair use doctrine, the scope of copyright protection which excludes all private performances and displays (since the copyright owner's distribution right is limited to distributions to the public) displays or distributions and all unfixed reproductions of copyrighted works.[28] However, absent from this definition is the ability of the end-user to act as a publisher and distributor.[29] Nowadays, "digital production techniques blur the line between listening, editing, and re-creating" and new possibilities are open to users.[30] For example, even in the distant 2001 an Apple advertisement was urging users to "[m]ix, rip and burn."[31] In this context of easy, cheap and

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[26] Ibid 1882 (footnotes omitted).

[27] Mulligan, Deirde K., et al., 'How DRM-Based Content Delivery Systems Disrupt Expectations of "Personal Use"' DRM'03, October 27, 2003, Washington, DC, USA, ACM 1-58113-786-9/03/001 <http://delivery.acm.org/10.1145/950000/947391/p77-mulligan.pdf?key1=947391&key2=4330113521&coll=GUIDE&dl=GUIDE&CFID=52008949&CFTOKEN=84569098> accessed 10 December 2011, at 78.

[28] Ibid 1895-1897.

[29] Ibid 1878, where it is noted that "limiting myself to personal use, moreover, allows me to evade, for now, many of the interesting questions that arise when readers, listeners, users, and experiencers morph into publishers and distributors".

[30] Boyle, James, 'The Second Enclosure Movement and the Construction of the Public Domain' (Winter/Spring 2003) 66 Law & Contemp. Probs. 33 <http://www.law.duke.edu/pd/papers/boyle.pdf> accessed 10 January 2007.

[31] See Lessig, Lawrence, *The Future of Ideas*, *The Fate of the Commons in a Connected World* (Random House, New York 2001) at 9 where it is argued that to "mix" creative work means "to reform it

far-reaching opportunities of digital production techniques, the user can establish himself both as a follow-on creator and a massive distributor of unauthorized works protected by copyright.

In order to solve the problems associated with the scope of lawful personal use when digital settings are concerned, Litman suggests agreeing on the principles that should inform the decision on where to locate the boundary between exploitation and enjoyment rather than trying reaching an agreement on the same issue something that, after all, was not possible during a decade of polarized debate on the proper scope of copyright.[32] Personal uses could be situated on the continuum between exploitation and enjoyment by evaluating "[…] both the uses' potential to undermine core copyright incentives and their potential to enhance essential copyright liberties of reading, viewing, listening, and their kin."[33]

Contrary to the United States, in Europe, the lawfulness of personal use can be searched for in specifically enumerated exceptions. The private copying exception that is codified in Article 5(2)(b) of the EUCD and has been transposed in several Member States can provide a useful starting point. In Germany, in particular, and in Member States following Germany's example, the statutory exception for private copying was accompanied by the legislative implementation of remuneration schemes based on levies charged on various copying equipment. However, by means of DRM that extent digital copyright to the area of personal use it is now possible to enforce property rights which, despite their practical unenforceability, were legally recognized by the German Supreme Court in 1955.[34]

In that case, the German authors' collecting society (GEMA) successfully made a legal claim against a producer of tape recorders to the effect that authors held the exclusive right to prohibit private recordings and to obtain remuneration for the private exploitation of their works. This attempt to enforce copyright against private users was unsuccessful because

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however the user wants", to "rip" it means "to copy it", and, significantly, to "burn" it means "to publish it in a way that others can see and hear". In other words, while Apple's devices provide technological tools to engage in transformative uses, traditional copyright law and right holders' licences do not permit these actions without permission given by the right holder.

[32] *Litman* (fn 16) 1909.

[33] Ibid 1911; for an analysis of these two factors see ibid 1911-1918.

[34] Guibault, Lucie, *Copyright Limitations and Contracts, An analysis of the contractual overridability of limitations on copyright* (Kluwer Law International, The Hague 2002) 50-54.

home-taping could not be monitored without copyright owners being physically able to enter individuals' homes. In 1964, the German Federal Constitutional Court acknowledged that the implementation of measures of control over copyright infringement caused by home-taping would have conflicted with the privacy of end-users and, specifically, against the inviolability of the home as guaranteed by Article 13 of the German Basic Law. The Federal Constitutional Court declined to uphold the plaintiffs' request for an order compelling suppliers of home-taping equipment to disclose the identity of their customers in order to permit GEMA to verify whether such customers engaged in unlawful uses. According to Guibault, the above two judgments led to the amendment of the German Copyright Act of 1965 to include the first statutory right to equitable remuneration in favor of authors, performers and phonogram producers for home-taping through the imposition of levies on the sale of sound recording equipment.[35]

However, similarly to the fair use doctrine, the private copying exception is unhelpful in identifying which uses are or should be legal mainly because when the exception was inserted its limits and its scope were clearly defined while today they are not. This is because today many uses that did not require any copying/reproduction to take place now do so, e.g. reading an e-book, annotating its pages etc. The question whether these uses that require reproduction are lawful seem to be answered in the negative since there is a general tendency in United States and European digital copyright law to abolish the private copying altogether in digital settings.

However, although the notion of lawful personal use has no easy definition since "determining the circumstances under which personal use of copyrighted works will be deemed lawful is essentially a matter of inference and analogy and therefore conflicting opinions may be heard"[36] and since studies of copyright law that query the scope of lawful

[35] Ibid 51.

[36] See National Research Council, *The Digital Dilemma: Intellectual Property in the Information Age* (National Academy Press 2000) 129 where it is argued that "[t]he extremes of the positions on this issue are well established and heavily subscribed to. Some rights holders seem to believe that all, or nearly all, unauthorized reproduction of their works, whether private or public, commercial or noncommercial, is an infringement. Many members of the general public appear to believe that all or virtually all private, noncommercial copying of copyrighted works is lawful."). Compare e.g. Netanel, Neil W., 'Copyright and a Democratic Civil Society' (1996) 106 Yale L. J. 283, 300 where it is noted that "Courts have generally declined to find personal copying as infringing", with Ginsburg, Jane C., 'From Having Copies to Experiencing Works: the Development of an Access Right in U.S. Copyright Law' in Hansen, Hugh (ed), *US Intellectual Property Law and Policy* (Edward Elgar 2006) 46 where it is argued that "U.S. and international copyright law have increasingly recognized that the author's right to

personal use often conclude that the answer to the question whether any particular use is lawful is difficult to be determined[37], it is commonly accepted that the lawful personal use zone is shrinking and there is a hot debate over its remaining content.[38] Generally, on both sides of the Atlantic, supporters of strong copyright want to secure a zone of safety surrounding copyright's exclusive rights both to ease copyright enforcement and to offer some protection in the event that technology offers new ways to use and interact with digital works. Opponents of enhanced copyright protection, on the other hand, try to

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authorize, or at least to compensated for, the making of copies, extends […] to end-users who make individual copies for private consumption". See also Litman, Jessica, 'War Stories' (2002) 20 Cardozo Arts & Ent. L. J. 337, 338 where it is argued that "[t]he question whether individuals are liable for copyright infringement when they make unauthorized uses of copyrighted works has no clear answer").

[37] See U.S. Congress, Office of Technology Assessment, *Copyright and Home Copying: Technology Challenges the Law*, OTA-CIT-422 (Washington, DC: U.S. Government Printing Office, October 1989) <http://govinfo.library.unt.edu/ota/Ota_2/DATA/1989/8910.PDF> accessed 10 May 2007, at 5 where it is noted that "[t]he problem of private uses arises because its legal status is ambiguous. *Current legislation and case law offer meager guidance as to whether copyright proprietors' rights extend over private use*" (footnotes omitted, emphasis of the author); in the same work see also the discussion at 5-14 under the title "contested issues"; see *National Research Council* (fn 36) 135 where it is stated that "[t]his report cannot solve the debate over private use copying. However, it may contribute to a better understanding of the dilemma by articulating the widely divergent positions on this and other issues"; in the same latter work see also the discussion at 129-36, under the heading "[t]he challenge of private use and fair use with digital information."

[38] Waelde, Charlotte, 'From entertainment to education: the scope of copyright?' (2004) 3 IPQ 259 (disussing to what extent digital copyright negatively affects digital dissemination of educational and research material); Cohen, Julie E., 'Copyright and the Jurisprudence of self-help' (1998) 13 Berkeley Tech.L.J. 1089 (discussing users' rights to hack DRM); Cohen, Julie E., 'A Right to Read Anonymously: A Closer Look at "Copyright Management" in Cyberspace' (1996) 28 Conn. L.Rev. 981; Benkler, Yochai, 'Free as the Air to Common Use: First Amendment Constraints on Enclosure of the Public Domain' (1999) 74 N.Y.U. L.Rev. 354 (suggesting a First Amendment basis for a user's right of access to the public domain); Benkler, Yochai, 'From Consumers to Users: Shifting the Deeper Structures of Regulation Toward Sustainable Commons and User Access' (2000) 52 Fed. Comm. L.J. 661 (arguing that First Amendment interests require regulators to ensure broad public access to tools for generating and disseminating expression); Benkler, Yochai, 'Through the Looking Glass: Alice and the Constitutional Foundations of the Public Domain' (Winter-Spring 2003) 66 Law & Contemp. Probs. 173 (articulating First Amendment constraints on Congress's power to restrict individual rights to read and speak); Tushnet, Rebecca, 'Copy this Essay: How Fair Use Doctrine Harms Free Speech and How Copying Serves It' (2004) 114 Yale L.J. 535; Patterson, Ray L., '*Eldred v. Reno*: An Example of the Law of Unintended Consequences' (2001) 8 J. Intell. Prop. L. 223 (who finds users' rights in the copyright and patent clause of the Constitution); Tussey, Deborah, 'From Fan Sites to Filesharing: Personal Use in Cyberspace' (2001) 35 Ga.L.Rev. 1129 (arguing that the policies underlying the copyright and patent clause support the enactment of a personal use privilege); Liu, Joseph P., 'Copyright Law's Theory of the Consumer' 44 B.C. L.Rev. 397; Cohen, Julie E., 'The Place of the User in Copyright Law' (2005) 74 Fordham L.Rev. 347; Elkin-Koren, Niva, 'Making Room for Consumers under the DMCA' (Summer 2007) 22(3) Berkeley Tech. L. J. 1119 (situating the interests of information consumers within the general context of information policy, therefore viewing consumers based on the theoretical framework of copyright law).

safeguard the interests of the members of the public traditionally recognized in copyright law.

With this background, the present study aims to examine the undeveloped idea of lawful personal use in the European context and its relation to DRM. The purpose is to investigate not only the extent of such lawful use but whether it can be preserved against the application of DRM technologies to copyright works. In other words, this study is concerned with the rights of recipients of copyrighted works and analyses the regulation as pertains to the dissemination of copyrighted works over the internet (digital delivery of works).

The jurisdictional scope of this work is European legal developments, though it refers to the United States when necessary in order to better illustrate the arguments and the issues examined. As concerns the methodology of this study, the first part is largely theory oriented, while the second part descriptively analyses the developments in digital copyright law and illustrates in what ways the legal protection of DRM is problematic. The third part analyses the proposition for the recognition of a privilege to circumvent for users of copyright works based mainly on the analysis of the link between traditional copyright infringement and the anti-circumvention legislation and also on the role of reasonable users expectations in the context of digital copyright law.

The key terms and concepts used throughout the study are the *minimum of lawful personal use*, its *enforcement against Digital Rights Management (DRM)*, the protection of DRM by means of *anti-circumvention legislation*, the *user* of copyright works and the *rightsholders*. The focus is on users of digital goods and services for non-commercial purposes and, therefore, publishers, broadcasters, libraries, and universities, remain outside the scope of this work. As concerns the term "exception" in this work, it is used interchangeably with the term "limitation" and refers to certain categories of acts which are exempted by law from the copyright scope and do not need the authorization of the rightsholders in order to achieve a number of public policy objectives (e.g., allowing criticism, research, teaching, news reporting, parody etc.).[39] Guibault observes that copyright exceptions may encompass different types of statutory provisions, namely full copyright exceptions, statutory licences, compulsory licences and so-called collective administration of copyrights.[40] Other kinds of

[39] *Guibault* (fn 34) 16.

[40] Ibid 20.

structural limitations of copyright, such as the temporary duration of copyright protection and the limitation of the scope of copyright embodied in the so-called idea/expression dichotomy will not form part of this work.

With regard to the structure of this work, Part I examines the justifications behind the recognition of a minimum of lawful personal use and the scope and contents of such use. In particular, in Chapter 2, it is suggested that the natural law origins of the modern copyright legal systems and the limits they place to the scope of exclusive rights justify the need for the preservation of a minimum of lawful personal use in digital settings. Next, the limitations of the economic incentive rationale and of the utilitarian approach that seems to underpin European digital copyright are examined. Given that the economic incentive rationale as a basis for digital copyright law has several drawbacks and limitations, alternative philosophical underpinnings for the digital copyright exceptions are proposed. Finally, the operation of the three-step test in digital settings is examined and also some alternative philosophical underpinnings for digital copyright are provided. Chapter 3 examines the scope and content of lawful digital personal use in the context of the EUCD, the Software Directive[41] and the Database Directive.[42] The United States first sale doctrine is also examined in order to better illustrate the scope of exceptions to the distribution right. It is concluded that a minimum core of lawful use in relation to digital works encompasses the enforcement of copyright exceptions (copyright law considerations) and other transformative and non-transformative uses such as the ability to burn, time-, place- and platform-shift, share, store, make back-up copies, use the work on different devices, use the works in the future and resell the work that are based on the users' expectations of personal use from his viewpoint as a consumer (consumer law considerations). Competition law and human rights law are not used as a legal basis of lawful personal use because, although these laws can be considered justificatory bases of the copyright exceptions, this work is not focused on copyright exceptions but on the notion of lawful personal use which also covers consumers' reasonable expectations. However, competition law considerations arise

[41] Council Directive (EC) 2009/24/EC of 23 April 2009 on the legal protection of computer programs (replacing Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs) [2009] OJ L 111/16.

[42] Council Directive (EC) 96/9 of 11 March 1996 on the Legal Protection of Databases [1996] OJ L77/20-28.

towards the end of the Part II in respect of the negative impact of DRM to competition and implicitly to aspects of lawful personal use.

Part II of this work examines the impact of the application of DRM to copyright works to the minimum core of lawful personal use. It is argued that the European legislator failed to achieve the requisite balance between the rightsholders and the users of digital copyright works mainly because the minimum core of lawful use is not safeguarded against erosion in the case of DRM-protected works. Chapter 4 examines the impact of anti-circumvention legislation to the minimum of lawful personal use as provided for in the law by means of an extensive interpretation of exclusive rights, a restricted interpretation of copyright exceptions and users' expectations, and the development of business models supporting exclusivity rather than liability principles. In Chapter 5, a comparative examination of the anti-circumvention provisions found in the EUCD, the Software Directive and the Conditional Access Directive is attempted. As concerns mandatory interoperability, the relationship between the Software Directive and the EUCD in this area is examined and is concluded that the circumvention of DRM for mandatory interoperability purposes is not allowed by either Directive. Moreover, in Chapter 5, it is shown that the relationship between the anti-circumvention provisions and the copyright exceptions varies considerably among the EUCD, the Software Directive and the Conditional Access Directive and, at the same time, the scope of application of the aforementioned Directives overlaps to an important extent. The inconsistent treatment of the same issue has a negative impact for the exercise of a minimum of lawful personal use.

Finally, Part III is comprised by two chapters, one that covers the proposed solution to the problem and another that contains the conclusive remarks. Chapter 6 starts by examining the reasons of a lack of enforcement of the minimum of lawful personal use against DRM. It is suggested that the reason is that copyright exceptions are non-enforceable interests instead of enforceable rights, that copyright exceptions provide a defence to copyright infringement but not to DRM circumvention because it does not equate to copyright infringement, and that rightsholders are not positively obliged to allow users of works to benefit from the exceptions to the anti-circumvention provisions. Following the rejection of several proposed solutions that do not address the aforementioned issues, it is suggested that the best solution to the problem is to link the act of circumvention to copyright infringement directly and permit DRM circumvention by the users for purposes of engaging

in lawful personal use. Conclusively, Chapter 7 refers to the specific form that the legislative provisions should take in order to remedy the problems identified in this study. The solution to the imbalance that lies at the core of digital copyright law could be the introduction of a user's right to circumvent for purposes of lawful personal use which could be based on the existence of a nexus between copyright infringement and circumvention and on the ability to engage in acts of self-help circumvention in the context of the EUCD legal environment.

Chapter 2. Copyright and Digitization

2.1 Introduction

The adoption of restrictive contractual agreements and technological restrictions on use can affect the balance of interests that copyright law preserves. In an effort to maintain a balanced scope of copyright protection for digital works the boundaries of traditional copyright protection should be examined. Then, the findings could be applied to the digital environment. Two distinct norms exist in the field of copyright law, namely "*market place norms* [which] require rules to maintain a reliable market in products of the mind" and "*authorship norms* [which] dictate rules to empower authors to control the use by others of their self-expression."[43] Existing copyright laws vary in how far they subscribe to each of these distinct norms and "it is often asserted that copyright lawmakers must choose between a tough-minded market approach facilitating copyright commerce and a sympathetic attitude towards authors' interests."[44]

Common law jurisdictions, on the one hand, are said primarily to aim at "encouraging the production of new works," while civil law jurisdictions, on the other hand, are said to be mainly concerned with "the natural rights of authors in their creations."[45] Therefore, the term "copyright" is used mainly in common law jurisdictions while civil law jurisdictions prefer the term "right of the author" (*droit d'auteur)* in order to describe the particular legal system. The main factor which is said to distinguish author's rights legal systems from copyright legal systems is that the former recognizes the rights of an author as a natural right while the latter sees them as a positive legal enactment instead.[46]

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[43] Geller, Paul Edward, 'Must Copyright Be For Ever Caught between Marketplace and Authorship Norms?' in Sherman, Brad & Strowel, Alain (eds), *Of Authors and Origins-Essays on Copyright Law* (Clarendon Press, Oxford 1994) 159.

[44] Ibid 160.

[45] Bently, Lionel & Sherman, Brad, *Intellectual Property Law* (2nd edn OUP 2004) 30.

[46] See Cornish, William & Llewelyn, David, *Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights* (6th edn Sweet & Maxwell 2007) 377. In the case of *Donaldson v. Beckett* (1774) 4 Burr. 2408 it was made clear by the Court that the Copyright Act was delimiting the scope of rights with regard only to the period following publication. See also Strowel, Alain, 'Droit d'auteur and Copyright: Between History and Nature' in Sherman, Brad & Strowel, Alain (eds), *Of Authors and Origins-Essays on Copyright Law* (Clarendon Press, Oxford 1994) 242 where it is said that a series of changes was highlighted by the above case which acknowledged the common law or natural rights of the author,

Copyright was preceded by the privilege system and could be characterised an aftermath of the invention of the printing press. The first copyright laws had a trade regulatory nature and their primary purpose was to destroy the monopoly in the book trade enjoyed by certain groups and ensure ongoing trade regulation after the discontinuation of printing licenses.[47] However, although the purpose may have been the same, their philosophy was different since the copyright laws of France, which served as an example for the rest of the civil law countries, adopted an author centric approach while the Anglo-American copyright laws adopted an approach in the centre of which was the remuneration of the author for serving the public interest. The differences in the approach of the several countries have led to recognition of two main categories of rights, namely the moral rights of the authors that preserve the author's reputation and require a perfect reproduction of his work, and the economic rights of the authors and exploiters in general (e.g. publishers, content providers). A compromise of the conflict between countries with strong civil law and strong common law traditions was achieved with the Berne Convention which set the minimum of protection that both civil and common law countries adhere to.

The exploiters of the intellectual property played an important role from the beginning of the history of intellectual property since copyright statutes were enacted as a result mainly of the publishers' efforts. Nowadays, content providers, who have replaced traditional publishers, have resorted to technological restrictions on use in the form of technological measures in order to protect both moral and economic rights. With regard to the moral rights, the use of technological restrictions on use is not an issue of intense conflict exactly because moral rights by their nature have the very particular and well defined aforementioned meaning. However, the use of technological restrictions for the preservation of the economic rights of the rightsholders is controversial.

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but also denied them any strength, "for if the rights fell away upon publication, the *only* agency that would *then* be in a position to define the extent of those rights was the statute (meaning the Statute of Anne) itself."[46] Therefore, as a result of the intervention of the legislator, copyright was not any more going to be considered a natural right but, instead, acquired legal-positivist features.

[47] For example, in 1777, in France, an edict that refers to the duration of the libraries' privileges recognised explicitly to the author the right to edit and sell his works. However, if the writer has assigned the editing right to an editor then the author's right ceases to exist when the author dies. Even though this decree was the first step in creating the literary property concept it seems to have been a trade regulation mechanism employing the author merely as an instrument to break the monopoly of the Parisian publishers. For this discussion see Makeen, Makeen F., *Copyright in a Global Information Society-The Scope of Copyright Protection under International, US, UK and French Law* (Kluwer Law International 2000) 8-9.

The origins of copyright and right of the author doctrines influence the nature of economic rights in the digital era. Next, it will be shown that both legal doctrines are influenced by a natural rights approach that could limit the extension of the exclusive rights of the creators over the interests of the members of the public to interact and have access to works.

2.2 Natural Law Origins of Copyright and of Right of the Author (*Droit d'Auteur*)

It is widely accepted that copyright law originated from and constantly tries to keep pace with new technologies. Following the introduction of the printing press in England in 1476, the monarchy became afraid that this technology might be used to spread undesirable ideas and, as a result, the first king's printer was appointed and was granted a Letter Patent or 'privilege' by the Crown, which secured him the exclusive right to print certain books and official documents.[48] Traces of the utilitarian theory can be found in the Statute of Anne, in the title of which we read that it is "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", and the law to be "For the Encouragement of Learned Men to Compose and Write Useful Books."[49]

Utilitarian theory was influenced by John Locke's labor theory of property, to which natural rights are linked, that was extended to incorporeal property in the writings of authors. The author appeared as a new claimant to those rights and philosophical and legal theory was introduced connecting him to those rights. Locke's draft, written in March 1695, seems to secure the author's property in his copy as a matter of natural justice.[50] It has been suggested that this proposal is the precursor to the Statute of Anne and the first enactment to place the exclusive right initially in the hands of the authors rather than of printer-booksellers and that it also demonstrates that by the late seventeenth century authors'

[48] *Makeen* (fn 47) 2.

[49] An Act for the Encouragement of Learning by Vesting the Copies of Printed Books in the Authors or Purchasers of such Copies, 8 Anne c 19 (1710). Moreover, the United States' Constitution explicitly bases the logic of copyright and patent regimes on utilitarian foundations. In the words of the US Constitution, Congress is empowered 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" (US Constitution Art.1, s.8, cl.8).

[50] Ginsburg, Jane C. '"Une chose publique"? The author's domain and the public domain in early British, French and US copyright law' (2006) 65(3) Cam. L. J. 636, 641.

claims may have been recognized as a matter of natural justice.[51] Moreover, a few years before publishing his seminal work "Two Treatises of Civil Government" (1689), John Locke had drafted a Memorandum on the 1662 Licensing Act[52] urging the parliament to abolish the publishers' privileges and to replace them with a more author-centric approach.[53] The utilitarian theorists such as Jeremy Bentham[54] and John Stuart Mill[55] were influenced by Locke's labor theory and applied it to informational goods so that creative works represent for utilitarianism one of the purest forms of an individual's labor and personality and that Locke could justifiably be considered copyright's father.[56]

Locke, on whose theory the foundations for a general theory of marketplace norms based on incentives are based, outlined the Enlightenment approach to law according to which there is an analogy between physical and mental labour; while, on the one hand, physical labour draws wealth from virgin land, on the other hand, intellectual labour produces "mental constructs starting from the *tabula rasa* of the mind at birth."[57] Developing Locke's thinking further, in the 18th century, it was realised that copyright provides incentives to create since "just as property rights prompted farmers to cultivate the land, copyright was needed to

[51] Ibid 641. Ginsburg examined how the British envisioned the respective domains of author and public and whether copyright is based on natural law or whether it is positive law, based on legal enactment. It was concluded that English judges in many cases granted extra-statutory protections proving that the scope of the respective domains of author and public were not merely statutory enactments but that they had common law elements and that they were influenced to an extent by Locke's natural law theory of copyright.

[52] "An act for preventing the frequent abuses in printing seditious treasonable and unlicensed Books and Pamphlets and for Regulating of Printing and Printing Presses", that had as a main goal to control the press.

[53] Hughes, Justin, 'Locke's 1964 Memorandum (and more incomplete Copyright historiographies), introductory essay, an accompanying piece to Justin Hughes' Copyright and Incomplete Historiographies: Of Piracy, Propertization, and Thomas Jefferson' (2006) 79 S. Cal. L. Rev. 993

[54] Jeremy Bentham (1748 –1832), an English jurist, philosopher, and legal and social reformer, became a leading theorist in Anglo-American philosophy of law and his ideas influenced the development of the ethical theories of utilitarianism and welfarism.

[55] John Stuart Mill (1806-1873), a British philosopher, economist, moral and political theorist, administrator, the most influential English-speaking philosopher of the 19th century, was a proponent of utilitarianism, empiricism and expressed liberal political views.

[56] Mayer-Schönberger, Viktor, 'In Search of the Story: Narratives of the Intellectual Property' (2005) 10(11) Va. J.L. & Tech. 1

[57] *Geller* (fn 43) 166.

furnish incentives for authors to develop their works of the mind."[58] Thus, utilitarian theorists argued that in order to foster innovation the system must recognise exclusive rights in intellectual creations and it must recognise property insofar as it furthers society's goals of utility or wealth maximisation (social utility theory).[59]

In an effort to accommodate conflicts between strong exclusive rights and the public's interest in accessing and interacting with copyright works in the context of the utilitarian approach to copyright, Gordon proposed a particular interpretation of the natural law theory influenced by Locke.[60] She concludes that sometimes creators of intellectual products have no property that is justifiable by a natural rights approach, that sometimes even if they have such a property right they have to recover damages for the public's access to work and be entitled to a liability rule protection and that if rightsholders prevail in a conflict with the interests of users this happens because of a governmental action in excess of what a natural rights claim would justify.[61] Natural rights theory is not only concerned with the rights of the authors but with the rights of the public as well since, arguably, the most fundamental duty in the context of the natural rights theory, imposed on all, is the duty not to harm others.[62] In particular, members of the public, have several claims based on the fact that new authors are influenced by their predecessors, must have some freedom to copy and to engage in some use of prior creations, must be able to use existing intellectual creations that are not owned by someone (the so-called "intangible common") and have a "property right in the common" in the sense that they have a liberty to use the common and are entitled to be

[58] Ibid 165-166.

[59] Zemer, Lior, 'On the Value of Copyright Theory' (2006) IPQ 1. See also Recht, Pierre, *Le Droit d' Auteur, une nouvelle forme de propriete-Histoire et Theorie* (J. Duculot, Gembloux 1969) 173. For more information on the social utility theory see Recht, Pierre, *Le Droit d' Auteur, une nouvelle forme de propriete-Histoire et Theorie* (J. Duculot, Gembloux 1969) 201.

[60] Gordon, Wendy J., 'A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property' (1993) 102 Yale L.J. 1533. Although her approach was confined to the conflicts between exclusive rights and free speech, we believe that it can apply generally to the area of conflicts between exclusive rights and users' interests.

[61] Ibid 1606-1607.

[62] Ibid 1540-1544.

free from restraints that others' property rights impose on such use ("the common as property theory").[63]

Notwithstanding the rights of the public, the authors rights/labourers encompass the liberty right to use their property, the power to transfer and the right to exclude others from using their property,[64] Gordon argues that the possible conflicts that arise between the claims of the authors and members of the public could be solved based on Locke's famous proviso, according to which "Labour being the unquestionable Property of the Labourer, no Man but he can have a right to what that is once joined to, *at least where there is enough and as good left in common for others*."[65] This proviso establishes an "individualized criterion" in that a member of the public in his capacity as a new author should be able to use an existing creation if the prohibition of such a use would make him worse off *individually* than he would have been if the intangible at issue had not been created at all.[66] Moreover, the protection of the proviso is "non fungible" with ordinary economic goods since one cannot be fully compensated for the loss of the right to access copyright works and interact with them.[67] In sum, it is argued that when the claims of the rightsholders and of the public conflict, property does not form under the Lockean proviso and the conflict should be solved

[63] Ibid 1555-1560.

[64] Ibid 1549-1555.

[65] Ibid 1560-1562; Zemer, Lior, 'The Making of a New Copyright Lockean' (2006) 29(3) Harv. J.L. & Pub. Pol'y 891, 907; See also Laslett, Peter (ed), *Locke John-Two Treatises of Government* (Cambridge University Press 1988).

[66] *Gordon* (fn 60) 1570.

[67] Ibid 1572. In the same page we read: "(1) the proviso protects people's liberty to use what has already been created and is in the public domain. Nothing can be taken from the public domain unless "enough and as good" is left. (2) If a new creation renders the public domain less valuable, the proviso gives people a privilege to use the new creation to the extent necessary to make themselves as well off as they previously were. Among other things, this means that major cultural developments must be open for all to use. (3) The proviso gives people the same kind of liberty to create that they would have had if the creators had not sought to appropriate. As one application of this principle, persons have the liberty to use what they would have discovered in the absence of prior creators. As a broader application of this principle, persons have the liberty to deal with reality as fluidly and freely as if prior creators had not existed."

in favour of the public.[68] In such cases the author could not prevent access to the work but he could be compensated by means of a liability rule.[69]

Similarly, Senftleben referred to the notion of 'intergenerational equity' based on Locke's theory which could also be used as a reference point for the enforcement of copyright exceptions against DRM and also as a necessary reference position for the application of the three-step test since "there is no clear response to the question of where to draw the line between grants and reservations of copyright" and "[d]epending on which argument in favour or against copyright protection is emphasized, the grant of excessive, strong, moderate and minimal protection alike comes within reach." In particular, Senftleben also recognised that the natural right to property, as introduced by Locke, can only be acquired on condition that other labourers will find a world of abundance as well. Thus, authors have to subject their works to the idea/expression dichotomy, the expiration of copyright protection and copyright limitations, in order to leave abundance for others as well and also acquire a natural right to intellectual property.

Regarding the first step in creating the literary property concept in France, almost 10 years before the beginning of the French Revolution of 1789, this was based on the doctrine of physiocratism ("doctrine physiocratique") which was triumphing at the time.[70] According to some of the general principles of this school of thought, what is the most advantageous for the individual is the most advantageous for all and, therefore, a literary property right is awarded in order to facilitate the free expression of the individual. The proponents of this doctrine believed in the existence of a natural law according to which every person has a right to what he acquires freely with his (intellectual) labour for liberty and property are natural rights.[71] In other words, the proponents of this literary property right were influenced by Locke's natural rights theory developed earlier in England. That intellectual property right was considered a natural right is also shown by the fact that the edict of 1777

[68] Ibid 1589.

[69] Ibid 1575-1576. Remuneration, however, should only be available in the case of commercial users instead of a non-commercial users since only the former are likely to be able to draw a monetary return from their use or in the case of commercial users who have been drawn to work solely in order to save themselves fungible resources, such as money, effort and time.

[70] *Makeen* (fn 47) 8-9.

[71] For other representatives of this school of thought see *Recht* (fn 59) 33.

accords a perpetual privilege to the author to recompense him for his work and creativity. Similarly, the edict of 1778 amending the edict of 1777 preserved the perpetual intellectual property right by providing that the author could contract with the printers without such a contract amounting to a cession of their property right. Arguably, conserving the property right perpetually indicates that intellectual property was considered a natural right. The edicts of 1777/1778 remained effective until the Revolution (1789) following which the system of privileges to which the existence of a literary property right was linked was abolished.

Following the French Revolution, the first French copyright enactment, the Law of 1791, created a dramatist's public performance right. The principal motivation behind the law was to dissolve guilds and corporations and to recognise and enlarge the public domain. In particular, the report on the 1791 decree arose in a dispute between dramatists and the Comedie Francaise, which was the beneficiary of the exclusive right to produce theatrical works. According to Le Chapelier, who was the Reporter of the 1791 law, when the manuscript is "give[n] over to the public […] by the nature of things, everything is finished for the author and the publisher when the public has in this way acquired the work."[72] Le Chapelier declared that author's rights are an exception to the public domain and he criticised the English law for providing a very strong right to the author rather than considering the public domain.[73]

The 1791 decree provided that any citizen could be a theatrical producer, and, correspondingly, any living author (or one dead for up to five years) could be produced wherever he wished. Plays by authors dead over five years were part of the public domain. Thus, authors' rights seemed to be after-casts to the rights of the public and there is no doubt about the end of the author domain and the beginning of the public domain. Moreover, Le Chapelier's concept of the public domain appears more extensive than the duration of the right since the public's property interest is incipient as soon as the author

[72] For other representatives of this school of thought see ibid.

[73] Ginsburg, Jane C., 'A tale of two copyrights: literary property in revolutionary France and America' in Brad Sherman and Alain Strowel (eds), *Of Authors and Origins-Essays on Copyright Law* (Clarendon Press, Oxford 1994) 145.

discloses his work, therefore although author's have temporary property rights based on his labour the public have more fundamental claims based on ever-existing principles.[74]

A reproduction right that recognised a property right in author's works even after publication was enacted in France in 1793.[75] Jurisdiction over elaboration of a copyright law had been transferred to the Committee on Public Instruction and the report of Lakanal on behalf of the Committee favoured author's rights and announced a property right in works of authorship.[76] Lakanal also underlined author's rights relationship with other fundamental rights of man by referring to the Declaration of the Rights of Man and of the Citizen.[77] The 1793 decree was to become one of the most important author rights laws as this law was the primary source of legislation not only for France but for Swiss and German laws as well and to a greater or lesser extent for most of the author rights statutes of the civil law countries.[78] Taking under consideration that the revolutionary author rights laws were preceded by the formal recognition of natural rights, including the right to property, by the Declaration of the Rights of Man and of the Citizen,[79] it has been suggested that

> "mixed motives underlay the French Revolutionary copyright laws […] and that the parliamentary speeches and the texts of the laws themselves attest to a certain tension between authors' personal claims of right and the public interest in access to works of authorship."[80]

[74] *Ginsburg* (fn 50) 655.

[75] French Law of July 19-24, 1793, in Duvergier, Jean-Babtiste M. (ed), *Collection Complete des Lois* (Deuxieme Edition, Guyot et Scribe, Libraires-Editeurs, Paris, 1834), 29-32.

[76] Archives Parlementaires, 19 July 1793; *Ginsburg* (fn 50) 656 quoting extracts from the Report.

[77] See, generally, Declaration of the Rights of Man and of the Citizen 1789, adopted by the National Assembly during the French Revolution on August 26, 1789, and reaffirmed by the French Constitution of 1958 <http://www.britannica.com/EBchecked/topic/503563/Declaration-of-the-Rights-of-Man-and-of-the-Citizen> accessed 10 June 2011.

[78] *Makeen* (fn 47) 9.

[79] See, generally, *Declaration of the Rights of the Man and of the Citizen* (fn 32); Article 17 of the Declaration recognizes the 'sacred' right to property.

[80] *Ginsburg* (fn 73) 151.

Civil law has its natural law foundations on the philosophical heritage of Fichte, Kant and Hegel.[81]

For Fichte a property right does not simply protect the 'interest' of the author, but fosters the relationship between the author and the public in relation to knowledge.[82] According to Fichte, when one acquires a book, the real object of purchase is the possibility of appropriating such matter trough one's effort, that is the possibility of 'learning', a demanding activity that consists in obtaining the author's ideas and giving them his own form (and not the material carrier or its matter or copy as such).[83] Therefore, the essence of Fichte's property right is the dynamic of learning as such and the fostering of the relationship between the author and the public who "come to share the responsibility of thinking" and not the simple protection of the author's interests by means of his remuneration.[84] Since Fichte is not interested in establishing a clear definition of what constitutes a work of authorship but instead is interested in understanding the process of sharing thoughts through a tangible medium (through the acts of 'communication' and 'learning'), his approach to the author's right is the preservation of "the dimension in which author and reader can freely share the responsibility of thinking."[85]

A similar relationship of sharing thoughts can be found in all domains of human creativity, since, arguably, the value of a copyright work lies in the possibilities of experience it conveys, not in the material carrier of the work or in its content as such, and, accordingly, the real object of purchase is a mere possibility.[86] In other words, only the possibility of

[81] See Borghi, Maurizio, 'Owing Form, Sharing Content: Natural-Right Copyright and Digital Environment' in Macmillan, Fiona (ed), *New Directions in Copyright Law (Volume 5)*, (Cheltenham, UK and Northampton, MA, USA: Edward Elgar 2007) 205.

[82] Ibid 209; similarly, in 208-209 it is also noted that property rights in a book can be established in relation either to the physical carrier which can be transferred, or to the matter constituting the ideational aspect, which can be appropriated by anyone, who can engage in a specific activity, without the author's consent, or to the form constituting the ideational aspect, which cannot be appropriated without the author's consent.

[83] Ibid 209, 219.

[84] Ibid 209.

[85] Ibid 218.

[86] Ibid.

learning and experiencing can be bought and not the 'knowledge' or the 'experience' as such.[87]

According to Borghi, utilitarian proponents think of knowledge "as a cumulative process of 'building-up', binding past and future generations on the bright path of progress (i.e. evolution)", a theory not suited to the literary creation.[88] Fichte engaged in a productive critique of the utilitarian knowledge theory when he observed that there are two different kinds of knowledge, the first being only an "image or a copy of something existing outside the knowledge itself" that accumulates with the passing of time and can be quantitatively measured and the second being knowledge that creates the reality instead of merely copying it.[89] Only those who practice the second kind of knowledge can be named 'scholars' and it only this kind of knowledge based on the natural right theory of copyright that in the digital environment "can provide a sound basis for giving a new rigorous sense to the 'sharing of knowledge'."[90]

Kant's approach is similar to Fichte's. In particular, Kant considers books as means of exchanging thoughts and publishers as mere intermediaries between the author and the public.[91] As a result, he defines copyright as a right serving the need to preserve a public sphere of communication among authors and members of the public that helps approach the "correctness and truth" of their thinking.[92] Therefore, according to Kant, freedom of thought generally is above the author's interest in being remunerated for his labour.[93]

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[87] Ibid.

[88] Ibid 219-220.

[89] Ibid 220-221.

[90] Ibid 221-222.

[91] Ibid 209.

[92] Ibid 210.

[93] Ibid.

Hegel's opinion on the relations between persons, freedom and property was laid out in the "Philosophy of Right".[94] Hegel's believes that property is the initial right of persons and as such it provides the logical basis for the rights to life and liberty.[95] According to Hegel, the object of property is not related to physical characteristics and, since the latter do not belong in the definition of property rights' objects, incorporeal things, such as intellectual creations, can naturally become objects of private property.[96] Obviously, Hegel is influenced by natural law theories and he views human creations as the objectivization of the creator's self.[97] Moreover, in Hegel's framework, Things have only external form and not necessarily physical. For example, a thought is the purest object and a Thing belonging to the thinking subject. Thinking gives the world an objective existence and a claim to control such an existence.[98]

The question whether claims in immaterial objects are capable of being conceptually separated from the property rights in physical objects embodying them (the property holder can alienate copies and, at the same time, retain the exclusive power to make reproductions) was positively answered since intellectual property rights were considered by Hegel to be 'wealth' instead of 'possession'.[99] In other words, although the direct and intended use of an intellectual product is "to think it" the indirect use is the power to control use given by intellectual property.[100] Hegel justifies the prohibition against unauthorized literary reproduction on the basis of the protection of the economic interest of the author while, at the same time, he argues that plagiarism does not strictly infringe property rights but is "a violation of the code of honor."[101] Generally, Hegel believes that only limited

[94] Dyde, Samuel Waters (tr), *Hegel*, *Georg Wilhelm Friedrich*, *Philosophy of Right (1896)* (Batoche Books 2001). On Hegel see also Schroeder, Jeanne L., 'Unnatural Rights: Hegel and Intellectual Property' (July 2004) 60(4) U. Miami L. Rev. 453.

[95] Efroni, Zohar, *Access-right: the future of digital copyright law* (OUP 2011) 107.

[96] Ibid 113.

[97] Ibid.

[98] Ibid.

[99] Ibid 114.

[100] Ibid.

[101] Ibid 115.

protection is given to the authors while it has been even argued that Hegel's discussion of property does not provide for positive copyright protection at all.[102]

2.3 The marginalization of digital copyright law

2.3.1 The economic incentive rationale behind current digital copyright law

Arguably, European digital copyright law may be viewed, among other, as an "economic tool" that provides a solution to the "economic problem" of "suboptimal levels of creation of works" by means of granting proprietary rights over the author's work.[103] In particular, the wording of certain EUCD Recitals suggests that copyright law is used as a form of industrial policy for the digital environment. For example, Recital 2 of the EUCD shows that the policy objective of removing disparities between national provisions in the field of digital copyright law was an indirect result of the pursuit of another, primary objective, that is the creation of a framework which will "foster the development of the information society in Europe." The Recital recognizes that, towards the realization of this aim, "[c]opyright and related rights play an important role […] as they protect and stimulate the development and marketing of new products and services and the creation and exploitation of their creative content."

Moreover, Recital 4 of the EUCD provides that copyright harmonization is a means to an end since it "[…] will foster substantial investment in creativity and innovation, including network infrastructure, and lead in turn to growth and increased competitiveness of European industry, […]." The Recital confirms that such investment will create more employment

[102] Ibid. See also *Schroeder* (fn 94) 501-502 where the following are noted: "[w]hat types of arguments would Hegel have us consider when deciding on a specific property law regime? Hegel insists that his logical method is incapable of mandating pragmatic policy decisions. If it did, it would violate the very goal of political philosophy-to explain how man can manifest his freedom within society. If our specific decisions were mandated, we would not be free. Consequently, pragmatism turns out to be the corollary to Hegelian logic. In his discussion of copyright, Hegel mentioned in passing one of the traditional pragmatic justifications-that copyright may incentivize authors to create more copyrightable works to the benefit of society generally. This should not be interpreted as a logical mandate, however. It is only an example of the type of practical arguments that society might, in its discretion, consider. It is based on an empirical claim and so should be empirically challenged. Indeed, as an author, Hegel is hardly disinterested in the subject of copyright, and so his instincts are not necessarily to be trusted."

[103] Christie, Andrew F., 'Private copying license and levy schemes: resolving the paradox of civilian and common law approaches' in Vaver, David & Benlty, Lionel (eds), *Intellectual Property in the New Millennium-Essays in Honour of William R. Cornish* (Cambridge University Press 2004) 250.

opportunities "[…] both in the area of content provision and information technology and more generally across a wide range of industrial and cultural sectors."

In the same spirit, Recital 5 of the EUCD states that "the current law on copyright and related rights should be adapted and supplemented to respond adequately to economic realities such as new forms of exploitation" since new technologies have emerged that affect creation, production and exploitation. Similarly, Recital 6 of the EUCD stipulates that there is a need for copyright law harmonization in the EU because otherwise we will be lead to "a refragmentation of the internal market and legislative inconsistency" which has to be prevented because the information society has already greatly increased transborder exploitation of intellectual property and it argued that the development of the information society "will and should further increase". According to Recital 6, the European legislator is aware that "[s]ignificant legal differences and uncertainties in protection may hinder economies of scale for new products and services containing copyright and related rights" and this is something that he tries to avoid.

Even if copyright is used as an instrument to strengthen the industrial development of the EU, copyright's main purpose, even in digital settings, remains the struggle to guarantee an optimal amount and use of information.[104] Therefore, the central question in a normative economic analysis of intellectual property regulation is which legal rules are efficient and should be enacted. Efficiency is distinguished into product efficiency and allocative efficiency.[105] Product efficiency entails checking whether the results of application of a given legal rule could also be realized at lower costs by application of another legal rule. Allocative efficiency is concerned with the division of rights, questioning whether rights are being allocated to the person that values them most.[106] It is argued that "by introducing scarcity, markets for information products can function along the lines of other markets, namely,

[104] Atkinson, Benedict A. & Fitzgerald, Brian F., 'Copyright as an Instrument of Information Flow and Dissemination: the case of ICE TV Pty Ltd v Nine Network Australia Pty Ltd' (2008) Queensland University of Technology Digital Repository <http://eprints.qut.edu.au/15208/1/15208.pdf> accessed 20 April 2009.

[105] Yoo, Christopher S., 'Copyright and Public Good Economics: A Misunderstood Relation' (2006-2007) 155 U. Pa. L. Rev. 635; van den Bergh, Roger, 'The role and social justification of copyright: a "law and economics" approach' (1998) 1 IPQ 17.

[106] For the definitions used see *van den Bergh* (fn 105) 19.

goods are allocated to those who desire them most as indicated by their willingness to pay."[107]

In this theoretical context, the dilemma is finding a balance between the need for information production and information dissemination, namely the "economic optimal size of copyright."[108] As stated by Landes and Posner "striking the correct balance between access and incentives is the central problem in copyright law."[109] The price of information should not exceed marginal cost, namely the cost of producing one more unit of a good, if the policy objective is to secure an optimal use of information.[110] The problem is, however, that the price of information must be higher than marginal cost in order to provide incentives for the creation of the work in the first place. In this context, copyright introduces and artificial scarcity in copies and gives a monopoly to the right owner to control access to works. Arguably, because "copyright owners are able to charge substantially more than the marginal cost for access to expressive works" it has been argued that "some people who would have been willing to purchase access at somewhat more than its marginal cost, but at less than the supracompetitive price, now will not purchase at all. The result is a deadweight loss to society."[111] In other words, the dilemma is providing incentives to create information but without sacrificing its optimal use.

The market failure of the suboptimal levels of creation of works is closely connected to the public good nature of the work that conduces in it being non-rival and non-excludable. A non-rival public good may be consumed by one consumer without preventing simultaneous consumption by others. Moreover, it is impossible to prevent an individual who does not pay

[107] Ganley, Paul, 'Digital Copyright and the New Creative Dynamics' (2004) 12(3) Int. J. Law Info. Tech. 282, 288-289.

[108] *van den Bergh* (fn 105) 21.

[109] Ibid where the writer quotes Landes, William M. & Posner, Richard A. 'An Economic Analysis of Copyright Law' (1989) 18 J. Legal Stud. 325.

[110] *van den Bergh*, *Roger* (fn 105).

[111] *Netanel* (fn 36) 293 and fn 29 where it is stated that 'access might be in the form of purchase or rental of a hard copy (book or CD), electronic access (TV, radio, or electronic database), or onsite public performance or display (movie or museum)"; also in fn 32 we read that "defined in terms of traditional welfare economics, deadweight loss consists of two components: (1) the extent of the lost satisfaction experienced by each consumer who is unable to purchase the product because of its monopolistic price; and (2) the number of consumers who experience such loss."

for a non-excludable public good from enjoying the benefits of it unless proprietary rights are given in relation to it (non-excludable). Without the grant of proprietary rights in relation to it, the work is likely to be subject to "free-riding" by third parties and the creator of the work unable to appropriate the full value of it. As a result, creators would have reduced incentives to create new works and a non-optimal quantity of the goods is produced.[112] However, the concept of public good "doesn't capture the essence of [the] mode of distribution [of intellectual property]" which is not a public good.[113] In other words, the appreciated value of information disseminated in a tangible medium introducing scarcity created the publishing industries, afforded them strong monopoly rights and allowed for the argument to be put forward that intellectual property is an essential prerequisite for the creation and dissemination of valuable works.

Recent intellectual property expansionism is premised on neoclassical economic theory and the allocative efficiency of market structures, theories which followed the utilitarian economic incentive rationale. The neoclassicist approach has roots in late nineteenth-century "marginal utility theory" which represents "a fundamental shift from the classical conception of property as the embodiment of previously committed investment and labor to an identification of property with the ability to capture future profits."[114] According to neoclassical economics, property rights can act as "a cornerstone of market efficiency" and economic analysis applies to legal institutions.[115]

According to the Chicago School, the main neoclassical school of thought, the suitable theoretical framework for the analysis of all legal questions, including those which are not traditional market issues, is the micro-economic model. The microeconomic model examines the behavior of households, consumers and firms and buyers and sellers, regarding the allocation of limited resources affecting the supply and demand for goods and services. According to the Chicago School, the tools of micro-economic theory, that is the curves of supply and demand, can be applied to analyze the market of laws in general, just as they are applied to the market of apples or cars. In this context, the Chicago School does not

[112] *Christie* (fn 103) 250.

[113] *Ganley* (fn 107) 288-289.

[114] *Netanel* (fn 36) 311.

[115] Ibid 312.

distinguish between rational individuals and firms, governments or agencies and perceives the State, its structure and institutions as exogenous to the analysis while it assumes that markets and States correspond to each other.[116]

Moreover, the neo-classical economic theory supports the monopoly concept on which the strong monopolistic rights afforded today to rightsholders are based.[117] In a monopoly position a firm may misallocate resources. Monopolistic positions are usually obtained either because governments prevent competitive entries or because other firms face non-legal difficulties in competing with the monopolist. In order to maximize their profits, monopolists produce an output where the marginal revenue associated with the last unit sold is just equal to the marginal costs associated with producing and selling that final unit. In a monopoly, where the demand curve is negatively sloped, the price charged for the output is greater than both marginal revenue and marginal cost. On the contrary, in perfect competition, price and marginal revenue are equal and thus price is the equal to marginal cost when profits are maximized. Finally, under perfect competition, production is efficient because price is always driven down to the minimum point of the average cost function, while, on the contrary, monopolistic production is non-efficient and outputs are less because average production costs are greater.

A second generation in the development of the Law and Economics thought is the Transaction Cost Analysis. At the heart of the Transaction Costs Analysis is the Coase theorem. According to this theorem, bargaining will lead to an efficient outcome when trading with no transaction costs in an externality, regardless of the initial allocation of property rights. According to the traditional welfare economics identification of market failures adopted by the Chicago school, a market failure exists when both sides of the market lack multiple players (the problem of monopolies), when these players lack the same full information relevant to their market activities (imperfect information), when the market is bypassed by any of the players through involuntary actions (the problem of externalities), or when there is trade in public goods (the problem of public goods). The above categories of market failures are not mutually exclusive since particular issues can be analyzed in more

[116] Elkin-Koren, Niva & Salzberger, Eli M., Law, *Economics and Cyberspace: The Effects of Cyberspace on the Economic Analysis of Law* (Edward Elgar 2004) 8.

[117] Hovenkamp, Herbert 'Coase, Institutionalism, and the Origins of Law and Economics' (2011) 86 Indiana L. J. 499.

than one framework, e.g. some phenomena can be analyzed either as an externality or as a public good.[118] Prior to Coase, economists believed that state action would be required to fix market imperfections such as externalities. When producers do not pay all the costs associated with production, they will not cease production even when its costs are higher than the value to consumers. For example, if a factory pollutes the environment while producing goods, it would internalize the pollution costs via a liability rule requiring it to pay for the pollution and in that way the law would achieve an efficient outcome.

Coase shifted the framework of these market failures to a more general setting of transaction costs which are seen as the factor which determines modes of production and diverts the market from efficiency and as almost the sole factor to consider in the case of establishment of legal rules.[119] The concept of transaction costs includes the analysis of the interaction between individuals in the market, the analysis of the emergence of institutions, their internal decision-making process and their external interactions.[120] Central intervention is only needed when transaction costs are not zero.[121] Coase showed that the existence of externalities would not necessarily lead to inefficient results since in the absence of transaction costs efficiency would be achieved by the parties through bargaining in a competitive market. In the factory example, this would mean that it wouldn't mind if the factory had a legal right to pollute or whether the neighbors had a right to clean air since in the first case the "neighbors will pay it to reduce pollution by installing air filers as long as such preventive steps cost less than the damage caused by pollution," while in the second case "the factory will pay the residents of nearby neighborhoods for permission to pollute, as long as these sums are smaller than the gains from pollution."[122] However, Coase acknowledged that in the majority of cases transactions are not costless and in such cases the law's intervention to allocate rights as efficiently as possible is significant.[123]

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[118] *Elkin-Koren & Salzberger* (fn 116) 27.

[119] Coase, Ronald, 'The Nature of the Firm' (1937) 4 Economica 386; Coase, Ronald, 'The Problem of Social Cost' (Oct. 1960) 3 J. L. & Econ. 1.

[120] *Elkin-Koren & Salzberger* (fn 116) 8.

[121] *Coase* (fn 119); Coase, Ronald, 'The Problem of Social Cost' (Oct. 1960) 3 J. L. & Econ. 1.

[122] *Elkin-Koren & Salzberger* (fn 116) 91.

[123] Ibid 90-91.

The marginalization of the role of the law continued with the third generation of economic analysis of law, namely the Neo Institutional Economic Theory. The aforementioned transaction cost analysis views the transaction as the basic unit of economic analysis and hence focuses on various factors surrounding this unit and analyzes their cost structure. These include information, enforcement, governance structures of firms, political institutions and other collective decision-making structures.[124] The Neo-Institutional model, is a broader framework of economic analysis since it incorporates institutional structures as endogenous variables within the analysis of law.[125] In particular, according to the Neo-Institutional model, the political structure, the bureaucratic structure, the legal institutions, and other commercial and non-commercial entities affect each other while political rules intertwine with economic rules, which intertwine with contracts. This model uses the traditional micro-economics or welfare economics models, alongside public choice, game theory and institutional economics as analytical tools.[126]

However, apart from these few differences, new institutional theorists have many things in common with their neoclassical counterparts. Firstly, they also posit "that broad, clearly defined property rights are desirable for economic efficiency."[127] Second, new institutional theorists view property rights as more the product of private arrangement and negotiation than of legislative efforts to further fundamental social goals, thus, also tending to elevate market exchange over the implementation of public policy through law.[128] The view that all scarce resources should be owned by someone (universality), that all incidents of ownership in any given scarce resource must be concentrated in a single person (concentrated ownership), the fact that property rules are preferred over liability rules (exclusivity), and that property rights must be fully transferable (transferability) are shared by both the neoclassical and new institutional theorists.[129] The most important similarity between the two models is that they both believe that legal institutions are "subservient" to the market,"

[124] Ibid 91-92.

[125] Ibid 8-9.

[126] Mercuro, Nicholas & Medema, Steven G., *Economics and the Law-From Posner to Post-Modernism* (Princeton University Press 2006).

[127] *Netanel* (fn 36) 313.

[128] Ibid.

[129] *Netanel* (fn 36) 314-32.

and that the primary role of the law is to overcome transaction cost barriers and, "where this is impractical, to stimulate or mimic the market by producing the perceived outcome of such exchange" (principle of legal marginalism).[130]

In the context of these economic theories, it has been suggested that fair use is a response to market failure.[131] Since market failure, especially in the form of high transaction costs, can be eliminated by means of DRM there are suggestions to abolish fair use in the digital environment altogether.[132] In particular, DRM could help lower transaction costs, which are borne in the process of matching copyright owners to potential users and negotiating desired uses, by the enforcement of click-through licenses and by monitoring compliance with the agreed usage.[133] According to Goldstein, production and consumption of information are connected and thus market structures, based on willingness to pay, achieve optimal efficiency and achieve optimal dissemination of works when pricing signals are not disturbed and entitlements are broadly defined.[134] Therefore, rights structures should extend "into every corner where consumers derive value from literary and artistic works."[135] One market ploy used by information markets in order to achieve allocative efficiency is the "institutional lowering of transaction cost barriers."[136]

Another market ploy used by information markets in order to achieve allocative efficiency and combat market failure is price discrimination.[137] Price discrimination describes the movie industry model of distributing films first in the cinema, after some time via rental or

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[130] Ibid 321-322; in 324 we also read that "legal marginalism reinforces the principle that the purpose of copyright, like that of all law, is simply to facilitate an efficient allocation of resources through private ordering."

[131] Gordon, Wendy J., 'Fair Use as Market Failure: A Structural and Economic Analysis of the *Betamax* Case and its Predecessors' (December 1982) 82 Colum. Law Rev. 1600.

[132] Fernandez, Ben, 'Digital Content Protection and Fair Use: What's the Use?' (Spring 2005) 3 J. Telecomm. & High Tech. L. 425.

[133] *Ganley* (fn 107) 289-290.

[134] Goldstein, Paul, *Copyright's Highway-From Gutenberg to the Celestial Jukebox* (revised ed. Stanford University Press 2003).

[135] Ibid 216.

[136] *Ganley* (fn 107) 289.

[137] Ibid.

pay-per-view TV and, finally, through free-to-air TV, thus, bringing into balance availability and demand. Arguably, perfect price discrimination would make it possible for the author to produce both the work and the optimal number of copies and would bring him a maximum share of consumer surplus since he would charge each consumer the full amount she would be willing to pay for access to the work.[138] DRM systems can help at the realization of infinite price discrimination "through the combination of software or hardware protocols and click-through licenses matching consumer preferences with content distribution."[139]

2.3.2 The limits of the economic theories marginalizing the role of copyright exceptions

The examination of the economic analysis of law in light of the digital-networked information environment led scholars to argue that "a new reality that challenges the analytical framework of standard law and economics" has been created.[140] In particular, the complex interface between cyberspace and physical economic markets consists of a complete substitution of physical markets, of a partial substitution of physical markets and of an indirect affection of transactions, which are negotiated and concluded in traditional physical markets, by cyberspace.[141] The complete substitution of physical markets by cyberspace refers to the online negotiation, conclusion and carrying out of entire transactions, that is trading in information goods and services such as software, music and eBooks.[142] At this point it must be noted that the term 'cyberspace' used by Elkin-Koren and Salzberger will be replaced in this section by the term 'in the context of digital delivery of works' which fits better in our work, is more familiar so far to our readers and is considered to have the same meaning with the term 'cyberspace' as defined by these two writers.

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[138] Demsetz, Harold, 'The Private Production of Public Goods' (1970) 13 J.L. & Econ. 293, 301-304, where possibilities for price discrimination in relation to public goods are discussed.

[139] Ibid.

[140] *Elkin-Koren & Salzberger* (fn 116) 13.

[141] Ibid 26.

[142] Ibid where it is also said that "[t]hus, a Web site from which a user can directly download music files or software, may substitute for record stores. Online distribution of news may substitute for printed newspapers or broadcasted radio news. Transfer of money may also be processes online, using credit cards, e-cash or payment processing services provided by intermediaries such as PayPal or SafetyPass."

In this context, it has been argued that applying the neoclassical microeconomics model in the context of digital delivery of works maybe be unproductive and misleading since several traditional market failures do not exist in that case, e.g. the public nature of information goods, while it omits new models of production that do not fit to standard market analysis, e.g. the peer-produced content, whose existence requires "a better understanding of the interface between market and non-market modes of human interactions and activities in the information environment."[143] Elkin-Koren and Salzberger examined separately the five types of market failure that were developed in analogue contexts, namely monopolies, public goods, imperfect information, externalities and transaction costs, to see to what extent they exist and can be applied as such in the context of digital delivery of works.

For the purposes of this work we will only refer to their conclusions in relation to transaction costs. The reason is that the aim of this section is to show that the arguments in favour of strong exclusive rights backed by DRM according to which market failure in the form of high transaction costs does not exist when DRM are applied to works and therefore there is no need to maintain the enforcement of copyright exceptions when works are delivered digitally are not entirely valid. Generally, if it is accepted that the application of DRM to works reduces transaction costs, then it is also accepted that when DRM are applied to works more transactions are likely to be facilitated, prices are likely to be reduced and the justification for central intervention under standard contract law analysis is likely to be minimized.[144]

According to the side of the story accepting that DRM reduce transaction costs and thus solve the market failure problem of high transaction costs, transaction costs in the context of digital delivery of works are lower than in the non-digital delivery world for two reasons; first, because there are reduced costs of searching for, exchanging, purchasing and transmitting information in the consumer's interest and, second, because there are reduced search costs for sellers regarding consumers' preference by targeting advertising and promotions which result in price cuts. In particular, the effect of reduced transaction costs when works are delivered digitally is examined in the context of standard form contracts. Standard form contracts which are back-up and enforced DRM reduce hugely transaction

[143] Ibid 27-28.

[144] Ibid 93-94.

costs because standardization saves the costs of drafting documents and negotiating on the part of suppliers and of repeatedly reading the terms on the part of consumers. Thus, if transaction costs in the context of digital delivery of works are lower, competition regarding the terms of transactions is likely to increase since suppliers will be able to collect information about consumers' preferences and tailor contract terms accordingly and also since consumers will be able to seek and compare various contract terms for the same goods or services, thus, incurring lower search costs.

However, the application of traditional transaction costs economic analysis to works distributed digitally, where markets, communities and their governance differ substantially from their counterparts in the territorial state, is, arguably, an open issue and the answer cannot be so straightforward. The reason is that such an application results in different solutions than when applied to traditional markets, where exists a defined market and a central government with various intervention powers and enforcement abilities. Therefore, according to the other side of the story, notwithstanding the reduced costs of retrieving information in relation to works distributed digitally, there may be increased costs associated with individuals' choices since individuals are required to choose among a vast number of opportunities.

Moreover, markets of works distributed digitally do not have a clear advantage in informational accuracy and especially in the case of non-standardized goods and services, which may contain hidden information and information that may be less accurate and sufficient.[145] In particular, this connection between transaction costs and the traditional market failure of lack of information is due to the fact that, although the concept of transaction costs is not identical to the concept of information costs, full information would bring about zero-transaction costs.[146] Therefore, the conclusions regarding information in markets of works distributed digitally have an important bearing on the transaction cost analysis and on the ultimate question whether transaction costs are lower or not when works to which DRM are applied are distributed digitally.[147]

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[145] Ibid 95.

[146] Eggertson, Thrainn, *Economic Behavior and Institutions* (Cambridge University Press 1990) 15.

[147] *Elkin-Koren & Salzberger* (fn 116) 91-92.

Regarding information, in particular, Elkin-Koren and Salzberger argue that imperfect information and lack of information does not constitute a market failure in the case of digitally delivered works while, on the contrary, an information overflow does. This is so because although overflow is balanced by the existence of search engines market players still have to spend much more time and resources in making the correct decision.[148] In sum, it may be argued that DRM-protected works distributed digitally do not necessarily reduce transaction costs. As a result, even if it is accepted that copyright exceptions are indeed nothing more than a solution to market failure, the possibility of the existence of high transaction costs in the context of digital delivery of works means that copyright exceptions should not be abolished altogether in such a context.

Another argument in favour of preserving fair use is the implications of new technologies for the end user to interact with digital works in new and innovative ways. As it has been argued,

> [t]here is a tendency in economic research on copyright to abstract from the broader implications of digitization that play out in parallel to the diffusion of digital copying technology and to sideline induced technological change (adaptation). The potential for user innovation concerning new ways to disseminate and present copyright works is rarely incorporated into the analysis. Where he potential for industry adaptation and user innovation in market for copyright works is ignored, there may be a bias in favour of greater copyright protection.[149]

The assumption that price discrimination, in practice, consistently reduces prices for consumers more than the existing system of secondary markets is doubted by other legal scholars who are not persuaded whether price discrimination ultimately results in significantly lower prices for consumers who value the product less.[150] For example, a

> DVD that "vanishes" after 48 hours will only be attractive at a 6-7 dollars retail price if used DVDs at the same price (with unlimited playback and resale value) are eliminated, if rentals available for 2-4 dollars are

[148] Ibid 78.

[149] Handke, Christian for the Strategic Advisory Board for Intellectual Property, 'The Economics of Copyright and Digitisation: A Report on the Literature and the Need for Further Research' (March 2010) <http://www.ipo.gov.uk/pro-ipresearch/ipresearch-policy/ipresearch-policy-copyright.htm> accessed 15 April 2010, at 8-9.

[150] Perzanowski, Aaron & Schultz, Jason, 'Digital Exhaustion' (2011) 58 UCLA L. Rev. 889, 905.

> eliminated, and if library lending and free gifts or used DVDs are eliminated.[151]

Thus, those who depend upon the lowest priced copies (such as by rental and re-sales) and free copies (such as from gifts or library lending) because they cannot afford anything more are the most likely to be harmed, even if more new products/copies will be available at a cheaper price for those who can afford to buy them, and rightsholders will make higher profits even as fewer people get to enjoy the movies.[152]

By way of contrast to the problems that seem to characterize price discrimination, other doctrines such as the doctrines of first sale and exhaustion of rights have several advantages for the user of digital works. They allow copyrighted works to be redistributed so that much more people are able to enjoy them and that the circulation to persons unable to pay full price increase, while at the same time uses based on these doctrines offer a price-competitive option to purchasing new copies and help reduce their price.[153] The positive impacts of the first sale doctrine, at least as it was developed for offline distribution, are discussed in a Berkman Study of 2004.[154] In particular, it is argued that the first sale doctrine

> increases the overall availability of copyrighted works, […] ensures the continued availability of copyrighted works, including those that are out of print. […] enables both access to copyrighted works by different means than "purchase" (such as lending a book from the library), and lowers the costs because it leads to price competition. […] allows access to works without disclosure of the identity to the copyright holder. Thus, an individual enjoys (in non-technical terms) a kind of "right" to read, or watch, or listen anonymously under this doctrine. […] a buyer of a CD […] can sell it without copyright holder's permission to someone else when she is tired listening to it. […] leads to retail price competition, and that it

[151] Mitchell, John T., 'DRM: The Good, the Bad, and the Ugly' Colleges, Code and Copyright: The Impact of Digital Networks and Technological Controls on Copyright: Publications in Librarianship no.57, chapter 8, American Library Association, Presented June 10-11, 2004, Symposium sponsored by the Center for Intellectual Property in the Digital Environment, University of Maryland University College, Adelphi, Maryland, USA <http://www.ftc.gov/os/comments/drmtechnologies/539814-00747.pdf> accessed 10 June 2007, 60.

[152] Ibid.

[153] *Mitchell* (fn 151) 10.

[154] Gasser, Urs, 'iTunes: How Copyright, Contract, and Technology Shape the Business of Digital Media-A Case Study' Berkman Center for Internet & Society at Harvard Law School Research Publication No.2004-07 <http://cyber.law.harvard.edu/media/uploads/81/iTunesWhitePaper0604.pdf> accessed 10 June 2009.

> fosters the emergence of new markets such as rental and secondary sale markets.[155]

In the context of the law and economics discussion, it should be noted that copyright law is also influenced by the recent tendency to move from the "law and economics approach" to the "behavioural law and economics" approach. According to the latter approach, authors don't do everything for money but they are motivated by other factors as well. This is illustrated, for example, by the fact that moral rights are recognized in many countries which do not benefit authors in any obvious way. Therefore, strong copyright protection should be given only when there is proof that it offers authors an incentive to create that compensate users by means of an optimal production of works.

Opposite to the neoclassical and new institutional economic theories, which generally favor copyright expansion, there are the minimalist theories of the copyright expansion according to which since "the market for copyrightable works is only a small part of the allocative efficiency matrix," a broad proprietary copyright "will draw resources away from non-expressive productive activity, resulting in an inefficient allocation of social resources overall." In principle, it is suggested that it must be proved that copyright protection is required in order to motivate authors to create and publishers to distribute the works before extended rights are given to the rightholders. The ability of copyright protection to motivate authors to create and publishers to distribute works online is questioned by certain scholars who believe that "little or no copyright incentive is required to encourage creative activity and interaction on the Internet and, therefore, the copyright as we know it is not needed in the digital world".

In particular, it has been argued that more important empirical research must be conducted by economists working in this field and more empirical evidence that economic incentives do indeed encourage intellectual productivity is needed. It has even been argued that the incentive approach dating back to Adam Smith that "seeks to explicate intellectual property's traditional incentive rationale in economic terms" is based on the "unproven intuition" that "authors and publishers will not make works available to the public unless they can prevent others from making copies, at least for a limited time". A more moderate approach is the one that acknowledges the need for the existence of copyright in the digital

[155] Ibid 52.

world but not in cases of personal and generally noncommercial uses of their works. According to this approach, digital copyright should exist alongside the hard-copy environment's exceptions and limitations. Instead of trying to limit users' expectations to match rightholders' preferences, Litman suggests adjusting the rights of readers and listeners to interact with copyrighted works in order to accommodate parallel uses made possible by new technologies.

2.4 Reproduction for private use and the Three-Step Test in the context of digital delivery of works

The three-step test is the legal standard used to determine whether or not a use of copyrighted work is lawful. In particular, its very existence implies the existence of copyright limitations since it is an instrument for setting limits to limitations on exclusive rights.[156] The test was introduced in 1967 in Article 9(2) of the Berne Convention (Paris Act) as a general criterion for determining under which circumstances the right of reproduction may be curtailed in national law. Article 9(2) differs from the other provisions of the Berne Convention on exceptions and limitations. It does not provide for any specific limitation or exception, but rather fixes the rules for the application of limitations and/or exceptions at the national level. More specifically, Article 9 of the Berne Convention stipulates that

> (1) Authors of literary and artistic works protected by this Convention shall have the exclusive right of authorising the reproduction of these works, in any manner or form. (2) It shall be a matter for legislation in the countries of the Union to permit the reproduction of such works in certain special cases, provided that such reproduction does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author.

The three-step test lies at the core of copyright law. Since its introduction in 1967, it was included in the TRIPS Agreement of 1994[157] and the WIPO Treaties of 1996[158] and has now

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[156] Senftleben, Martin, *Copyright, limitations and the three-step-test. An analysis of the three-step-test in International and EC Copyright law* (Kluwer, The Hague, 2004) 295.

[157] The Agreement on Trade-Related Aspects of Intellectual Property Rights 1994 (TRIPS), Annex 1C of the Marrakesh Agreement establishing the World Trade Organisation, Morocco on 15 April 1994 <http://www.wto.org>.

[158] WIPO Copyright Treaty 1996 (WCT) (adopted 20 December 1996, entered into force 6 March 2002) S. Treaty Doc. No. 105-17 (1997), 36 ILM 65 (1997) <http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html>; WIPO Performances and Phonograms Treaty (WPPT) (adopted 20 December 1996, entered into force 20 May 2002) S. Treaty Doc. No. 105-17, 36 ILM 76 (1997) <http://www.wipo.int/treaties/en/ip/wppt/trtdocs_wo034.html>.

been adopted as a general template for limitations and exceptions and a 'horizontal provision' under the aforementioned treaties. Although the object of both paragraphs of Article 9 of the Berne Convention is only the "reproduction" of a work, the TRIPS Agreement and the WIPO Treaties have adopted the test and extended its scope to all exclusive rights since it is obvious that 'exclusive rights' include other rights aside from the right of reproduction and extend the concept from the reproduction right to all rights under the Berne Convention, that is to the right of translation, public performance, broadcasting, public recitation and adaptation.

Both traditional copyright exceptions and exceptions to anti-circumvention provisions must not infringe the three-step test. With regard to the EUCD anti-circumvention legislations, in particular, Ricketson and Ginsburg argue that they subject to the three-step test since "Article 11 [of the WIPO Copyright Treaty] delegates to member states' laws the determination of permissible acts, but these must remain consonant with the scope of exceptions and limitations allowed under […] article 9(2) […] of the Berne Convention."[159] In the same spirit, Reinbothe and Von Lewinski argue that

> [a]ny exceptions to the protection of technological measures for those who benefit from limitations of or exceptions to the rights should: […] (2) be restricted to the balanced application of particularly relevant and important limitations and exceptions in conformity with the conditions of the three-step test.[160]

In the context of examining the argumentation in support of the preservation of a minimum of lawful person use in the digital environment, special mention should be made to the operation of the three-step test in digital settings and particularly, regarding digital reproduction for personal use. The reason for the preference of the private copying exception over other copyright exceptions is that the former is the most problematic area for the smooth application of the three-step test. While other copyright exceptions in relation to digital works do not infringe the three steps of the test, it is uncertain whether the private copying exception does not fall foul of them since it is obvious that, at least in principle, digital reproduction for private use can result in an economic loss for the rightsholders and affect the normal exploitation of the work. Apart from a potential

[159] Ricketson, Sam & Ginsburg, Jane C., *International Copyright and Neighbouring Rights: The Berne Convention and Beyond* (OUP 2006) 977.

[160] Reinbothe, Jörg & von Lewinski, Silke, *The WIPO Treaties 1996* (Butterworths LexisNexis, UK, 2002) 147.

infringement of the second step of the test, the first and third steps may also be infringed by the recognition of an exception regarding reproduction for private use. The discussion that follows examines whether this is true and whether it is possible to accept the operation of the exception for private use in relation to digital works. It is suggested that this is possible and this conclusion is used in support of the theoretical background that favours the preservation of a minimum of lawful personal use in the digital environment that is the issue under examination in this chapter.

2.4.1 The First Step

The three-step test has been interpreted by the WTO Copyright Panel on June 25, 2000.[161] The EC requested the WTO Panel to find that the two limitations laid down in Section 110(5) of the US Copyright Act were incompatible with Article 9(1) TRIPS together with Articles 11*bis*(1)(iii) and 11(1)(ii) of the Berne Convention. In particular, Section 110 of the US Copyright Act provides for limitations on exclusive rights granted to copyright holders for their copyrighted work, in the form of exemptions for broadcast by non-right holders of certain performances and displays, namely, "homestyle exemption" (for "dramatic" musical works) and "business exemption" (for works other than "dramatic" musical works). The so-called “homestyle exemption”, provided for in sub-paragraph (A) of Section 110(5) of the US Copyright Act, allows small restaurants and retail outlets to amplify music broadcasts without an authorization of the rightsholders and without the payment of a fee, provided that they use only homestyle equipment (i.e. equipment of a kind commonly used in private homes). Under the so-called ‘business exemption,’ provided for in sub-paragraph (B) of Section 110(5), commercial establishments such as bars, shops, and restaurants which do not exceed a certain size or which meet certain equipment requirements, may play radio

[161] WTO Panel, ‘United States-Section 110(5) of the US Copyright Act: Report of the Panel’ WT/DS160/R, 15 June 2000 <http://www.wto.org/english/tratop_e/dispu_e/1234da.pdf> accessed 10 May 2009. Another interpretation of three-step test was also given on March 17, 2000, when a WTO Panel presented its report on patent protection of pharmaceutical products in Canada (WTO Panel, ‘Canada-Patent Protection of Pharmaceutical Products’ WTO Document WT/DS114/R, 17 March 2000) and twin reports concerning EC protection of trademarks and geographical indications for agricultural products and foodstuffs followed on March 15, 2005 (WTO Panel, ‘Protection of Trademarks and Geographical Indications for Agricultural Products and Foodstuffs’ WTO Document WT/DS174/R, 15 March 2005; WTO Panel, ‘Protection of Trademarks and Geographical Indications for Agricultural Products and Foodstuffs’ WTO Document WT/DS290/R). For a comparative analysis of these reports see Senftleben, Martin, ‘Towards a horizontal standard for limiting intellectual property rights?-WTO Panel reports shed light on the three step test in copyright law and related tests in patent and trade mark law’ (2006) 37(4) IIC 407. However, here we only refer to the WTO Copyright Panel because the subject matter (copyright) of its analysis is similar to the subject matter of this study (copyright).

and TV music without paying royalty fees to collecting societies. The US held the view that both exceptions of Section 110(5) fell under the so-called "minor reservations doctrine" which was impliedly recognised by the Berne Convention.[162]

In the context of the dispute settlement procedure between the EU and the US, the WTO Panel, applied the three-step test found in Article 13 of the TRIPS Agreement and concluded that the "homestyle exemption" met the test's three cumulative requirements and, thus, was consistent with Berne Convention Article 11*bis*(1)(iii) and 11(1)(ii) as incorporated into the TRIPS Agreement (Article 9(1)).[163] In particular, it was found that the "homestyle exemption" was well-defined and limited in its scope and reach (13-18 per cent of establishments covered) (thus, it applied to "certain special cases"), that there was little or no direct licensing by individual rightsholders for "dramatic" musical works (i.e. the only type of material covered by the "homestyle exemption") (thus, it did not conflict with a "normal exploitation of the work"), and that there was no evidence showing that the rightsholders, if given opportunities, would exercise their licensing rights (thus, it did not cause "unreasonable prejudice" to the "legitimate interests" of the rightsholders).

However, the WTO Panel found that the "business exemption" did not meet the requirements of Article 13 of the TRIPS Agreement and, thus, was inconsistent with Berne Convention Article 11*bis*(1)(iii) and 11(1)(ii).[164] In particular, the exemption's scope in respect of potential users covered "restaurants" (70 per cent of eating and drinking establishments and 45 per cent of retail establishments), which is one of the main types of establishments intended to be covered by Article 11*bis*(1)(iii) (thus, it did not qualify as a "certain special case"), it deprived the rightsholders of musical works of compensation, as appropriate, for the use of their work from broadcasts of radio and television (thus, it

[162] *Senftleben* (fn 156) 410.

[163] *WTO Panel WT/DS160/R* (fn 161) §7.1 (a) 69. Regarding this decision see Helfer, Laurence R., 'World Music on a U.S. Stage: A Berne/TRIPs and Economic Analysis of the Fairness in Music Licensing Act' (2000) 80 B.U. L. Rev. 93; Ginsburg, Jane C., 'Toward Supranational Copyright Law? The WTO Panel Decision and the 'Three-Step Test' for Copyright Exceptions' (2001) 187 RIDA 2; *Senftleben* (fn 156); Ficsor, Mihály, 'How Much of What? The 'Three-Step Test' and its Application in Two Recent WTO Dispute Settlement Cases' (2002) 92 RIDA 111; Oliver, Jo, 'Copyright in the WTO' (2001) 25 Colum. J. L. & Arts 119; Dinwoodie, Graham, 'The Development and Incorporation of International Norms and the Formation of Copyright Law' (2001) 62 Ohio State L.J. 733; Johnson, Philip, 'One Small Step or One Giant Leap' (2004) 26 EIPR 264; Brennan, David J., 'The Three-Step Test Frenzy-Why the TRIPS Panel Decision might be Considered Per Incuriam' [2002] 2 IPQ 213.

[164] *WTO Panel WT/DS160/R* (fn 161) 69 §7.1 (b).

conflicted with a "normal exploitation of the work"), and statistics showed that 45 to 73 per cent of the relevant establishments fell within the business exemption (thus, it unreasonably prejudiced the "legitimate interests" of the rightsholder).

What is important in the context of the first step of the three-step test is the requirement of "specialty". This requirement has two aspects, namely one quantitative and one qualitative. With regard to the quantitative aspect, it has been argued that

> [f]irstly, it can be understood to require that a limitation has 'an individual, particular, or limited application, object, or intention; affecting or concerning a single person, thing, circumstance.' This is the quantitative aspect of specialty. It requires that a limitation has a limited scope so that it enables only a limited number of privileged uses.[165]

Regarding the qualitative aspect of specialty, it has been said that

> [s]econdly, the term 'special' refers to the state of being 'marked off from others of the kind by some distinguishing qualities or features; having a distinct or individual character'. This is the qualitative aspect of specialty which refers to a distinctive, exceptional objective. In this vein, it can be posited that a sufficiently strong justification must be given for a limitation.[166]

The WTO Panel opted for a quantitative enquiry both in relation to the homestyle exemption and in relation to the business exemption and stated that it was not equating the term "special cases" with "special purpose."[167] However, the quantitative concept developed by the WTO Panel was rejected by authors in favour of qualitative considerations of the term 'special.'[168] Accordingly, 'special cases' are said to be those justified by "some clear reason of public policy or some other exceptional circumstance."[169] The phrase "certain

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[165] *Senftleben* (fn 156) 137 (footnotes omitted).

[166] Ibid (footnotes omitted).

[167] *WTO Panel WT/DS160/R* (fn 163) 33 §6.111. See also *Ginsburg* (fn 164). See *Ricketson & Ginsburg* (fn 159) 764-767 where Ginsburg suggested that no normative interpretation should be given to the phrase since, in any case, the purpose behind any given exception will be tested by the second and third steps of the test.

[168] *Senftleben* (fn 156) 140-152.

[169] Ricketson, Sam, *The Berne Convention for the protection of Literary and Artistic Works: 1886-1986* (CCLS, Queen Mary College, London, 1987) 482.

special cases" in the first step refers, among others, to the notion of 'public interest.'[170] Other scholars, based on the records of the conference as well as on the context of the Convention, argue that for the introduction of an exception there must be a "sound legal-political justification."[171]

The impact of the aforementioned definition of 'special cases' on the question whether broadly framed limitations of personal use can generally be considered 'special cases' is important since the answer depends on the justification behind the exception. Broadly framed limitations for private or personal use generally cannot be considered 'special cases' anymore if the market failure rationale is the justification behind this type of limitation since the market failure rationale for the defence of private or personal use loses weight in the digital environment. However, Senftleben argues that, although the market failure rationale may be rejected, there are other rationales such as the right to privacy, the right of the dissemination of information and also considerations of intergenerational equity that can support this type of limitation.[172] It has also been argued that from a historical perspective there is substantial reason to think that a broadly worded private use is a special case, since private use privileges had been perceived as a 'certain special case' at the 1967 Stockholm Conference and many European countries were recognising broadly private copying exemptions when Article 9(2) of the Berne Convention was introduced in the Berne Convention in 1967 which were not affected by the recognition of a general right of reproduction in the Berne Convention.[173]

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[170] Koelman, Kamiel J., 'Fixing the Tree Step Test' (2006) 28(8) EIPR 407, 409; *Ricketson* (fn 169) 482; Fiscor, Mihάly, *The Law of Copyright and the Internet* (OUP 2002) 284; *Reinbothe & von Lewinski* (fn 160) 124-125.

[171] Ficsor, Mihάly, 'Collective Management of Copyright and Related Rights in the Digital, Networked Environment: Voluntary, Presumption-Based, Extended, Mandatory, Possible, Inevitable?' in Daniel Gervais (ed), *Collective Management of Copyright and Related Rights* (Kluwer Law 2006) 61 where it is argued that "the concept of "special cases" includes two aspects: first, an exception or limitation must be limited as regards to its coverage as no broad exception or limitation with a general impact is permitted and, second, it must be also special in the sense that there must be a specific and sound legal-political justification for its introduction. "Sound legal-political justification" means that exceptions and limitations cannot serve any kind of political objective. There is a need for a clear and well-founded justification, such as freedom of expression, public information, public education and the like for en author's rights may not be curtailed in an arbitrary way."

[172] *Senftleben* (fn 156) 158.

[173] See, for example, *Ricketson & Ginsburg* (fn 159) 775-776 who state that since at the time of introduction of the three-step test several countries recognized compulsory licenses then the permission of access in exchange of remuneration should be allowed under the third step of the test.

Apart from the WTO Copyright Panel, an EU case that exhibits a flexible interpretation of the three-step test regarding the exception of private copying is the German Supreme Court's decision in *Supply of Photocopies of Newspaper Articles by a Public Library*, *Re*.[174] The decision concerned the practice of a scientific library of dispatching copies of articles published in periodicals via mail or fax (upon request by individuals and undertakings) and of making an electronic catalogue of its holdings available online. Publishers and booksellers claimed that the library's activities infringed the reproduction and distribution rights of the authors of the articles distributed by the library. The library's practice of dispatching copies was deemed permissible on account of the personal use limitation found in the German Copyright Act according to which, the authorized user may ask another person to make the reproduction and need not necessarily produce the copy himself.[175] The Court took the view that a library is capable of fulfilling an intermediary role in the sense of the German Copyright Act and could provide a framework with which the personal user can take advantage of his user privilege. The Court also argued that the reproduction and dispatch of articles on demand, constitutes a certain special case owing to its connection with lawful personal use and a lawful interest in access to information and therefore does not infringe the first step of the three-step test.

Moreover, the Swiss Federal Court in *ProLitteris v Aargauer Zeitung AG* examined the issue of the scope of the private use exception in the digital environment by reference to the

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See also WIPO, 'Study on limitations and exceptions of copyright and related rights in the digital environment' SCCR/9/7, 5 April 2003 <http://www.wipo.int/edocs/mdocs/copyright/en/sccr_9/sccr_9_7.pdf> accessed 10 May 2009, at p.20 where it is said that Member States did not care to alter their laws and it was accepted that in the event that the Convention were to embody a general right of reproduction, it would be required to ensure that this provision did not affect national laws' exceptions. Moreover, see Hugenholtz, Bernt et al., 'The Future of Levies in a Digital Environment' Institute for Information Law, University of Amsterdam, Final Report, March 2003 available at <http://www.ivir.nl/publications/other/DRM&levies-report.pdf> accessed 15 February 2009, at 33, where it is noted that broadly worded private copying exemptions already existed in many European countries when Article 9(2) of the Berne Convention was introduced in the Berne Convention in 1967 and that "[i]t is generally assumed that such exemptions were 'grand-fathered' into the BC, and are therefore not in conflict with the test."

[174] Case I ZR 118/96 [2000] ECC 237 (BGH, German Federal Supreme Court).

[175] §53(2) No. 4(a) of the Urheberrechtsgesetz (UrhG, German Copyright Act) <http://www.wipo.int/wipolex/en/details.jsp?id=1034> accessed 10 June 2011.

three-step test.[176] A newspaper group effectively challenged the application of the private use exception to the activities of press review agencies by challenging the right of a collecting society (established to receive remuneration for the production of literary and artistic works) to collect fees from certain press review agencies which produced electronic compilations of articles from paper and web-based newspapers and journals for commercial and public authority clients who specified certain keywords against which the defendants' employees searched in producing the reviews. The fees were only legally payable to the collecting society, under the provisions of the Swiss Federal Act on Copyright and Related Rights, if the activities of the press review agencies fell within the Act's statutory exception for private use.

The Federal Court concluded that indeed the activities of the press review agencies in respect of both paper and electronic distribution fell within the Act's statutory exception for private use according to which, a person entitled to make private use of a work is also entitled to have those copies made by a third party also by means of providing a set of keywords upon which the agencies' choices were made instead of specifying the exact copies to be made.[177] Next, the Federal Court considered the newspapers group's argument that the three-step test precluded the application of the private copying exception because the electronic press review agencies acted like publishers competing with the claimant newspaper group. The Court concluded that the first step of the test did not prohibit the extension of the private use exception in this case because the court was simply applying an existing exception to a case in which a third party made a copy of a work rather than the person entitled to make private use him or herself.

In addition, another case that successfully transposes the analogue copyright exceptions in the digital environment is a 2002 German decision concerning the scanning and storing of press articles for internal e-mail communication in a private company.[178] Here, the Court

[176] [2008] 39 I.I.C. 990. See also Geiger, Christophe, 'Rethinking Copyright Limitations in the Information Society-the Swiss Supreme Court Leads the Way' (2008) 39 IIC 943.

[177] Article 19(2) of the Swiss Federal Act on Copyright and Related Rights adopted on 9 October 1992 (Status as of July 1, 2008) <http://www.wipo.int/wipolex/en/details.jsp?id=5223> accessed 10 June 2011.

[178] See *Elektronischer Pressespiegel (Electronic Press Review)*, Bundesgerichtshof (Supreme Court), July 11, 2002, case no. I ZR 255/00, *GRUR* 2002 <http://www.jurpc.de/rechtspr/20020302.htm> accessed 15 May 2010, at 963; This case is discussed in Senftleben, Martin, 'Fair Use in the Netherlands-a Renaisssance?' (2009) 1 Tijdschrift voor Auteurs, Media & Informatierecht 15-16, and

held that digital press reviews were legal under paragraph 49(1) of the German Copyright Act just like their analogue counterparts, if the digital version essentially corresponded to traditional analogue products in terms of its functioning and potential for use and, like in the particular case, if articles were included in graphical format without offering additional functions, such as a text collection and an index. The Court stated that, in view of new technical developments, a copyright limitation may be interpreted extensively and confining the limitation provided for in paragraph 49(1) to press reviews on paper was, on the contrary, considered to be outdated. In sum, the Court maintained that the analogue press review exception was transposed into the digital environment in line with the three-step test.

2.4.2 The Second Step

According to the second step of the three-step test, Member States may permit the reproduction of works "provided that such reproduction does not conflict with a normal exploitation of the work". Reproduction for private use was allowed in the past because "By its very nature, 'private use' would appear to be confined to the making of single copies, and the basis for it a kind of *de minimis* argument, coupled with acknowledgement that authors' rights should not impinge upon what is done in the purely private sphere."[179] Therefore, the use could easily satisfy the second step of the three-step test. However, today, the new technologies allow huge amounts of copying at no cost and at extreme paces. In essence, the quality of the new copies substitutes completely for licensed copies and "the copyright owner loses the opportunity of authorizing the individual in question to make a copy (and pay a fee), or of authorizing a third party to make a copy which may then be bought by that individual."[180] Therefore, it is not clear anymore whether reproduction of digital works for private use lies within the scope of Article 9(2).

A justification for the insertion of the reproduction for private use exception was the existence of high transaction costs and the difficulties in practically enforcing the reproduction right via private licensing. Nowadays, it is argued that from the moment new

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in Senftleben, Martin, 'The International Three-Step Test: A Model Provision for EC Fair Use Legislation' 1 (2010) JIPITEC 67.

[179] *Ricketson & Ginsburg* (fn 159) 780-782.

[180] Ibid.

technologies can reduce transaction costs and can enforce private licensing, the only "operative factor in relation to the second step" is the "non-economic normative consideration of privacy."[181] According to such an interpretation, the reproduction for personal use exception does not pass the second step of the three-step test unless Member States could "advance the bold argument that privacy considerations in themselves are sufficient to take such usages outside the scope of normal exploitation."[182] Indeed, there is an important ongoing debate on the impact of DRMs on privacy because of the envisioned monitoring techniques that are designed so as to allow the precise recording of the consumption patterns and on-line behavior of individuals.[183]

Another justification for the preservation of reproduction for private use notwithstanding the normal exploitation of the work requirement is provided by the notion of "intergenerational equity", according to which, not all private uses are the same. Given that browsing the internet and downloading for personal use, for example, may assist in the creation of a new literary of artistic work in the future, the real problem is to be able to distinguish such a consumptive use of today that will ultimately lead to an intellectual production of tomorrow from a consumptive use that will not lead to such production.[184] Therefore, arguably, a general exemption of personal use in the digital environment would not pass the second step and "a personal use framework ought to be established online which to the greatest extent possible, is aligned with the use of copyrighted material for ends serving intergenerational equity".[185]

Most importantly, the underlying economic normative factor of the second step can be interpreted in an empirical or a normative way so that it will not be always the case that the reproduction for private use conflicts with the "normal exploitation" of the work. In

[181] Ibid.

[182] Ibid.

[183] On DRM and privacy see Litman, Jessica, 'The Sony Paradox' (2005*)* 55(4) *Case W. Res. L. Rev.* 917 <http://works.bepress.com/jessica_litman/2> accessed 20 November 2010; Cohen, Julie E., 'DRM and Privacy' (2003) 18 Berkeley Tech. L. J. 575; Samuelson, Pamela, 'Privacy as Intellectual Property?' (2000) 52 Stan. L. Rev. 1125; Mulligan, Deirde & Perzanowski, Aaron K., 'The Magnificence of the Disaster: Reconstructing the DRM Rootkit Incident' (2007) 22 Berkeley Tech. L. J. 1157 <http://ssrn.com/abstract=1072229> accessed 10 January 2011.

[184] *Senftleben* (fn 156) 203-206.

[185] Ibid 205-206.

particular, it has been argued that the meaning of the word "exploitation" refers to "the activity by which the owner of copyright employs his exclusive right to authorize reproduction of his work in order to extract the value of his right," while "normal" should be interpreted "either as an empirical conclusion about what is common in a given context, or as an indication of some normative standards."[186]

Ricketson suggests that if the rightsholder may ordinarily expect he can make money from it, then usage conflicts with the "normal exploitation."[187] Following Ricketson's line of reasoning, it can therefore easily be contended that a limitation does not conflict with a normal exploitation because the authors, normally, do not gather revenue in the exempted area. The United States stated on the basis of Ricketson's concept in the course of the WTO Panel proceedings concerning Section 110(5) of the United States Copyright Act that "[i]n the case of Section 110(5)(B), a significant portion of the establishments exempted by that section had already been exempted, for almost a quarter of a century, by the homestyle exception" and that owners of copyrights in nondramatic musical works had no expectation of receiving a fee from these establishments.[188]

Since the normal way of deriving economic value from creative works is strongly influenced by the exceptions to exclusive rights Ricketson's empirical approach leads to a circular argumentation.[189] It has been argued that

> at least historically, an author will normally exploit a work only in those markets where he is assured of legal rights; by definition, markets for exempted uses fall outside the rage of normal exploitation. Consequently, it might be thought that to expand an exemption is to shrink the "normal market," while to expand the definition of "normal market" is to shrink the permitted exception.[190]

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[186] *Ficsor* (fn 171) 61.

[187] *Ricketson* (fn 169) 482-483 where it is argued that "[h]owever, common sense would indicate that the expression "normal exploitation of a work" refers simply to the ways in which an author might reasonably be expected to exploit his work in the normal course of events. Accordingly, there will be kinds of use which do not form part of his normal mode of exploiting his work-that is, uses for which he would not ordinarily expect to receive a fee-even though they fall strictly within the scope of his reproduction right."

[188] *WTO Panel WT/DS160/R* (fn 161) 50 §6.190.

[189] *Senftleben* (fn 156) 172.

[190] Goldstein, Paul, *International Copyright: Principles, Law and Practice* (2nd ed. Oxford University Press 2010) §5.5.

Moreover, it has been argued that, such a viewpoint could lead to the abolishment of the exceptions altogether since "[b]efore long, right holders would be able to control any usage by way of digital rights management systems and thus be in a position to demand payment for any usage, and exploit it."[191]

However, both the records of the Stockholm Revision Conference and the technological developments plead for the normative standards interpretation of the second step of the three-step test instead of a quantitative one. In particular, according to a statement contained in the records of the Stockholm Conference, the adjective "normal" is a normative requirement since it refers to "all forms of exploiting a work, which have, or [are] likely to acquire, considerable economic or practical importance, [which] must be reserved to the authors."[192] Moreover, technological developments such as new means and forms of reproduction emerge that make it "difficult to speak about a form of exploitation that might be described – in the empirical sense of the word – as "usual", "typical" or "ordinary""[193] and, in this context, it "may be very important for the owners of copyright to extract market value from the right of reproduction, the more so because they usually replace some other, more traditional forms."[194]

The normative approach, would also take into account potential future technological and market developments.[195] Similarly, the WTO Panel on the "homestyle exception" came up with an empirical conception of "normal exploitation" according to which the notion covers not only forms of exploitation that currently generate significant income, but also those that have the potential to do so.[196] Thus, the proposed interpretation of the phrase "normal exploitation" includes "in addition to those forms of exploitation that currently generate

[191] *Koelman* (fn 170) 409.

[192] Stockholm Intellectual Property Conference, 1967, *Records of the Intellectual Property Conference of Stockholm, June 11 to July 14, 1967* (Geneva: World Intellectual Property Organization, 1971) 112.

[193] *Ficsor* (fn 171) 61.

[194] Ibid 61-62.

[195] *WIPO* (fn 173) 23 where it is stated that "[...] uses that are presently not controlled by copyright owners might subsequently become so, as the result of a technological change- an example might be private copying where the transaction costs involved in monitoring such uses might now be reduced because of the new technologies."

[196] *WTO Panel* (fn 161).

significant or tangible revenue, those forms of exploitation which, with a certain degree of likelihood and plausibility, could acquire considerable economic or practical importance."[197] Therefore, the decisive factor is the economic loss of the rightsholder. Exceptions under national law that are not economically competing with the non-exempted uses should not be contrary to the second step of the three-step test even if they create an economic benefit for the user.[198]

However, one must be careful in that only exploitation "of *considerable* economic or practical importance" should be taken under consideration and not every part of the overall commercialization of a work and small economic loss.[199] In particular, it is argued that

> the prohibition of a conflict with a normal exploitation only protects the economic core of copyright from erosion. It concerns those ways of using an intellectual work from which major royalties accrue. If a minor source of royalty revenue is eroded, the market is not substantially impaired and a conflict with a normal exploitation does not arise.[200]

Moreover, it has been argued that

> the second criterion merely has the function to sort out the category of limitations which exempt 'a very large number of copies.' The remaining cases of a 'rather large' and a 'small number of copies' are subjected to the control of the third criterion. Copyright's adaptation to digital technology should not be misused to erode these conceptual contours.[201]

Given that what matters is the erosion of the economic core of copyright, it is argued that such erosion should be determined by taking into account the share which a specific form of

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[197] Ibid 48 §6.180.

[198] Ibid 48 §6.182 where it is stated that "not every use of a work, which, in principle is covered by the scope of exclusive rights and involves commercial gain, necessarily conflicts with a normal exploitation of that work. If this were the case, hardly any exception or limitation could pass the test of the second condition and Article 13 (of the TRIPS Agreement) might be left devoid of meaning, because normal exploitation would be equated with full use of exclusive rights."; see also § 6.183 where it stated that "an exception or limitation to an exclusive right in domestic legislation rises to the level of a conflict with a normal exploitation of the work (i.e., the copyright or rather the whole bundle of exclusive rights conferred by the ownership of the copyright), if uses, that in principle are covered by that right but exempted under the exception or limitation, enter into economic competition with the ways that right-holders normally extract economic value from that right to the work (i.e., the copyright) and thereby deprive them of significant or tangible commercial gains."

[199] *Senftleben* (fn 156) 183 (emphasis of the author).

[200] Ibid 188-189.

[201] Ibid 182.

exploitation has in the overall commercialization of a work and the profitability of the market and that a sophisticated market analysis must be conducted in order to identify which are the most profitable areas for the author of a work.[202] For example, the practice of time-shifting, does not divest the authors of a major source of income since it does not affect the ways of a cinematographic work's overall commercialization. In particular, the showing in cinemas precedes the TV broadcast offering the chance to make a copy for personal use. Moreover, it cannot be assumed that the value of rebroadcasts is substantially reduced because of time-shifting since it is unclear whether rebroadcast typically constitutes a major source of income. Finally, it cannot be argued that time-shifting substantially impairs the market for selling copies of the work due to lack of empirical evidence that consumers would have purchased video cassettes of DVDs if they did not engage in time-shifting.[203] What is more, it is likely that if beneficiaries of exempted time-shifting were made to pay they would stop engaging in this practice thus showing that the potential market for time-shifting does not provide a potential major source of income.

Another example of a use that does not infringe the second step of the three-step test can be found in Article 5(2)(b) of the EUCD which allows for the formulation of an exception for personal private use for noncommercial ends on condition that the rightsholders will be fairly compensated and that any DRM applied to the work will be taken under consideration. It has been argued that this provision assumes that there is no conflict with the second step

> presumably on the basis that it is (1) almost impossible for the author/copyright to regulate this through private licensing arrangements and also because this is (2) a private, as distinct from a public, use of the work, a non-economic normative factor that is to be weighed against the author's economic interests.[204]

Apart from the WTO Copyright Panel, the German Supreme Court's in *Supply of Photocopies of Newspaper Articles by a Public Library*, *Re* interpreted the three-step test in a balanced way and took the view that the practice of dispatching copies does not conflict with a normal exploitation of the work since it does not compete with the publishers of works but

[202] Ibid 189-193.

[203] Ibid 202-203.

[204] *Ricketson & Ginsburg* (fn 159) 780-782.

it merely complements the regular way of communicating a work through its publishing, in view of the technical and economic developments of recent years.[205]

Moreover, in the instance of the second step of the test, the Swiss Federal Court in *ProLitteris v Aargauer Zeitung AG* took the view that the normal exploitation of a newspaper included the sale and use of online editions and electronic papers.[206] Since the newspaper group's claim that the activities of the press agencies had led to a decline in print runs and a loss of readers was unsubstantiated, there was no infringement of the second step either.

2.4.3 The Third Step

A choice between property and liability rules is usually the main issue when intellectual property extends to novel areas and there is the danger of an enclosure of the public domain. Exclusive intellectual property rights "confer on their proprietor the entitlement to exclude others from making unauthorized use of the protected subject matter."[207] This exclusivity derives from the recognition of IPRs as property under constitutional law and human rights law. Arguably, exclusivity should not be the dominant regulatory model when other non-exclusive schemes such as the payment of remuneration in order to allow access may achieve the aim of fostering creativity and innovation and dissemination of knowledge. When the user has to pay in order to have access then "in economic terms this means that the exclusivity paradigm is transformed into a liability rule."[208] The term liability rule refers to a legal structure permitting third parties to undertake certain actions without prior permission provided that they pay compensation (monetary relief) while the tem "property

[205] [2000] E.C.C. 237. *Senftleben* (fn 156) 203-206 elaborates on his argument that recourse to library activities could help distinguishing fruitful personal uses that do not compete with a normal exploitation of the work and serve intergenerational equity from fruitless uses that do not since libraries are dealing with the collection, preservation, archiving and dissemination of information.

[206] [2008] 39 I.I.C. 990. See also *Geiger* (fn 176).

[207] Kur, Annette & Schovsbo, Jens, 'Expropriation or Fair Game for All? – The Gradual Dismantling of the IP Exclusivity Paradigm' in Kur, Annette (ed), *Intellectual Property Rights in a fair world trade system-Proposals for reform of TRIPs* (Max-Planck-Institute for Intellectual Property, Competition and Tax Law, Munich, Germany, Edward Elgar 2011) 409.

[208] Ibid.

rule" denotes a legal structure where legal entitlements cannot be removed without prior bargaining with the rightsholder (who is entitled to claim for an injunction).[209]

The distinction between the two regulatory models of property and liability is a main theme of legal and economic debates.[210] Calabresi and Melamed were the first to apply a unifying approach to property and tort law. According to them, the most common reason for employing a liability rule rather than a property rule to protect an entitlement is "that market evaluation of the entitlement is deemed inefficient, namely it is either unavailable to too expensive compared to a collective evaluation."[211] While 'efficiency' in that sense is primarily a function of the transaction costs involved,[212] distributive reasons are likewise held to be of relevance; it is pointed out that "the choice of a liability rule is often made because it facilitates a combination of efficiency and distributive results which would be difficult to achieve under a property rule."[213]

By way of contrast, a property rule may not be desirable sometimes because it encourages excessive claims, inhibits legitimate activities and the development of new products and because the exact boundaries of property entitlements may be difficult for a court to define and this may force courts to resort to broadly tailored injunctions prohibiting both infringing and non-infringing conducts.[214] Moreover, the market's determination of the value of entitlements in the context of property rules does not always reflect a correct picture of the inherent value or utility of an achievement, especially in the case of abuse of dominance of incumbent firms and lack of competition, and fair prices need to be guessed.[215] Regarding

[209] Ibid where it is also argued that the two regulatory models and their differences were first discussed in the article of Calabresi, Guido & Melamed, Douglas A., 'Property Rules, Liability Rules, and Inalienability-One View of the Cathedral' (April 1972) 85(6) Harv. L. Rev. 1089, in which they tried to apply a unifying approach to property and tort law. The relevance of the property/liability paradigm for intellectual property law was realized at a later stage.

[210] *Calabresi & Melamed* (fn 209).

[211] Ibid 1110.

[212] The importance of transaction costs for the foundation of legal rules had been established in *Coase* (fn 122).

[213] Clarke, Alison & Kohler, Paul, *Property Law: Commentary and Materials* (Cambridge University Press 2005) 242.

[214] *Kur & Schovsbo* (fn 207) 414.

[215] Ibid.

the argument that free-riding would become the dominant model of economic behaviour in the absence of strong property rules, it has been argued that there is a lack of relevant conclusive empirical evidence.[216] Generally, a weak and insecure regime of property rules may discourage the investment decisions of rightsholders while, on the contrary, a robust and reliable liability system rendering fair returns may encourage them.[217]

Liability rules can be facilitated either by the application of non-voluntary licensing schemes broadly to public performances, broadcasting and other communications to the public ("compulsory licenses") or by the imposition of levies on equipment and media ("remuneration rights"). In the first case, the liability rule compensates rightsholders for public performances, broadcasting, and other communications to the public. In the second case, liability rules compensate rightsholders for exceptions that undercut the reproduction right and, therefore, apply in the case of the public lending right, the rental right, the resale right (*droit de suite*), to the reproduction right (private copying, reprography), the communication to the public right (broadcasting, communication in public places), the cable retransmission right (simultaneous and unabridged) and the making available to the public right.[218]

Ricketson and Ginsburg note that the report of the Main Committee I at the Berne revision conference in Stockholm (1967) is clear in that unreasonable prejudice to the legitimate interests of the author "may be avoided by the payment of remuneration under a compulsory license."[219] With regard to compulsory licensing, it is Articles 11bis(2) and 13(1)

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[216] Ibid 415. Free-riding here refers to companies that would regularly prefer to profit from new developments accessible at pre-established prices instead of investing in the pursuit of new ideas. An example of inconclusive evidence is said to be provided by the Commission DG Internal Market and Services (EC), 'First evaluation of Directive 96/9/EC on the legal protection of databases' (Working Paper) 12 December 2005 <http://ec.europa.eu/internal_market/copyright/prot-databases/prot-databases_en.htm> accessed 10 June 2008, which stated that no evidence was found to confirm that the Directive and the existence of more layers of IP protection has a positive effect to innovation and growth, or any effect at all.

[217] *Kur & Schovsbo* (fn 207) 415.

[218] *Kur & Schovsbo* (fn 207).

[219] *Ricketson & Ginsburg* (fn 159) 775-776. They continue by saying that "[t]he facility under article 9(2) is to permit the reproduction of works in certain special cases, and there is nothing in the wording of the provision which forbids the imposition of conditions on the grant of such permission, such as an obligation to pay for it, or to acknowledge the source of the work reproduced, […]. It must also be borne in mind that article 9(2) was conceived of a being capable of covering all existing exceptions to reproduction rights under national laws, apart from those already covered by other

of the Berne Convention that provide its legal basis at international level. In particular, Article 11bis(2) provides that

> [i]t shall be a matter for legislation in the country of the Union to determine the conditions under which the rights mentioned in the preceding paragraph may be exercised, but these conditions shall apply only in the countries where they have been prescribed. They shall not in any circumstances be prejudicial to the moral rights of the author, nor to his right to obtain equitable remuneration which, in the absence of agreement, shall be fixed by competent authority.

The rights to which Article 11bis(2) refers can be found in Article 11bis(1), which establishes that

> [a]uthors of literary and artistic works shall enjoy the exclusive right of authorising: (i) the broadcasting of their works or the communication thereof to the public by any other means of wireless diffusion of signs, sounds or images; (ii) any communication to the public by wire or by rebroadcasting of the broadcast of the work, when this communication is made by an organisation other than the original one; (iii) the public communication by loudspeaker or any other analogous instrument transmitting, by signs, sounds or images, the broadcast of the work.

Moreover, Article 13(1) provides that

> [e]ach country of the Union may impose for itself reservations and conditions on the exclusive right granted to the author of a music work and to the author of any words, the recording of which together with the music work has already been authorised by the latter, to authorise the sound recording of that musical work, together with such words, if any; but all such reservations and conditions shall apply only in the countries which have imposed them and shall not, in any circumstances, be prejudicial to the rights of these authors to obtain equitable remuneration which, in the absence of agreement, shall be fixed by competent authority.

The Berne Convention also provides that members to the Convention may determine or impose such conditions for the exercise of exclusive rights in cases where an exclusive right is not provided as remuneration right and not as an exclusive right of authorisation, for example in the case of the resale right (*droit de suite)* in Article 14ter and the rights of performers and producers of phonograms established in Article 12. Members to the Berne Convention may also determine or impose such conditions where the restriction of an exclusive right to the mere right to remuneration is allowed, for example the right to reproduction (Article 9(2) of the Berne Convention).

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provisions of the Convention. As some national laws already had compulsory licenses for particular kinds of use, it cannot be presumed that it was intended that such licenses were to be precluded by the new provision."

As concerns the legal basis for remuneration rights, it is the third step of the three-step test found in Article 9(2) of the Berne Convention. In particular, the third step of the three-step test allows Member States to allow reproduction of a work on condition that such reproduction does not result in an unreasonable prejudice to the rightsholder's legitimate interests. The expressions "unreasonable" and "legitimate" establish a proportionality test addressed to the national legislator and provides guidelines facilitating the task of striking a proper balance.[220] The remuneration principle is implied in the analysis of the legitimacy of the authors' interests.

Firstly, the reference to "interests" instead of "rights" confirms that the third criterion is located at the core of copyright's balance[221] and it could be added here that the fact that it is only about interests not rights makes it easier for the application of the remuneration principle since no authors' rights will be 'affected'. Secondly, the legitimacy of the author's interests depends on whether the economic and non-economic interests of the author are justifiable in order to promote cultural diversity in the light of the natural law and the utilitarian copyright rationales.[222] If they are, then they are legitimate. According to the WTO Panel, the term "legitimate interests of the author" does not simply refer to the economic interests of the author but has a more normative perspective.[223]

In an effort to examine the legitimacy of an author's interests, the principle of using the suitable measure for the realisation of the envisaged objective can be used, according to which an author's interest can only be deemed legitimate if its assertion is suitable for promoting the attainment of the natural or and the utilitarian copyright rationales' aims. If this is not so, then foreclosing access to a work is unjustifiable and illegitimate. For example,

[220] *Senftleben* (fn 156) 211-212.

[221] Ibid 216.

[222] Ibid 230-232. With regard to analogue works, for example, the authors cannot exploit their works mainly due to market failure. However, eroding personal use privileges in order to control how their works are used in private would be disproportionate. On the contrary, their interest in being remunerated for private copying of their works is justifiable and legitimate because it promotes cultural diversity by the creation and dissemination of new works. Thus, the payment of equitable remuneration and the imposition of compulsory licensing could help evaluate the intensity of the prejudice caused by a limitation.

[223] *WTO* (fn 161) 58 §6.224, where it is stated that "[t]hus, the term relates to lawfulness from a legal positivist perspective, but it has also the connotation of legitimacy from a more normative perspective, in the context of calling for the protection of interests that are justifiable in the light of the objectives that underlie the protection of exclusive rights."

authors who are hindered from exploiting their works by market imperfections should not be allowed to anyway forbid users to access their works since such a prohibition does not result in the achievement of the objectives underlying copyright law. In such cases, an author has merely a justifiable and legitimate interest in being rewarded for allowing access. This interest is definitely legitimate since the authors will be rewarded for his work and cultural diversity will be promoted at the same time.[224]

Apart from the WTO Copyright Panel, the three-step test and, in particular, the third step of the test has been interpreted in several disputes in the context of digital settings. For example, the German Supreme Court's in *Supply of Photocopies of Newspaper Articles by a Public Library*, *Re* discussed above[225] held that any problem created for the publishers from the library's practice could be solved in the framework of the third step by means of remuneration given that the establishment of a digital library-administered personal use system is in line with the principle that the least harmful means must be chosen.[226] It is to be expected that a refined digital library system enabling a work's personal use would be capable of promoting the dissemination of information and intergenerational equity as effectively as the general exemption of personal use in the digital environment. Since upholding a general personal use privilege in the digital environment would have a much deeper impact on the marketing of works in the digital world, would militate against the principle that the least harmful means must be chosen and would unreasonably prejudice the author's legitimate economic interests a library-administered system was preferred.

In *ProLitteris v Aargauer Zeitung AG*, case which was also discussed above[227] in relation to other criterions of the three-step test, the Swiss Federal Court held that an interpretation of the private use exception that would cover the activities of electronic press agencies would not violate the third step of the test since individual persons and small business had to rely on specialist information intermediaries due to the huge amount of data that existed. The legitimate interests of individual journalist authors and the newspaper publishers were not infringed unreasonably if they were granted a right to remuneration instead of an exclusive

[224] *Senftleben* (fn 156) 230-232.

[225] See text to fn 174 above.

[226] [2000] E.C.C. 237.

[227] See text to fn 176 above.

right to prohibit the particular activities while, on the contrary, if the rightholder were granted an exclusive right, individual journalist authors would probably not receive a fee. Therefore, not only the party holding rights to economic exploitation but also the actual authors should be remunerated under the third-step of the three-step test as well.[228] In particular, by remunerating authors as well, whose interests corresponded with those of the general public, the third step was not infringed. Thus, in this case as well an analysis of the 'legitimacy' of the authors' interests was attempted; not allowing individuals and small businesses to rely on specialist information intermediaries due to the huge amount of data that existed would not have negatively affected authors' interests and would not have resulted in the promotion of the copyright law cultural promotion objectives. On the contrary, this would have led to a negative economic impact for individual journalists who would thus not receive any fees for the use of their works. Since, remunerating authors and other rightholders would have made everyone involved better-off the court decided that the particular practice passed the third criterion of the test and was legal. It was decided that rightholders in that instance had only an interest in remuneration.

Compulsory licensing of remuneration rights by means of mandatory collective administration has acquired great significance in the case of works distributed on the internet and in certain cases exclusive rights can only be exercised through collective rights management organizations (CRMOs). CRMOs are usually used in the context of a model of statutory remuneration rights. For example, a number of Member States implementing Article 4 of the Rental and Lending Directive, which provides that the authors and performers who have transferred the rental right to the producer retain a non-waivable right to fair remuneration for the renting out of their works, have prescribed mandatory collective administration of the remuneration right.[229] Moreover, it is argued that mandatory collective administration of the making available right strengthens the position of authors and other rightholders and does not affect the exclusive character of the right.[230]

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[228] [2008] 39 I.I.C. 990. See also *Geiger* (fn 176).

[229] Council Directive 92/100/EEC of 19 November 1992 on rental right and lending right and on certain rights related to copyright in the field of intellectual property ('Rental and Lending Directive'), OJ L 346, 27.11.1992, 61–66 (replaced and repealed by Directive 2006/115/EC of the European Parliament and of the Council of 12 December 2006 on rental right and lending right and on certain rights related to copyright in the field of intellectual property, OJ L 376, 27.12.2006, 28–35).

[230] *Kur & Schovsbo* (fn 207); von Lewinski, Silke, 'Mandatory Collective Administration of Exclusive Rights-A Case Study on its Compatibility with International and EC Copyright Law', e-Copyright

Therefore, we notice that a relationship exists between compulsory licensing and remuneration which consists mainly in the fact that in certain cases remuneration rights can only be administered by mandatory collective administration (i.e. collective licensing). Given the relationship between compulsory licensing and remuneration rights, one could parallel compulsory licensing to an act of circumvention by the user (circumvention in this case would achieve the same outcome that compulsory licensing would achieve) and, thus, argue that mandatory collective administration should come into play in that instance. The result of this hypothetical exercise would be to allow circumvention on condition that CRMOs would administrate the remuneration right of the rightholders' whose digital works' DRM have been circumvented.

2.5 Alternative Philosophical Underpinnings for Copyright in Cyberspace

2.5.1 Human rights, the notion of balance and the creation of an access right

Copyright is not primarily about markets and wealth maximization, but rather it provides the best mechanism for striking a balance between our desire to reward authors whilst safeguarding other important interests such as free speech, privacy, access to information, the preservation and extension of cultural resources (the cultural rationale). In particular, copyright limitations are recognized as providing a defence of fundamental rights and freedoms, such as the guarantee of freedom of expression, including the right to receive information and the right to privacy. Certain public policy considerations, like the objective of fostering the dissemination of information, can be regarded as corollaries of freedom of expression. Internationally, the importance of limitations serving educational purposes has also been recognized at an early stage. Regarding the copyright exemptions that safeguard the making of private copies, originally, they were based on privacy justifications.

Bulletin, January-March 2004. The Commission also issued a Commission Recommendation of 18 May 2005 on collective cross-border management of copyright and related rights for legitimate online music services (2005/737/EC) (O J L 276/54, 21.10.2005) and a Communication 'Management of Copyright and Related Rights in the Internal Market' COM(2004)0261 final, 19 April 2004. Recently, the Commission issued a Proposal for a Directive of the European Parliament and of the Council on collective management of copyright and related rights and multi-territorial licensing of rights in musical works for online uses in the internal market (Brussels, 11.7.2012 COM(2012) 372 final 2012/0180 (COD) < http://ec.europa.eu/internal_market/copyright/management/index_en.htm#maincontentSec2 > accessed 10 December 2012).

With regard in particular to private copying exception, Senftleben suggests replacing the market failure justification by the public policy objective to disseminate information in order to shelter from erosion the particular exception.[231] Alternatively, the privacy justification is still relevant since monitoring techniques are designed so as to allow the precise recording of the particulars of private uses, and privacy issues are raised in respect of personal data portraying the consumption patterns and online behavior of individuals.[232] Another justification for private copying limitations could be based on 'justice' considerations emanating from the system of levies that can be found across the majority of the EU countries.[233] Levies reflect the "remuneration principle" prevailing in Member States of the authors' rights traditions. Under this conception of copyright, authors are entitled to "equitable" remuneration for each and every use of their works as a matter of fairness.

Finally, the notion of "balance" that traditionally underpins copyright could provide a justification for the need to preserve a minimum core of user rights in relation to copyright works distributed online. When investigating the user's legitimate interests in digital copyrighted works it is important to remember that the boundaries of copyright law are the result of a process of carefully balancing the rights of the right owners and the "rights" of the public. Whatever the origin of the copyright limitations, the control over the use of protected material statutorily granted to the rightsholders is not absolute. All legislative bodies that have taken on the protection of technological protection measures stress that the balance that is struck in copyright law between the interests of the rightsholders and the users must be maintained.

The notion of "balance" has also acquired importance by finding its way into the conventions relating to copyright. For example, the fifth paragraph of the Preamble to the 1996 WIPO Copyright Treaty states that the signatories recognize "the need to maintain a balance between the rights of authors and the larger public interest, particularly education, research and access to information, as reflected in the Berne Convention." This paragraph makes it clear that what is needed is only maintaining such a balance since it does exist

[231] *Senftleben* (fn 156) 30-32.

[232] Ibid 32-33.

[233] Helberger, Natali & Hugenholtz, Bernt P., 'No Place Like Home for Making a Copy: Private Copying in European Copyright Law and Consumer Law' (Summer 2007) 22(3) Berkeley Tech. L. J. 1061, 1069-1070.

already in the Berne Convention. Therefore, the balancing requirement must not be regarded as a new principle. In addition, the balancing of interests in the Berne Convention is supposed to be under the control of the basic objective of the Convention, namely the protection of copyright "in a manner as effective […] as possible." The same principle of "balancing" must also prevail according to the WCT.

Certain aspects of public interests such as "education, research and access to information" are also referred to in the fifth paragraph of the Preamble to the 1996 WIPO Copyright Treaty. The Berne Convention provides for certain specific limitations and exceptions with respect to these interests. The text of the paragraph itself underlies this in clarifying that what is meant is a balance "as reflected in the Berne Convention." Thus, the Diplomatic Conference did not intend to introduce any new element into the existing principles of the Berne Convention. It is also to be noted that an agreed statement concerning Article 10(2) of the WCT confirms again the principle of "unchanged balance," which states that "It is understood that Article 10(2) neither reduces nor extends the scope of applicability of the limitations and exceptions permitted by the Berne Convention."

The preamble to the 1996 WIPO Performances and Phonograms Treaty contains an almost identical statement to the fifth paragraph of the Preamble to the WCT, and one of the express aims of the TRIPS Agreement is to ensure that "the protection and enforcement of intellectual property rights should contribute to […] a balance of rights and obligations." Similarly, Recital 31 of the EUCD states that a 'fair balance' must be safeguarded. Indeed, all legislation on the protection of technological protection measures claims to take into account the balance that is reflected in copyright law by not prohibiting certain acts of circumvention and allowing certain circumvention-enabling devices.

Regarding the assertion of balance, it has been said that "at first glance [it] may seem to be a harmless (and meaningless) truism, since all legal rights represent a balance to some extent." Even if it is not meaningless, its meaning may be hard to determine "[d]espite the ubiquitous use of the language of balance in copyright debates and despite the imprimatur of the conventions, there is a semantic ambiguity associated with the notion of 'balance' which makes its use in this context problematic." This ambiguity is due to the fact that in the context of copyright debates the word 'balance' can mean both 'an apparatus for weighing' and 'a harmony of proportion and design'. When it is asserted that when designing copyright legislation the legislator needs to balance competing interests against

one another, the notion of balance is being used as if it were a mechanism of a process (in effect, using 'balance' in the first sense identified). When it is asserted that the balance of copyright must be preserved (for example, it is often said that the balance that existed in the analogue environment must be replicated in the digital environment) then balance is being used in the sense of a harmony of proportion and design.

An illustration of the dangerous linguistic shift that can take place between the two meanings of 'balance' is provided by the claim that copyright laws have always been formulated by a process of balancing, a claim which is usually followed by a call for this balance to be maintained. The fact that the word 'balance' has different meanings and already carries with it to an extent the notion of 'correctness', results in an error in logic; in particular, one considers it linguistically to be a small step from saying that copyright laws have been formulated by a process of balancing to saying that copyright laws present the correct balance. In this case, the first claim, that copyright laws have in the past been formulated by a process of balancing, simply tells us that in the past other interests have been set off against copyright, and can be usually justified by reference to a host of legislative materials and judicial decisions. The second claim, that this balance should be maintained, however, assumes that in the past this process has achieved the 'correct result', a claim which needs to be supported by detailed argument.

As a further illustration of their point, Burrell and Coleman use the argument that copyright can at times impose an illegitimate restriction on freedom of speech. In particular, they refer to those who employ the notion of balance as an explanation for how copyright laws have been formulated in the past. The latter frequently counter this argument with the assertion that free speech interests must be already adequately represented within the structure of copyright law since copyright has always involved a balance between competing interests (namely, free speech is adequately protected by the idea/expression dichotomy, and the 'relevant' public interest in free speech is satisfied by the fair dealing exceptions).

Burrell and Coleman argue that this reasoning might close off explanations for the development of copyright according to which such development was the result of pressure from particular groups to favour particular interests. Moreover, in the same spirit it has been suggested that since copyright was always changing in order to adapt to developing technologies "[t]he term 'traditional copyright law' is clearly a misnomer, for there is no fixed or 'traditional' conception of copyright. […] The history of copyright law has been a

process of balance." Therefore, it is suggested that there is a real danger of reaching a paradoxical result where pro-user commentators will in essence argue in favour of the existing copyright balance in the digital environment notwithstanding the existence of strong exclusive rights given to rightholders.

Thus, the legal and policy analysis of the copyright exceptions and fair use should not be limited to what exists presently in the offline world but rather the offline policy can be used as a baseline to illuminate the extent to which copyright exceptions shall be enforced against DRM. It is accepted that "a system of digital media regulation that accepts, as a baseline, the reasonable expectations of fair use that users have derived over a lifetime of interactions with ordinary offline media is preferable to a system that frustrates these expectations." In that case, the liberation of the fair use doctrine in the United States so that it can continue to evolve on a case-by-case basis in response to users' actions can be accommodated by a DRM system engineered to protect fair use as a process and the same is true about the European copyright exceptions.

Therefore, the existing balance should not be maintained as it is but instead one should engage in a new balancing process that takes into consideration the users' interests to access and use digital copyright works. The fact that in the past copyright law achieved some sort of balance does not mean that this balance was the correct one or, even if it was correct at the time, that it must be preserved into the digital environment where the dynamics may be different. The balancing procedure is still open and closely connected to the long-term debate on the legal nature and the scope of the copyright (versus the copyright exceptions).

Copyright law is based on the aforementioned objectives and has been developed to regulate copying of works. However, nowadays, reproduction acts as an access-gate since in order for someone to access a work he must first reproduce it. The user of the work often comes across the paradox of not being allowed to reproduce a work while he clearly has a right to access it. Although traditional copyright law does not equate reproduction with access, this principle does not seem to be able to continue to apply in digital settings since the access-right model gains primacy over the traditional reproduction right model.[234] In

[234] The existence of an access right in traditional copyright law has been rejected on several occasions, inter alia in the ALAI Conference of 2001; e.g., see Hoeren, Thomas, 'Access right as a postmodern symbol of copyright deconstruction? - Some fragmentary considerations for the ALAI Congress in New York' ALAI 2001 Adjuncts and Alternatives to Copyright <http://www.alai-usa.org/2001_conference/1_program_en.htm> accessed 20 May 2009, at 7 where he wonders "[b]ut

particular, it has been argued that the reason for this development is that the "need for a new "digital copyright" model is multifaceted. […] the traditional arrangement of copyright entitlements fails to provide a reasonable and efficient legal platform for the operation of digital information markets. This recognition is today widespread, […]."[235] Effroni, in particular, in his study showed by means of using positive law (i.e. digital reproduction rights, anti-circumvention laws and digital communication rights) that copyright regulation now covers "access to information" or "private enjoyment" which traditionally was unregulated by copyright law. As a result, copyright has turned more into an access right which gives the power to rightsholders to block dissemination of knowledge in the digital environment. In this context, Effroni proposes the introduction in digital copyright law of an access-right model based on his observations which has two prongs; first, there is the exclusive access-right in access-conducts and, second, there is the exclusive access-right in communication-conducts.[236] In particular, human access to information, according to Effroni, is separated into "access-conducts,"[237] "communication conducts,"[238] and "facilitation conducts"[239] all of which can be regulated (access-regulation).

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even if there is no such thing as an "access right", isn´t there a need to discuss a fundamental change in the copyright structure? Perhaps the whole discussion on "access rights" is only a symbol, a feverous warning, an inherent feeling that copyright law is becoming ill." Moreover, Heide argues that it is wrong to equate reproduction with access since "access remains a separate and distinct act and it does not equate with a reserved use. To find otherwise would be the equivalent of equating every act of walking into a bookstore or a library to read a book with pressing the print button at the publisher's printer and setting in motion the publisher's distribution chain" (Heide, Thomas, 'Copyright in the E.U. and United States: what "access right"?' (2001) 23(10) EIPR 469, 472).

[235] *Efroni* (fn 95) 479.

[236] Ibid 401.

[237] Ibid 139-141 where it is argued that this term "pertains to actions performed by the human agent before and/or simultaneously with human-access. Access-conducts are carried forth allowing the actor to gain access to information. These conducts place the recipient in a position in which or from which human-access may occur. Broadly perceived, access-conducts can be both intended and unintended. To illustrate, when a person walks into a room in which a copyrighted painting hangs on the wall without previously knowing anything about the existence of the painting, the act of walking into the room is nominally an access-conduct in the broad sense, though the human-access achieved thereby did not motivate the entrance and was not intended by the actor in the first place. […] From a legal standpoint, however, the case of *intended* access-conducts is more interesting. Objectively, these conducts place the actor in a human-access position. Subjectively, the actor is at least aware of the fact that access to information would likely result from the contemplated conduct. […] If the door to the room is closed, the actor will need to open it. If the door is locked, he will further need to obtain the key or break the lock in order to enter."

[238] Ibid 142 where it is argued that "[a]fter access has been achieved, the recipient may attempt to further communicate the message."

In the context of the access-right model proposed by Effroni, rights-of-access afforded to the public as a counterbalance to the access-right afforded to rightsholders play an important role. In particular, exemptions to the access-right fall under two general categories, namely there are exception to rights-of-access in both the weak and in the strong form. A right-of-access in the weak form corresponds to the second prong of the proposed access-right, namely the exclusive right in communication conducts, while a right-of-access in the strong form corresponds to the first prong of the proposed access-right, namely the exclusive right in access-conducts.[240] In other words, rights-of-access in the strong form mean the beneficiary holds an affirmative right-claim against the opponent who is obliged to make works under his control accessible to the rights-of-access holder.[241] On the contrary, rights-of-access in the weak form mean that the privileged beneficiary is not exposed to copyright infringement liability and is free to engage in several communication conducts in the broad sense.[242]

With regard to monitoring mechanisms, exclusivity over access-conducts is not absolute since an exhaustive catalog of exceptions will enumerate instances in which beneficiaries may also gain lawful access to the asserted work without the rightsholders' consent in order to avoid situations of unlawful prevention of access to information and unlawful inhibition of competition.[243] In this context, a monitoring authority should enforce the rights-of-access exceptions against rightsholders in specific situations and also broadly aim for the avoidance of a negative impact to the relevant industries, competition, innovation and consumers.[244] Finally, the creation of a specialized copyright tribunal with adjudicative and administrative

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[239] Ibid 143 where it is argued that "facilitators have neither a desire to create a new message nor to modify an existing one; they are simply (noisy) channels that carry the message or agents that bring messages to recipients while possibly making alterations unrelated to any intention to engage themselves as independent originators in communication with recipients."

[240] Ibid 507-508.

[241] Ibid 508.

[242] Ibid.

[243] Ibid 508-509.

[244] Ibid 508-510.

powers will be responsible for the administration and enforcement of rights-of-access in the strong form.[245]

With regard to monitoring mechanism of the exclusivity in communication-conducts and the weak rights-of-access, this is similar to current copyright exceptions since a list o statutory privileges is provided probably based on currently existing copyright exceptions. The only main difference with the current system of copyright exceptions is that the rights-of-access are based on "the idea of access to information" and thus are made distinct from acts governed by the exclusive rights of reproduction or communication to the public.[246] The particular proposal promotes free speech, access to knowledge, cultural participation, education and research principles etc. and corrects the flaws and gaps existing in the current copyright exceptions mechanism.[247] Finally, the particular proposal supports an "open" legal standard mechanism following the example of the US fair use principle which encourages courts to make decisions on a case-by-case basis.[248]

By looking at Effroni's model it can be argued that even if it accepted that an access-right does exist or, better, has been developed due to technical developments, the need for the recognition of certain privileged uses of the public still remains unchanged. In other words, even in an access-right model, there must be recognised and enforced several rights-of-access afforded to the public and the users of works. This means that the digital copyright system should in one way or the other allow access to works in specific instances without rightsholders' authorization and remuneration by means of an undated and sophisticated exceptions mechanism. In sum, notwithstanding the evolution of copyright law, the essence of copyright which is the balance between the authors and the public can be maintained and has to be maintained when works are distributed in the context of digital settings.

2.6 Conclusion

[245] Ibid 510.

[246] Ibid 511.

[247] Ibid 512.

[248] Ibid 512.

This chapter explored the philosophical underpinnings of copyright. As a starting point of the discussion, the traditional copyright principles that could justify the need to preserve a minimum of lawful personal use in digital settings were explored. In this context, it was argued that the common law tradition is influenced by a utilitarian theory of property influenced by John Locke's natural rights theory. Both in the case of utilitarianism and natural law theory, creative works represent one of the purest forms of an individual's labor and the public's interest in accessing and interacting with copyright works is justified due to the so-called "*enough and as good*" proviso or the intergenerational equity theory.

Like England, French physiocratism, 10 years before the Revolution, was influenced by Locke's natural rights theory. Moreover, by providing for a perpetual right, the edicts of 1777 and 1778 show that literary property right was a natural right. Just like the pre-revolutionary edicts of 1777 and 1778, the first French copyright law of 1791 which created a dramatist's public performance right aims to the enlargement of the public domain by accepting that the authors' natural rights are temporary (they lapse when they die) while the public's rights are more fundamental. It was even accepted that author's right are an exception to the public domain and after-casts to the rights of the public. Regarding the recognition of a property right in an author's work after publication by the law of 1793 in France, it was also influenced by the formal recognition of natural rights based on Locke's theory by the Declaration of the Rights of Man and of the Citizen.

Common law has its natural law foundations on Locke's theory of labour while civil law is mainly based on the philosophical heritage of Fichte, Kant and Hegel. Fichte, in particular, suggested that the essence of the author's right is the preservation of the dynamic of thinking for both the author and the reader. Next, Kant explicitly believes that the freedom of thought and the communication between the authors and the public is generally above the author's interest in being remunerated for his labour by means of exclusive rights. As concerns Hegel, it is unclear whether he suggests the need for positive copyright protection since he believes that the intended use of an intellectual product is "to think it" while the indirect use is the power to control use given by IPRs thus giving precedence to the 'rights' of the public over the rights of the author. Thus, the role of the reader, i.e. the public, is a very important element of the property right.

Therefore, arguably, both copyright and right of the author traditions are influenced to an extent by the same natural law principles which strongly consider the rights of the public. In

this context, the natural law foundation of both the common law and the civil law tradition affects the nature of economic rights. It recognizes, in particular, that the public and the users of the works have an interest to use the works sometimes without paying, that is they provide a basis for the recognition and enforcement of copyright exceptions and limitations which operate in favour of the public in the copyright arena.

In digital context, the law, even the EUCD which aims at the industrial development of the EU, has adopted several economic theories which favour the adoption of strong economic exclusive rights. Such a school of thought is the Chicago School, which suggests that legal institutions can be analysed under an economic analysis which favours monopolistic behaviours leading to a maximization of profits. Even so, however, digital copyright has to guarantee and optimal amount and use of information and solve the market failure problem of public goods. In digital context, the law, even the EUCD which aims at the industrial development of the EU, has adopted several economic theories which favour the adoption of strong economic exclusive rights. Such a school of thought is the Chicago School, which suggests that legal institutions can be analysed under an economic analysis which favours monopolistic behaviours leading to a maximization of profits. Another school of thought is the so-called Transaction Cost Analysis school adopting the Coase theorem according to which bargaining will lead to efficiency when there are no transaction costs regardless of the initial allocation of property rights.

Similarly, the Neo Institutional Economic Theory school of thought also posits that the law is subservient to the market and that the primary role of the law is imply to overcome transaction cost barriers. The result of the fact that these economic theories that lead to a marginalization of the law have gained primacy is that copyright exceptions (i.e. the European equivalent to the US market failure doctrine) are seen merely as a response to market failure. Since the market failure problem is solved by DRM and the supported price-discrimination model, the proponents of these economic theories suggest that there is no room for copyright exceptions when works are distributed digitally.

This chapter showed that the economic analysis of the law applied to works distributed digitally has several shortcomings. First, even if it is accepted that copyright exceptions are merely a response to market failure of high transaction costs, the possible existence of high transaction costs even in the context of digital delivery of works where DRM are applied which was illustrated by Elkin-Koren and Salzberger shows that copyright exceptions should

not be abolished altogether in such a context. Second, the economic analysis that marginalizes the role of the law does not, generally, take into account the fact that the new technologies give users the opportunity to interact with works in new and innovative ways. Third, although price discrimination may reduce transaction costs and cost of the product for those who can afford them, the abolishment of copyright exceptions will mean that ultimately fewer people will enjoy the works because those who could only afford to enjoy the works by taking advantage of copyright exceptions at no cost at all will not be able to do so anymore. Forth, arguably, more empirical research is necessary to back-up the findings according to which strong exclusive rights provide a strong motive and the only motive to creators to create.

With regard to the three-step test, it can provide an instrument for the preservation of lawful personal use in the digital environment. In particular, the first step of the test is not infringed by the recognition of broadly framed lawful personal use limitations. Moreover, the Swiss Federal Court in *ProLitteris v Aargauer Zeitung AG* examined the issue of the scope of the private use exception and concluded that the first step of the test is not infringed by the extension of the private use exception to the case in which a third party made a copy of a work rather than the person entitled to make private use him or herself.[249]

The second step of the test is also helpful in transposing lawful personal use limitations in the digital environment. In particular, time-shifting and the personal private use for non-commercial ends exception found in Article 5(2)(b) of the EUCD pass the second step of the test. Moreover, the German Supreme Court's in *Supply of Photocopies of Newspaper Articles by a Public Library*, *Re* interpreted the second step of the test in a way that takes into consideration the recent technical and economic developments and does not reject the application of the lawful personal use merely because of the existence of innovative ways of exploitation of the work.[250] In addition, the Swiss Federal Court in *ProLitteris v Aargauer Zeitung AG* took the view that unsubstantiated claims of a decline in print sales due to online sales cannot lead to an infringement of the second step of the test, thus, making clear

[249] *Geiger* (fn 176).

[250] [2000] E.C.C. 237. *Senftleben* (fn 156) 203-206 elaborates on his argument that recourse to library activities could help distinguishing fruitful personal uses that do not compete with a normal exploitation of the work and serve intergenerational equity from fruitless uses that do not since libraries are dealing with the collection, preservation, archiving and dissemination of information.

the online sales do not by definition negatively affect the market for conventional sales.[251] Finally, the third step of the three-step test explicitly promotes liability rule over exclusivity rule, even in the instance of digital works and online distribution, as a way of safeguarding the minimum of lawful personal use in the digital environment. Conclusively, the three-step test is a valuable tool in determining the scope of digital lawful personal use.

Finally, this chapter briefly referred to human rights justifications behind copyright exceptions and behind the private copying exception, in particular, to the central notion of balance existing in copyright law and to the development of an access right in digital settings which should be counterbalanced by rights-of-access. It was concluded that all the three, i.e. the human rights justifications, the notion of balance and the dynamics of the operation of an access right which is counterbalanced by rights-of-access, can apply without problems to works delivered digitally. In other words, first, the human rights justifications that support copyright exceptions are still relevant and apply when works are distributed digitally and thus they can justify the need for the enforcement of works distributed digitally; second, the balance between the authors and the public that is inherent in traditional copyright law is, arguably, necessary and needs to be preserved when works are distributed digitally as well; finally, if we accept that an access-right has been developed in digital settings in relation to works distributed digitally, then it must also be accepted that exceptions to this right in the form of rights-of-access should also be introduced. In sum, based on the aforementioned observations, it could be plausibly argued that the existence of a minimum of lawful personal use when works are distributed digitally can be justified. Having explored the several justifications for the enforcement of a minimum of lawful personal use in digital settings, we will move on to the next chapter to define the contents and scope of such use.

[251] [2008] 39 I.I.C. 990. See also *Geiger* (fn 176).

Chapter 3. A Basic Minimum of Lawful Personal Use

3.1 Introduction

This chapter examines the scope of the lawful personal use. It is suggested that lawful personal use derives from two sources: the permitted acts which copyright laws provide for the benefit of users; and users' expectations about what they should be entitled to do with digital works. The exceptions to the exclusive rights recognized under copyright law are examined as one of the aspects of lawful personal use being what the law explicitly reserves to the users of copyright works. The reason why users' expectations are examined is because part of the rationale for copyright is to secure the benefit to society of works being used. The expectations of users therefore tell us what society wants, in terms of ability to use works, and thus gives us an idea about the expected benefit which copyright should deliver. The scope of the examination covers the EUCD, the Software Directive and the Database Directive and, thus, lawful personal use is examined in relation not only to cultural works such as music and movies, but also covers every digital work with which the users can interact including software and databases. The examination of the users' expectations in relation to their ability to interact with digital works, as has been illustrated by relevant European surveys, completes the delineation of a minimum of lawful personal use which is the aim of this chapter.

3.2 Current Copyright Laws

3.2.1 EUCD

3.2.1.1 Exceptions to the Reproduction Right

Article 2 of the EUCD provides that "authors […] have the exclusive right to authorise or prohibit direct or indirect, temporary or permanent, by any means and in any form, in whole or in part reproduction of their works […]". A closed list of exceptions to this right can be found in Article 5 of the EUCD. Article 5(1) provides that transient or incidental reproductions which form "an integral and essential part of a technological process and whose sole purpose is to enable: (a) a transmission in a network between third parties by an intermediary, or (b) a lawful use of a work or other subject-matter to be made" shall not be protected under the exclusive reproduction right on condition that they have no independent economic significance.

In trying to ascertain what lawful use in the context of Article 5(1) means, Recital 33 may be helpful in that it states that "[a] use should be considered lawful where it is authorized by the rightsholder or not restricted by law." Arguably, Recital 33 creates a clear link between the notion of lawful use and the beneficiary of copyright exceptions and implies that copyright exceptions are set out by the law and not by rightsholders by means of contractual conditions.[252] It has been even argued that 'lawful' in the context of Article 5(1) does not mean either a use authorized by rightsholders or one already covered by statutory exceptions because then it would add nothing to the law; therefore, "a third category of instrumental reproductions that are neither authorized nor covered by exceptions *but are nonetheless lawful*" must be assumed.[253] In sum, a use is lawful (1) if it falls within a copyright exemption ("not restricted by law"), (2) if it is authorized by rightholders, or (3) if it can be considered to be 'nonetheless lawful' even if it is not authorized by rightholders and if it is not permitted by law (i.e. is not expressly permitted under an existing copyright exception).

More concrete evidence on what falls under the definition of lawful use is given by the CJEU following a reference for a preliminary ruling made by the Højesteret (Denmark) on 16 June 2010 in the context of proceedings between Infopaq International A/S ('Infopaq') and Danske Dagblades Forening ('DDF').[254] In that case, Infopaq, a media monitoring and analysis business, applied for a declaration that it was not required to obtain the consent of the rightsholders (by DDF, namely the professional association of Danish daily newspaper publishers) for acts of automatic reproduction of newspaper articles via scanning them, convert them into a digital file and electronically processing that file. The application was dismissed. In the context of the appeal that Infopaq brought following this dismissal, the referring court asked whether the concept of lawful use in Article 5(1) of the EUCD includes the scanning by a commercial business of entire newspaper articles and subsequent processing of the reproduction, for use in the business's summary writing.

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[252] Mazziotti, Giuseppe, *EU Digital Copyright Law and the End-User* (Springer-Verlag Berlin Heidelberg 2008) 86-87.

[253] *Efroni* (fn 95) 243-244.

[254] Reference for a preliminary ruling from the Højesteret (Denmark), lodged on 18 June 2010-*Inforaq International A/S v Danske Dagblades Forening* (Case C-302/10, OJ C 221/31, 14.8.2010); Order of the Court (Third Chamber) of 17 January 2012 (reference for a preliminary ruling from the Højesteret-Denmark) *Infopaq International A/S v Danske Dagblades Forening* (Case C-302/10) OJ C73/8, 10.3.2012.

Moreover, the court asked whether uses which do not require the copyright holder's consent also fall within the definition of lawful use in Article 5(1) of the EUCD. In the case at hand, although the reproduction of works in order to enable a more efficient drafting of summaries of newspaper articles and, thus, a use of those articles is not authorized by the rightholders, the court held that such an activity is not restricted either by Danish or other European Union legislation and, therefore, is lawful. Accordingly, the condition set by Article 5(1) of the EUCD that the acts of reproduction must pursue the objective of a lawful use of a work is satisfied in the case of acts of temporary reproduction carried out during a data capture process.

Another exception that falls within the scope of lawful personal use is the reproduction for private use provided for in Article 5(2)(b). This Article provides that Member States may provide for exceptions or limitations to the reproduction right for personal use "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." A further condition to the exception is "that the right-holders [should] 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" (Article 5(2)(b)) and that this exception should be consistent with the requirements of the three-step test (Article 5(5)).

Regarding the exceptions that do not fall within the scope of lawful personal use, these can be found in Article 5(2)(a) and 5(3). As concerns Article 5(2)(a), it contains an exception for analogue personal use, i.e. the reprography exception, which, by definition, falls outside the scope of lawful *digital* personal use.[255] Finally, Article 5(3) contains many other exceptions in relation to reproduction of content distributed digitally but these exceptions are not mentioned and analysed here because they usually are not exercised by a single individual in his capacity as a user who interacts with a work for personal and consumptive purposes, i.e.

[255] Article 5(2)(a) provides, in particular, that "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 reproduction 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".

entertainment purposes. In other words, they are not relevant to the concept of personal use either.[256]

3.2.1.2 Exceptions to the Communication Right and to the Making Available Right

Article 3 of the EUCD covers two closely-connected rights as its title, namely "right of communication to the public of works and right of making available to the public other subject-matter", indicates. The right of communication to the public is broader since it provides that authors are in a position to authorise or prohibit any communication to the public of their works, by wire or wireless means, while the making available right provides that the authors are in a position to authorise or prohibit the making available to the public of their works in such a way that members of the public may access them from a place and at a time they individually chose. Arguably, not many exceptions were introduced by the European legislator regarding the right established in Article 3(1).[257] This right is very broad because it stipulates a broad communication right, covers on-demand transmissions, further extends to performers (with respect to fixed performances), producers (with respect to phonograms and films), and broadcasting organizations the making available right provided to "authors", and finally, because it is not subject to exhaustion.[258]

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[256] Article 5(2)(a)(c)-(e) provides, in particular, that Member States may provide for exceptions or limitations to the reproduction right in cases of publicly accessible libraries, educational establishments, museums, or archives, in cases of broadcasting organizations for their own broadcasts, and in cases of social institutions pursuing non-commercial purposes. Moreover, Article 5(3) provides that exceptions or limitations to the rights provided for in Articles 2 and 3 may be provided for illustration for teaching or scientific research, for the benefit of people with a disability, in the case of published articles on current economic, political or religious topics, for the purposes of criticism or review, of public security or to ensure the proper performance or reporting of administrative, parliamentary or judicial proceedings, for informatory purposes, during religious celebrations or official celebrations, in cases of incidental inclusion of a work or other subject-matter in other material, for the purposes of advertising the public exhibition or sale of artistic works, of caricature, parody or pastiche, of demonstration or repair of equipment, of research or private study by dedicated terminals on the premises of establishments, and, finally, for the purposes of use in certain other cases of minor importance.

[257] Article 3(1) provides that "Member States shall provide authors with the exclusive right to authorise or prohibit 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 them from a place and at a time individually chosen by them."

[258] *Efroni* (fn 95) 278-279. Article 3(2) provides that "Member States shall provide for the exclusive right to authorise or prohibit the making available to the public, by wire or wireless means, in such a way that members of the public may access them from a place and at a time individually chosen by them: (a) for performers, of fixations of their performances; (b) for phonogram producers, of their

The exceptions to this can be found in Article 5(3) which provides a list of fourteen permissible specific exceptions and one general exception concerning analog uses of "minor importance".[259] Although the list is exhaustive none of these exceptions is mandatory. Notably, the exception to the exclusive reproduction right for private use purposes (established in Article 5(2)(b)) and the exception to the exclusive reproduction right in cases of transient and incidental reproductions (established in Article 5(1)) do not apply in the case of the communication to the public and to the making available to the public rights. It has been argued that were these exceptions applied in the case of the making available right as well this would counter balance the strongly exclusive character of this right.[260] At this point, it should be noted that since this work mainly examines digital dissemination of copyright works the discussion that follows uses the term 'making available to the public right' over the term 'communication to the public right'. However, since the making available right is narrower, our assumptions may also be applicable in the case of the wider and all-encompassing communication to the public right.

The reproduction right and the making available to the public right may overlap to an extent since the distribution over the internet often involves at the same time acts of reproduction (possible application of the reproduction right) and acts of communication (possible application of the making available right). These two rights may overlap if one follows a broad interpretation of the scope of the reproduction right and a technical and merely descriptive approach to reproduction according to which all reproductions, irrespective of the purpose or their temporal nature, infringe the exclusive reproduction right.[261] If such a broad interpretation of the reproduction right is accepted, then when someone makes a

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phonograms; (c) for the producers of the first fixations of films, of the original and copies of their films; (d) for broadcasting organisations, of fixations of their broadcasts, whether these broadcasts are transmitted by wire or over the air, including by cable or satellite." Article 3(3) provides that "[t]he rights referred to in paragraphs 1 and 2 shall not be exhausted by any act of communication to the public or making available to the public as set out in this Article."

[259] See discussion in the previous Section (Section 3.2.1.1).

[260] Guibault, Lucie, Institute for Information Law, University of Amsterdam, The Netherlands (2007), 'Study on the implementation and effect in Member States' laws of the Directive 2001/29/EC on the Harmonisation of certain aspects of copyright and related rights in the information society, Final Report, Part I, The Impact of Directive 2001/29/EC on Online Business Models' European Commission DG Internal Market Study Contract No. ETD/2005/IM/D1/91<http://ec.europa.eu/internal_market/copyright/studies/studies_en.htm> accessed 15 June 2010, at 61.

[261] Ibid 23, 35-36.

copy of the work available to third parties from his hard disk/uploads a work to the internet and, thus, allows them to copy it, that person infringes the reproduction right instead of the communication right.[262]

On the contrary, a narrow interpretation of the reproduction right (i.e., a normative, man-made and purpose-oriented approach according to which reproduction should not infringe the reproduction right if it is temporary or if it is done in the context of an act of making available the work to the public) does not treat all reproductions as infringements of the reproduction right. In that case, if someone makes a copy of the work available to third parties from his hard disk/uploads a work to the internet and, thus, allows them to copy it, then he will be infringing the making available to the public right (instead of the reproduction right).

These interpretative options in relation to the reproduction right has led to uncertainty regarding whether downloading works from peer-to-peer networks for personal use could be exempted under the reproduction for private use exception. In particular, the uncertainty stems from that fact that if a broad interpretation of the reproduction right is adopted, then the person who downloads the works uploaded by the infringer of the reproduction right cannot be held liable on condition that the reproduction for private copy exception applies. If a narrow interpretation of the reproduction right is adopted, then the person who downloads the works uploaded by the infringer of the making available to the public rights will be held liable in any case since no exception of reproduction for personal use is recognised in the context of the making available right.

Unauthorised uploading of copyright works in per-to-peer networks infringes either the reproduction right, or the making available to the public right, or maybe both rights simultaneously. Although the copyright exceptions in the above example are given to the uploader (instead of the downloader), it is submitted here that which right is infringed by the uploader ought to have an impact on whether an exception will be recognised in favour of the downloader. If the right that is infringed is the making available right, then the right of the rightholder is the making available right and should not be infringed by means of reproduction by a downloader.

[262] Ibid 23, 62, 168.

On the contrary, if the right that is infringed is the reproduction right, then the right of the rightholder is the reproduction right and this right can be infringed by means of the reproduction by a downloader. If this interpretation were not the correct one, then the exceptions would be meaningless, because a lawful act by the uploader of making available or reproduction would fail to achieve the purpose for which the law grants the exception, as the downloader could still be found to be infringing some other right. Therefore, if a broad interpretation of the reproduction right in the context of uploading is adopted, then the downloading of works should be able to be exempted under the private copying exception. Such an interpretation may not solve the issue of a broad exclusive making available to the public right, but it may counter balance the exclusivity afforded to rightholders to some extent.

For the application of the private copy exception in the context of file-sharing networks, however, several issues should be considered. In the EU, arguably, downloads will not constitute infringement if they fall within the scope of the private copy exception, as reformed after the implementation of the EUCD by the Member States.[263] Regarding the proper scope of the concept of the private copy and 'private use,' if the user is only downloading for his private use including use in the family circle and is not making files available to others then it could be argued that he could take advantage of the private copy exception.[264] In particular, a German higher regional court on appeal recently dismissed a lower court verdict against RapidShare which had been sued by rightsholders for distributing copies of movies and been issued a preliminary injunction by a lower court.[265] The German higher regional court noted that RapidShare cannot control file uploads without possibly

[263] For the implementation of the EUCD in Member States see Westkamp, Guido, Queen Mary Intellectual Property Research Institute, Centre for Commercial Law Studies, Queen Mary, University of London (2007), 'Study on the Implementation and Effect in Member States' Laws of Directive 2001/29/EC on the harmonisation of certain aspects of copyright and related rights in the information society, Final Report, Part II, The implementation of Directive 2001/29/EC in the Member States' European Commission DG Internal Market Study Contract No. ETD/2005/IM/D1/91 <http://ec.europa.eu/internal_market/copyright/studies/studies_en.htm> accessed 10 March 2009.

[264] Ibid 111 where it is said that "[p]rivate use means personal use in connection which private (i.e. domestic purposes) which excludes legal entities, which is taken to also allow the transfer to family members and close friends."

[265] *Rapidshare v Capelight Pictures*, OLG Düsseldorf (Higher Regional Court of Dusseldorf) I-20 U 166/09, 22.03.2010 <http://www.telemedicus.info/urteile/Internetrecht/Haftung-von-Webhostern/1017-OLG-Duesseldorf-Az-I-20-U-16609-Keine-Haftung-von-Rapidshare-fuer-Urheberrechtsverletzungen-Dritter.html> accessed 20 June 2011.

restricting local fair use laws. Regarding the private copying exception, the German higher regional court said that German copyright law allows users to make copies of music and movies for their own use, as well as to share them with a limited number of close acquaintances[266] and that automated filters would make it impossible for users to save a legal back-up copy of a movie on RapidShare's servers.[267]

Although this decision of the German higher regional court was overturned on 12 July 2012 by the German Supreme Court, our conclusions so far on the issue of exercising the private copying exception in the context of file-sharing networks seem not to be affected.[268] In particular, since the German Supreme Court held that file-hosting services like RapidShare do not have to monitor all uploads from their users generally and precautionarily but, instead, they might have to take measures to prevent specific uploads only once they have been notified of a specific and clear infringement in which case they can be held liable for secondary infringement, it is implicitly recognised RapidShare can be used for perfectly legitimate purposes, the exercise of copyright exceptions included.[269]

Towards the same direction points also the fact that the measures to which the particular service should resort once it is notified of an infringement are broadly defined by the Supreme Court as those which are technically and economically 'reasonable' to prevent users from uploading the infringing material.[270] In other words, since only measures that can result in a prevention of infringement can be adopted under the theory of 'reasonableness', e.g. browsing the entire catalogue that results in locating and deleting the infringing files (filtering user uploads), an argument *a contrario* would be that measures that can result in

[266] See §53 UrhG Reproduction for private and personal use.

[267] *Rapidshare v Capelight Pictures* (fn 265) B §3.

[268] The decision of the German Supreme Court is not published yet but a summary of the German press release is available at <http://juris.bundesgerichtshof.de/cgi-bin/rechtsprechung/document.py?Gericht=bgh&Art=pm&Datum=2012&Sort=3&nr=60931&pos=0&anz=113> accessed 5 November 2012. For a comment in English see Engelhardt, Tim, 'German Federal Supreme Court on file hoster responsibility for third party content-"Rapidshare"' 13.07.2012, available at <http://germanitlaw.com/?p=683> accessed 5 November 2012; see also EDRI-gram Newsletter, 'German Federal Supreme Court Rules in the RapidShare Case' Number 10.14, 18 July 2012, available at <http://www.edri.org/edrigram/number10.14/german-supreme-court-rapidshare-> case accessed 5 November 2012.

[269] *Engelhardt* (fn 268).

[270] Ibid.

the prevention of lawful activities, the exercise of copyright exceptions included, are forbidden.[271] Continuing on the measures that the particular service provider must adopt, the Supreme Court also held that the particular service provider is obliged to review a 'limited/manageable number' of search engines and third party sites that link to infringing content stored in it. However, such a measure cannot be held to negatively impact on lawful uses of the file-hosting service either since it is very specific in that it concerns only links to infringing content and not links to non-infringing content, notwithstanding the fact that the Court did not clarify what a 'limited/manageable number' of search engines and third party sites is.[272] Ultimately, however, the 'reasonableness' of the measures adopted by RapidShare will be defined by the Higher Regional Court of Düsseldorf to which the Supreme Court remanded the case.[273]

Generally, two questions must be answered when examining the applicability of the private copying exception in the case of file-sharing networks. One question concerns the lawfulness of the source copy and another question concerns the satisfaction of the three-step test. It is not clear whether the lawfulness of the source is an issue that must be considered when downloads are made from the Internet in Canada, France and Netherlands, though this is definitely a relevant issue in other countries, e.g. in Germany. In particular, the Federal Court

[271] This interpretation of 'reasonableness' that links reasonable measures to measures that achieve the specific aim and nothing more than that is based on *Senftleben* (fn 156) 210-211. At 210, Senftleben states that the term 'unreasonable' in the context of the third step of the three-step test of the Berne Convention 1886 (that requires a copyright exception not to unreasonably prejudice the author's legitimate interests) means 'excessive' and 'disproportionate'. Moreover, at 210-211 we read that unreasonable is an exception that goes 'beyond the limits of what is proportionate and necessary for achieving the aim' and at 211 that an exception is reasonable when 'the detriment to the authors [is] reasonably related to the benefit of the users'. Therefore, *a contrario*, one can assume that an exception is reasonable when it does not exceed what is necessary in order to achieve the particular aim and that the detriment to the rightsholders by the recognition of an exception should not exceed the benefits for the users. Applying this proportionality principle to the case at hand, we conclude that the detriment caused to the users by the measures against piracy adopted by RapidShare should not exceed the benefits for the rightholders from this practice. In other words, the measures that can be adopted to combat piracy should not lead to the abolishment of the copyright exceptions and to the prevention of lawful uses of works. The ultimate aim is to keep both parties, namely rightsholders and users, happy in the context of this balancing exercise or 'proportionality test' as Senftleben calls it at 211.

[272] *Engelhardt* (fn 268).

[273] Ibid. The Supreme Court held that it lacked the necessary information regarding the practical ways and the costs of monitoring user uploads. What is interesting to note is that the Higher Regional Court of Düsseldorf in the first instance had ruled in RapidShare's favour and its decision is awaited with great interest.

of Canada in a case between record companies and Canadian ISPs confirmed what had been proposed by the Canadian commission on copyright in its 2003 decision regarding the private copy exception.[274] Regarding the infringing nature of uploading, it was said that

> [t]he mere fact of placing a copy on a shared directory in a computer where that copy can be accessed via a P2P service does not amount to distribution. Before it constitutes distribution, there must be a positive act by the owner of the shared directory, such as sending out the copies or advertising that they are available for copying.[275]

However, on appeal, this conclusion was contested since it was said that conclusions regarding what would or what would not constitute infringement of copyright should not have been reached at the preliminary stages of the action, namely by the Federal Court.[276]

Moreover, in France, a computer sciences student was accused of copyright infringement for having reproduced on numerous CD-ROMs protected works downloaded from the Internet and for having made copies from CD-ROMs lent by friends. He then himself lent some of the CD-ROMs containing the reproduced works. Both the Rodez District Court and the Montpellier Court of Appeal held that the reproductions in question were covered by the private copy exception laid down in Art. L.122-5(2) of the French IP Code and, thus, acquitted the student.[277] However, the Supreme Court accused the appellate court of not having taken into account the fact that the works reproduced had been made available to the public by means of P2P software and of not having held on the lawful nature of the source as being a condition for the application of the private copy exception and sent the case back to the Aix-en-Provence Court of Appeal. The Aix-en-Provence Court of Appeal

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[274] *BMG Canada Inc. v. John Doe (Federal Court)*, 2004 FC 488, [2004] 3 F.C.R. 241, March 31, 2004, T-292-04 <http://reports.fja.gc.ca/eng/2004/2004fc488/2004fc488.html> accessed 20 September 2012. In that case it was said that "Under the Act, subsection 80(1), the downloading of a song for a person's private use does not constitute infringement." It was also said that "[25] Thus, downloading a song for personal use does not amount to infringement." See Copyright Board of Canada, 'Private Copying 2003-2004' (Decision) 12 December 2003 <http://www.cb-cda.gc.ca/decisions> accessed 10 May 2010, at 20 where it is also said that "[…] the regime is not about the source of the copy. Part VIII does not require that the original copy is a legal copy. It is thus not necessary to know if the source of the copy was owned by the copier, a borrowed CD, or a downloaded file from the Internet."

[275] *BMG Canada Inc. v. John Doe* (fn 273) § 28.

[276] *BMG Canada Inc. v. John Doe (F.C.A.)*, 2005 Federal Court of Appeal 193, [2005] 4 F.C.R. 81.

[277] *Buena Vista Home Entertainment et autres c/ D.A.C.*, CA Montpellier, 3ème ch. correct. 10 mars 2005, Légipresse, n.222, juin 2005. The Criminal Chamber of the Court of Appeal of the Montpellier upheld a decision of the Criminal Court of Rodez (of 13 October 2004) acquitting Mr Aurélien D. of having reproduced on several DVDs movies he downloaded from the internet without authorization.

convicted the student of copyright infringement by holding that the private copy exception did not apply in this case since it generally does not apply "to the loan of CD-ROMs to friends" as these are third parties.[278] Unfortunately, the Aix-en-Provence Court of Appeal simply ignored the question of the lawfulness of the source.[279]

The reasons why the Aix-en-Provence Court of Appeal refused to hold on the lawfulness of the source requirement, although it was clearly invited to do so by the Supreme Court, are not clear. For example, it could be argued that the Court implied that the lawful origin of the work is irrelevant and that the French legislature could have decided to include it on the occasion of the copyright law reform, following the model of Germany.[280] Irrespectively of the reasons behind this refusal, however, it has been argued that subjecting the application of all the copyright exceptions to the implied condition of the existence of a lawful source could be very problematic and "would call into question the equilibrium in copyright law," since, for example, a student who reproduces a passage from an unauthorized copy of a text would have qualified as infringer in such a case, even though the student might reasonably think the exception covered the reproduction.[281]

Generally, in 2005 the application of the private copy exception in the case of downloading works from peer-to-peer networks was confirmed several times by the French courts.[282] In the last of these three cases,[283] the French Supreme Court found the defendant not guilty

[278] *public*, *SEV*, *FNDF*, *Twentieth Century Fox*, *Buena Vista Entertainment*, *Gaumont et a. c/ Aurélien D.*, Cour de Cassation, crim., 30 mai 2006, RDL, juin 2006, 24-25.

[279] *public*, *SEV*, *FNDF*, *Twentieth Century Fox*, *Buena Vista Entertainment*, *Gaumont et a. c/ Aurélien D.*, CA Aix-en-Provence, 5 septembre 2007, RLDI 2007/31, n.1029 <http://www.juriscom.net/documents/caaixenprovence20070905.pdf> accessed 10 June 2011. See also Thoumyre L., 'Arrêt d' Aix-en-Provence du 5 septembre 2007: de la copie privée à la privation de copies?' (2007) 31 RLDI N.1025, 10.

[280] Geiger, Christopher, 'Legal or illegal? That is the question! Private copying and downloading on the internet' (2008) 39(5) IIC 597, 601-602.

[281] Ibid 602.

[282] Tribunal de Grande Instance de Bayonne, 15 novembre 2005, Le Ministere Public et La SCPP c/ Monsieur D. <http://www.juriscom.net>; TGI Meaux, correctionnel, 21 avril 2005, SPPF, SEV, SDRM, SCPP, SELL, SACEM, FNDF, FNCF c/ Stéphane, Rodolphe, Aleister, Aurélie <http://www.juriscom.net>; TGI Paris, 8 décembre 2005, Monsieur G. Anthony c/ SCPP <http://www.juriscom.net> accessed 20 September 2012.

[283] TGI Paris, (31ème ch.), 8 décembre 2005, Mr. G. Anthony c / SCPP <http://www.juricom.net> accessed 20 September 2012>.

both because his actions were exempted as reproduction for private use, and because there was also no infringement of the making available right. According to the Court, there is no element of bad faith in using peer-to-peer software and no evidence that the rightsholders did not consent to the distribution of their works via peer-to-peer networks. It was accepted that the defendant when downloading the works simply placed a "copy" of the works in the shared folder to which the other users of the internet have access without having previously checked the databases of rightsholders whether he has the right to distribute their woks and without knowingly infringing intellectual property rights. By accepting that the defendant simply placed a "copy" of the work in the shared folder, the court implicitly accepts that the making available/distributing the work to the public is simply a technical consequence of the creation of a copy (which is, in turn, exempted under the reproduction for private use).

However, more recent French cases show that the legality of the source could be a precondition for the application of the private copy exception. For example the Tribunal de Grande Instance de Rennes decided that the private copy exception cannot be applied when the source of the copy is illegal.[284] Moreover, the Tribunal de Grande Instance de Montauban decided that user of the Kazaa software infringed the reproduction right and the making available right.[285]

In Netherlands, in a decision of 12 May 2004, the court of Haarlem rejected the claim of Stichting Brein, a local associate against piracy, by refusing to hold liable the search engine Zoekmp3 for any infringement because it provided links to Internet sites from which music could be downloaded in the MP3 format without the authorization of the rightful owners.[286] According to the court, the action of directing users to websites which offered, without

[284] TGI Rennes, 30 novembre 2006, SCPP et SPPF c/Madame A. <http://www.juriscom.net> at 7 "[…] qu'au surplus l'exception de copie privée ne saurait avoir pour effet de render licite la reproduction d'une oeuvre illicitement obtenue;"

[285] TGI Montauban, 9 mars 2007, Le Ministere Public et La SCPP c/Madame M. <http://www.foruminternet.org> at 2-3 "[a]ttendu qu'elle est prévenue d'avoir à ALBIAS (82), pendant l'année 2004 et jusqu'au 15 février 2005, sans autorisation de l'artiste-interprête, du producteur de phonogrammes, alors qu'elle était exitée, fixé, reproduit, communiqué ou mis à disposition du public, à titre onéreux ou gratuit, ou télédiffusé, une prestation, un phonogramme, un vidéogramme ou un programme audiovisuel;"

[286] Brandner, Sabrina, 'MP3 download is no hack, as the court of Haarlem' <http://www.juriscom.net/actu/visu.php?ID=511> accessed at 20 February 2009.

authorization, music files, was not illegal since, according to the websites, downloading of illegal files without sharing them is not contradictory to the copyright legislation.[287]

However, on 26 September 2012, the Hoge Raad der Nederladen-Netherlands referred certain questions to the CJEU for a preliminary ruling in the context of the case *ACI ADAM E.A.* concerning, among others, the issue of the lawfulness of the source copy.[288] In that case, a conflict arose between technology companies and a Dutch collecting society responsible to collect private copying levies and a Dutch organization responsible for determining the (fair) level of such levies and concerned the correct method of calculating the rate of remuneration in the context of a levy system. In particular, rightsholders were remunerated for acts of reproduction for private purposes with no direct or indirect commercial purpose made by natural persons via levies imposed on machines and, therefore, according to the claimants, only reproductions made in the context of such lawful uses should be taken under consideration when setting the level of levies. In this context, the referring Dutch Supreme Court asked, amongst others, whether the private copying exception in the EUCD (Article 5(2)(b)) applies only when the work becomes available from a lawful source, namely without a copyright infringement, or whether it also applies when the work becomes available via an unlawful source, namely when a copyright infringement has taken place.[289] The answer of this question, among others, will help clarify whether the harm caused to rightsholders by reproductions made from illegal sources should be or should not

[287] Ibid; Bernault, Carine & Lebois, Audrey, 'A Feasibility Study regarding a system of compensation for the exchange of works via the Internet' Institute for Research on Private Law, University of Nantes June 2005 <http://privatkopie.net/files/Feasibility-Study-p2p-acs_Nantes.pdf> accessed 20 June 2008, at 21.

[288] Case C-435/12 ACI ADAM E.A. The questions of the referring court can be found in the website of the UK Intellectual Property Office available at <http://www.ipo.gov.uk/pro-policy/policy-information/ecj/ecj-2012/ecj-2012-c43512.htm> accessed 1 November 2012. For a commentary of this case see Vousden, Stephen, 'Case C-435/12 ACI ADAM-Calculating private-copy 'fair compensation' in EU Copyright Law' EUlawradar.com, posted on 9 November 2012, available at < http://eulawradar.com/case-c-43512-aci-adam-calculating-private-copy-fair-compensation-in-eu-copyright-law/> accessed 2 November 2012.

[289] The opinion of the CJEU is awaited with great interest given that also a particularity of the case is that the court also asked whether the existence or not of technological measures applied to the works that prevent the making of unlawful private plays a role. In other words, the court asks whether the harm caused to rightsholders by unlawful reproductions and piracy should be taken into consideration when calculating his remuneration by means of levies at least in the case they do not have any means in the form of technological measures to prevent such unlawful activity.

be taken under consideration since it will clarify whether such reproductions fall within the scope of the private copying exception or not.

Similarly, the Oberster Gerichtshof-Austria addressed a preliminary ruling to the CJEU that concerned, among others, the issue of the lawfulness of the source copy.[290] In that case, the question was whether the company that provided access to the internet to people who visited a website to watch films online was liable under EU copyright law. In this context, the Austrian Supreme Court asked the CJEU whether reproduction for private use and transient and incidental reproduction are permissible only if the original reproduction was lawfully reproduced, distributed or made available to the public. In case the answer to this question is in the affirmative and an injunction is therefore to be issued against the user's access provider in accordance with Article 8(3) of the EUCD it also asked whether it is compatible with EU fundamental rights law to require that an access provider should not allow its customers access to a certain website (without ordering specific measures) containing unauthorized material if the access provider can show that it had nevertheless taken all reasonable measures (and can, thus, avoid incurring preventive penalties for breach of the prohibition). The CJEU's position on this matter is awaited with great interest as well.

On the contrary, the lawfulness of the source explicitly determines the unlawful character of the download and precludes the application of the private copy exception in other countries. In Germany,[291] for example, it was laid down on the occasion of the adoption of the law dated 10 September 2003 that the private copy exception did not apply when the original is an "obviously unlawful" source. The same approach is adopted by Portugal, Norway, Sweden and Finland.[292]

As concerns the application of three-step test in the context of downloading, it can be said that the first criterion of 'certain special cases' can be easily satisfied since the act of

[290] Reference for a preliminary ruling from the Oberster Gerichtshof (Austria) lodged on 29 June 2012- *UPC Telekabel Wien GmbH v Constantin Film Verleih GmbH*, Munich (Germany), Wega Filmproduktionsgesellschaft mbH (Case C-314/12) O J C 303/12, 6.10.2012.

[291] *Westkamp* (fn 263) 225 on §53(1) of the German Intellectual Property Law.

[292] Ibid 84-87. The Greek law N.2121/1993 Law No. 2121/1993 on Copyright, Related rights and Cultural Matters (as last amended by Law No. 3057/2002 (article 81) and by Law No. 3207/2003 (article 10 par. 33) and by Law No. 3524/2007) does not provide for the legal possession of the source copy from which one reproduces the work.

reproducing in the course of downloading is specific enough to be considered 'certain special case'. The second step, however, namely the absence of conflict with the normal exploitation of the work, is more demanding and could wipe out the private copy exception in the context of file-sharing. There are two interpretations of the second step of the test that could apply here. First, the question is whether downloading the work affects the sales of works and the legal options of downloading works, such as music and video, since studies on the subject are contradictory.[293] Second, an interpretation of the WIPO Panel decision suggests that the normal exploitation would simply be ways by which it is reasonable to believe that an author would exploit his work.[294]

Regarding the first question on whether the sales of works are affected, one must be careful when interpreting the conclusions of the existing studies. Generally, it could be said that if rightsholders lose money, it means that the users get for free something that they would have to pay for and thus the normal exploitation of the work is affected, and the other way round. Since the outcomes of the existing studies are contradictory,[295] it would be better to

[293] Indicatively see Oberholzer-Gee, Felix, & Strumpf, Koleman, 'The effect of file sharing on record sales: an empirical analysis' (2007) 115(1) Journal of Political Economy 1. The writers of this study conclude in p.25 that the effect of downloads on sales "is statistically indistinguishable from zero." On the contrary, Liebowitz, Stan J., 'File-Sharing: Creative Destruction or just Plain Destruction?' (2006) 49 J.L. & Econ. 1, reaches a different conclusion, namely that downloads affect music sales. In the context of this debate see also Liebowitz, Stan J., 'How Reliable is the Oberholzer-Gee and Strumpf Paper on File-Sharing?' (2007) <http://ssrn.com/abstract=1014399> accessed 20 February 2011; See Andersen, Birgitte & Frenz, Marion, 'The Impact of Music Downloads and P2P File-Sharing on the Purchase of Music: A Study for Industry Canada' 2006-2007 <http://www.ic.gc.ca/eic/site/ippd-dppi.nsf/eng/h_ip01456.html> accessed 23 January 2008, who find, in p.33, that in the aggregate - that is, among all Canadians - there was "no direct evidence to suggest that the net effect of P2P file-sharing on CD purchasing is either positive or negative." However, they found "a strong positive relationship between P2P file-sharing and CD purchasing" among the subgroup of P2P file-sharers (p.33). Specifically, it is argued that "among Canadians [who] actually engaged in it, P2P file-sharing increases CD purchasing" (p.33). For a summary of the majority of the studies available see British Recorded Music Industry (BPI) Research & Information (2009), 'The impact of illegal downloading on music purchasing' <http://www.ifpi.org/content/library/The-Impact-of-Illegal-Downloading.pdf> accessed 20 January 2011. Finally, see Waelde, Charlotte, 'From entertainment to education: the scope of copyright?' (2004) 3 IPQ 259, 271 where, apart from the limitations of the several economic studies, it is also noticed that "[…] the recorded music industry tends to argue that every copy made through the medium of file-sharing is a lost sale. That begs the question whether the person who made the copy, or bought the piratical product, would actually pay to acquire a legitimate copy. This must be a matter of some doubt, given a widespread and firmly established popular perception, long preceding the existence of "free" services, that legitimate recorded music is over-priced."

[294] See Part I, Chapter 2, Section 2.4.2 above.

[295] See also Swiss Federal Council, 'Report on the illegal use of works on the Internet in response to postulate 10.3263 Savary' Berne <http://www.ejpd.admin.ch/content/dam/data/pressemitteilung/2011/2011-11-30/ber-br-f.pdf>

follow a purposive interpretation of the second step of the three-step test. Regarding this interpretation, it has been argued that there would never be a conflict with the normal exploitation of the work where there is no real possibility that the rightful owner could assert his right in prohibiting that exploitation or obtaining remuneration by free negotiation and contracting with users.[296] This is because the purpose of the second step is to preserve the remuneration which right holders might reasonably expect to gain, but not to limit the exceptions if the remuneration is purely speculative. Accordingly, downloads fulfill the second requirement of the three-step test because, in effect, authors and neigbouring rightholders cannot practically control them, that is they cannot prohibit nor obtain remuneration using the individual management of rights, i.e. contracting with users.

Distributing works via peer-to-peer networks, however, would fail the third step since there would be 'an unreasonable prejudice' to the legitimate interests of the rightholders. As it was already said earlier, the third step of the three-step allows the operation of liability rules over exclusivity rules under certain conditions.[297] It was also said that the 'unreasonable prejudice' test requires that the legitimacy of the author's interests depends on whether the

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accessed 10 May 2011, where in §3.3 it is acknowledged that the studies available on the impact of peer-to-peer distribution to sales of works lead to very different conclusions based on data available, assumptions and methods of analysis.

[296] Ricketson, International Conventions and Treaties, in Baulch, Libby, et al. (eds), *The Boundaries of Copyright, its Proper Limitations and Exceptions*, ALAI Journal of Studies, Cambridge, 3-26, September 1998, 1999, 10-11 where it is argued that "[l]ittle specific guidance as to the meaning of "normal exploitation" is to be found in the Records of the Stockholm Conference, although the Report of Main Committee I provides an example of use that would conflict with this, namely the photocopying of a very large number of copies for a particular purpose. However, a common sense interpretation would suggest that the expression "normal exploitation" refers simply to the ways in which an author might reasonably be expected to exploit her work in the normal course of events. It seems logical to assume that this would not cover or conflict with a use which is made for a purpose for which the copyright owner would not ordinarily expect to receive a fee, even thought the use falls strictly within the scope of the exclusive reproduction right: examples would include the making of copies for the purpose of private study or research or for the purpose of judicial proceedings. A further kind of use that would not conflict with a normal exploitation would be one in respect of which there is no realistic possibility that the copyright owner would be able to enforce her rights, either by way of refusing permission or obtaining a fee by free negotiation: examples might include the making of multiple copies of works by means of reprographic reproduction or the off-air taping of broadcast works (such uses, however, would clearly be caught by the third criterion of "legitimate interest of the author", […]" See also the condition of the breach of normal exploitation as interpreted in Ricketson, Sam, 'Etude de l'OMPI sur les limitations et les exceptions au droit d'auteur et aux droits voisins dans l'environnement numérique' SCCR/9/7, 5 avril 2003, <http://www.wipo.int/edocs/mdocs/copyright/fr/sccr_9/sccr_9_7.pdf> accessed 27 March 2010, at 83.

[297] See Part I, Chapter 2, Section 2.4.3 above.

economic and non-economic interests of the author are justifiable in order to promote cultural diversity in the light of the natural law and the utilitarian copyright rationales (proportionality principle). If they are then they are legitimate while if not then they are not legitimate. Applying this proportionality principle in the case at hand it can be argued that a prohibition for users to use per-to-peer networks will not further any of the copyright's aims since rightholders are essentially incapable to exploit their works due to market imperfections. Therefore, an exception for reproduction for private copying should be recognized, in principle.

However, rightholders have a justifiable and legitimate interest in being rewarded for allowing access to their works by means of the private copying exception since the least harmful means principle should also apply, namely that the rightholders' should not give away more than what is necessary for the attainment of copyright's aims. Therefore, private use by means of downloading should be the object of a compulsory license fee in order to compensate for a potential loss which prejudices the legitimate interests of the rightsholders.[298] In that way, both sides, i.e. the rightholders and the users of copyright works, are satisfied.

In sum, the private copying exception could operate in the context of downloading from peer-to-peer networks in the case of one-click hosters and also if it becomes the object of a compulsory fee. The above discussion shows that the legal developments in the area of peer-to-peer networks can be used as a guidance for the recognition of an exception for private use in the case of the communication to the public right, and in particular in the case of the making available right, that would counter balance the strong exclusivity afforded to rightholders and would broaden the scope of lawful personal use.

3.2.1.3 Exceptions to the Distribution Right

Copyrighted works are immaterial products and as such they are never sold to the users, they are simply licensed (license of Intellectual Property (IP)). The license of IP terms is usually contained in a contract either for the provision of goods or for the provision of

[298] *Carine & Lebois* (fn 287) 35; For ways how to remunerate rightholders in the context of file-sharing networks see, e.g., Netanel, Neil W., 'Impose a Noncommercial Use levy to allow free Peer-to-Peer file sharing' (Fall 2003) 17(1) Harv. J.L. & Tech. 1; Fisher, William W., 'An alternative compensation system' in *Promises to Keep: Technology, Law and the Future of Entertainment* (Stanford University Press 2004); Yu, Peter K., 'P2P and the Future of Private Copying' 2005 (76) U. Colo. L. Rev 653.

services while non-contractual, i.e. 'bare', licences are also possible. The physical carrier of the copyrighted work (e.g. the CD) can be sold or rented. In the case of a sale of a physical carrier embodying a work the copyright law principle of exhaustion of rights applies with regard to the embodied work. According to the exhaustion doctrine, the vendor cannot control subsequent use of the work once it was marketed under his permission and the user can lawfully make copies, lend, distribute or resell the work without being restricted by any terms or limitations. For example, video rental stores can rent videos to consumers and libraries can lend books without asking for the copyright holder's permission. A pre-requisite, however, for the doctrine to apply is that the user of the work owns the copy of the work. The mere possession, contrary to ownership, is not sufficient. Moreover, the doctrine requires that the copy has been lawfully made, e.g. the making of the copy was authorized by the rightsholder or permitted by the law.[299]

In the absence of material carrier, works provided online are usually licensed rather than sold and, therefore, the vendor's ability to control subsequent uses falls under contract law (instead of copyright law). Generally, vendors usually prefer license agreements in order to avoid the exhaustion of their rights.[300] The exhaustion doctrine is a limitation to the exclusive right of distribution, namely to the right to control the first public distribution of an authorized copy of the copyrighted work, and has been developed to balance authors' rights and public access to works.[301]

Generally, according to the international and the EU approach, the exhaustion doctrine does not apply to digital content.[302] In a digital context, it is the right of making available to the public and not the exclusive distribution right that is of particular interest and relevance, since online music services such as iTunes distribute music in digital file format over electronic networks. The WIPO Copyright Treaty and, accordingly, the US and the EU copyright law, stipulates that the communication of a work to the public by means of the

[299] *Gasser* (fn 154) 51. See also Gaubiac, Yves, 'The exhaustion of rights in the analogue and digital environment' (2002) 36(4) Copyright Bulletin <http://unesdoc.unesco.org/images/0013/001397/139700e.pdf> accessed 10 June 2010.

[300] Lucchi, Nicola, *Digital Media and Intellectual Property: Management of Rights and Consumer Protection in a Comparative Analysis* (Springer 2006) 105.

[301] *Gasser* (fn 154) 50.

[302] Ibid 55-64. See also *Lucchi* (fn 300) 137-8.

communication networks is a "service provision" and, therefore, it is subject to the authorization of the rightsholders every time any further action of the same type is implied.[303] Moreover, Recital 29 of the EUCD explicitly provides that

> [t]he question of exhaustion does not arise in the case of services and on-line services in particular. This also applies with regard to a material copy of a work or other subject-matter made by a user of such a service with the consent of the rightholder. Therefore, the same applies to rental and lending of the original and copies of works or other subject-matter which are services by nature. Unlike CD-ROM or CD-I, where the intellectual property is incorporated in a material medium, namely an item of goods, every on-line service is in fact an act which should be subject to authorisation where the copyright or related right so provides.

Moreover, a digital exhaustion doctrine is not implied by the WCT and the WPPT and is also explicitly rejected by the EUCD. In particular, according to the WCT and the WPPT, there is a clear distinction between an exclusive distribution right with respect to tangible copies of works and an exclusive transmission right with respect to intangible copies, i.e. the right of making available to the public.[304] While the WIPO Treaties mention the exhaustion principle exclusively in the context of the distribution rights, they do not contain similar provisions with respect to the right to making intangible copies available, i.e. regarding digital transmission over networks.[305] As a result, international law cannot be said to provide a basis for the recognition of a digital exhaustion doctrine.

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[303] With regard to the WIPO Treaties, see, for example, International Federation of the Phonographic Industry (IFPI) 'The WIPO Treaties: 'Making Available' Right: What is the 'Making Available' Right?' March 2003, <http://www.ifpi.org/content/library/wipo-treaties-making-available-right.pdf> accessed 20 March 2010. In p.1, it is argued that the scope of this right "covers both the actual offering of the phonogram or other protected material and its subsequent transmission to members of the public. The exclusive right provides control over the act of 'making available' by all means of delivery-by wire or wireless means-and whenever members of the public may access the work or phonogram from a place and at a time individually chosen by them. This broad formulation is capable of accommodating many different types of exploitation, from services allowing only the listening of music, to services allowing the download of permanent copies of music tracks, to exiting future uses of technology. The key element is that the exclusive right covers all types of exploitation that allow the consumer to have a choice as to the time and the place to enjoy music. Therefore, not only 'music on demand' services but also all other services with a like effect (e.g. digital transmissions allowing for the identification and recording of specific music tracks) should be covered by this right."

[304] Article 6(1) WCT and Articles 8(1) and 12(1) WPPT provide exclusive distribution rights for tangible objects. Article 8 WCT and Articles 10 and 14 WPPT grant a separate exclusive right for transmission of digital works over networks to make them available to the public.

[305] According to Article 6(2) WCT and Articles 8(2) and 12(2) WPPT, legislatures must decide whether and under what conditions a limitation of the distribution right for tangible works shall be implemented. These Articles give the option to contracting parties to limit the distribution right by the

With regard to the EU, the EUCD distinguishes between a distribution right dealing with the circulation of tangible works (Article 4), and a right of communication to the public, including a right to making available to the public that covers any means or process other than the distribution of physical copies (Article 3). Article 4(2) stipulates that the distribution right shall be exhausted within the European Community in respect to the original or copies of the works where the first sale or other transfer of ownership in the EU of that object is made by the rightholder or with his consent. However, Article 3(3) stipulates that "[t]he rights referred to in paragraphs 1 and 2 shall not be exhausted by any act of communication to the public or making available to the public as set out in this Article." Therefore, the exhaustion principle is limited to the right of distribution of tangible copies such as books, CDs, etc.

Contrary to the approach of the EUCD on exhaustion, recent research in the United States suggests that under US copyright law

> the exhaustion principle holds that a fundamental set of user rights or privileges flows from lawful ownership of a copy of a work. These privileges apply to the full range of exclusive rights, not just the distribution right. Although the precise shape and scope of exhaustion privileges vary, they permit activities incidental to the use and enjoyment of copies by their owners.[306]

It is generally argued that the United States first sale doctrine, namely the equivalent to the European exhaustion doctrine, should be understood "[…] as a component of a larger exhaustion principle [that] offers a promising solution to the threat of obsolescence the doctrine currently faces."[307] In support of a digital exhaustion principle in the United States, the writers argue that "[…] the exhaustion principle, like many central doctrines in copyright law, remains essentially a common law rule despite the statutory recognition of the first sale doctrine […]" and they use the common law development of patent law's exhaustion rules (allowing owners of goods embodying patented inventions to use and redistribute them without patent holder permission) to further support a digital exhaustion approach in copyright law.[308]

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application of the exhaustion principle after any authorized transfer of ownership of the original or a copy of the work.

[306] *Perzanowski & Schultz* (fn 150) 912.

[307] Ibid 925.

[308] Ibid 926.

Arguably, the application of the exhaustion principle to digital copies is supported by the enactment by the US Congress of Section 117 to ensure the right of copy owners to use and redistribute copies of computer programs. In particular, Section 117 provides that the owner of a computer program can make or authorize the making of another copy or adaptation of that computer program without infringing copyright provided that this is "an essential step in the utilization of the computer program in conjunction with a machine and that it is used in no other manner" or that this is "for archival purposes only and that all archival copies are destroyed in the event that continued possession of the computer program should cease to be rightful." Section 117 continues by providing that such exact copies "may be leased, sold, or otherwise transferred, along with the copy from which such copies were prepared, only as part of the lease, sale, or other transfer of all rights in the program" while adaptations "may be transferred only with the authorization of the copyright owner."

With regard to machine maintenance or repair, Section 117(c) provides that the owner or lessee of a machine may make or authorise the making of a computer program "solely by virtue of the activation of a machine that lawfully contains an authorized copy of the computer program, for purposes only of maintenance or repair of that machine" provided that the new copy of the computer program is used only for maintenance or repair and is destroyed immediately thereafter and that any computer program or part thereof that is not necessary for that machine to be activated is not accessed or used other than to make such new copy by virtue of the activation of the machine.

Arguably, since Section 117 clarifies that reproduction is sometimes essential to a computer program's operation and that sometimes owners are free to alienate their copies, these rationales that are based on principles that motivated the nineteenth-century exhaustion jurisprudence could apply to all digitally encoded works.[309] In the same spirit, it is argued that

> [t]o the extent that courts continue to treat RAM instantiations as copies, reading an e-book or listening to an MP3 necessarily entails reproduction, just like running a computer program. Similarly, digital works often require modification or adaptation to enable playback across devices and software, sometimes forcing copy owners to alter their copies for use on new or competing platforms. Perhaps most importantly, the alienability of

[309] Ibid 935.

> digitally distributed works is just as deeply intertwined with reproduction as the resale of computer programs.[310]

Perzanowski and Schultz equate computer programs with all other digitally distributed works by arguing that the

> [U.S.] Copyright Act defines a computer program as "a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result." But of course, the experience of a consumer of digital content owes just as much to instructions contained in the data file as it does to instructions supplied by software. Indeed, any rigid distinction between computer programs and digitally encoded data is something of an over-simplification.[311]

The writers also argue that since exhaustion traditionally requires use and alienability copy owners should be entitled to reproduce a work only to the extent necessary in order to use, preserve, or alienate that copy or lawfully reproduce it.[312] It is argued that

> [t]his rule, in conjunction with the existing first sale doctrine, would give copy owners a set of privileges for digital works functionally equivalent to the privileges they have traditionally enjoyed in the analog context. Moreover, it would preserve the traditional benefits of first sale in the digital context, allowing for increased access, preservation, privacy, transactional clarity, user innovation, and platform competition.[313]

It is emphasized, however, that copy owners should not alienate some copies of a work while keeping others and they should not redistribute reproductions made from a single lawful copy to more than one party since the original copy acquired from the copyright holder and all second generation copies made from it should be considered as a single unit for the purposes of exhaustion in order to retain the copyright balance between rightsholders and users.[314]

Finally, the writers give three examples illustrating how exhaustion would operate in a digital context without undermining rightsholder's incentives to create and how the exhaustion principle addresses the complications of digital distribution. In their first example ("transfer of digital media"), a consumer who acquires a digital media file, e.g. an MP3 from Amazon's

[310] Ibid 935-936 (footnotes omitted).

[311] Ibid 936 (footnotes omitted).

[312] Ibid.

[313] Ibid 936-937.

[314] Ibid 937.

online music store, cannot transfer ownership to another through resale or gift because the first sale doctrine, traditionally limited on distribution, only permits her to transfer ownership of the particular copy she downloaded by selling her laptop or its hard drive.[315] On the contrary, the writers' proposal would solve the issue by requiring courts to make an ex-post case-by-case analysis and, once it establishes copy ownership, ask whether the acts of reproduction, e.g. copying the file to some transferable medium or attaching it to an email, facilitate transfer of the consumer's limited ownership interest and if the consumer retains any copy of the work after the transfer. In other words, if the work has been "forwarded and deleted" then there is no copyright infringement since the exhaustion principle would apply.[316]

The second example given by Perzanowski and Schultz ("modification of digital media for device shifting") refers to a consumer who purchases an e-book that is incompatible with his device or platform. According to the writers, in the analog world book owners are free to read their books in a way that satisfies them, e.g. they "can bind paperbacks in hard covers or remove excerpts from lengthy tomes for the sake of convenience",[317] and in the digital context the proposed exhaustion principle can extend "[…] similar freedoms to digital books, privileging acts of reproduction or modification necessary, for example, to read a book purchased on a Sony Reader on a Nook instead."[318] However, if the modifications or alterations made by the copy owner "[…] transform an existing work by adding new expression rather than enabling new uses […]" and further the use and enjoyment of the underlying work then these uses are not covered by the exhaustion principle.[319] Moreover, in the context of this second example, Section 117 applies also in the case when a copy owner who has lawfully modified a copy to ensure interoperability wants to sell that modified copy on the secondary market. Although Section 117(b) requires copyright owners to obtain copyright holder permission before selling adaptation copies, it is argued that when adaptation is done simply in order to enable the use/compatibility of the work rather

[315] Ibid 938.

[316] Ibid 938-939.

[317] Ibid 939.

[318] Ibid (footnotes omitted).

[319] Ibid.

than in order to add new features or functions to it then "copy owners should be permitted to transfer adaptations as a component of their transfer of all rights to copies of a work."[320]

Finally, in the third example used by the writers ("remote access to digital media"), the right of reproduction facilitating space-shifting when a consumer purchases a digital movie on her home computer to watch later over the internet via remote computers or a mobile device would be exhausted by the ownership of a copy.[321] However, it is argued that "exhaustion could provide a defense to any incidental reproduction to enable device, time, and format shifting"[322] and would not apply in the case when a work is transmitted in public.[323] Since the exclusive right of public performance is beyond the scope of exhaustion's traditional boundaries,

> [d]ownloading a copy of a film from an authorized online retailer would not give the copy owner the right to offer a Netflix-style streaming service any more than a DVD or VHS copy would entitle its owner to exhibit a film to the public. But if the remote display is a private rather than public use of the copy, exhaustion should insulate the copy owner from liability from incidental reproductions.[324]

Generally, in this third case, the writers argue that the use of the exhaustion principle is a safer solution than the fair use principle when the making of a private copy is involved on condition that ownership of the copy has been established because it "teaches that the ability to make personal use of a copy is implicit in its purchase."[325]

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[320] Ibid 940-941 (footnotes omitted) where it is argued that "[s]ince section 117 permits the creation of adaptations not only for compatibility purposes but also to add new features or functions to an existing program, this restriction on alienation makes some sense. Adaptations that incorporate new features or functions could compete directly with the copyright holder's own updates and improvements in ways that could undermine incentives for follow-on creativity. However, because the adaptation privilege for nonprogrammatic works is limited to enabling use of the existing work, this threat would be less pressing. As a result, copy owners should be permitted to transfer adaptations as a component of their transfer of all rights to copies of a work."

[321] Ibid 941 (footnotes omitted).

[322] *Perzanowski & Schultz* (fn 150).

[323] Ibid.

[324] Ibid 941 (footnotes omitted).

[325] Ibid 942.

A right to use and redistribute copyright works reserved to the copy owners could also be implied in the equivalent provisions of the European Software Directive.[326] Firstly, Article 5(2) provides for a back-up copy exception reserved to person having a right to use the computer program.[327] Secondly, Article 4(2) of the Software Directive provides that "[t]he first sale in the Community of a copy of a program by the rightholder or with his consent shall exhaust the distribution right within the Community of that copy, with the exception of the right to control further rental of the program or a copy thereof." Thirdly, Article 5(1) of the Software Directive provides that "[i]n the absence of specific contractual provisions", the acts of the permanent or temporary reproduction of a computer program by any means and in any form, in part or in whole which may also be the result of loading, displaying, running, transmission or storage of the computer program as well as the translation, adaptation, arrangement and any other alteration of a computer program and the reproduction of the results thereof "shall not require authorization by the rightholder where they are necessary for the use of the computer program by the lawful acquirer in accordance with its intended purpose, including for error correction."

In this context, the reference for a preliminary ruling concerning the interpretation of Article 4(2) and 5(1) of the Software Directive made in proceedings in *Oracle International Corp. Redwood Shores, CA, USA v UsedSoft GmbH, Munich* is of special interest.[328] Oracle developed and marketed computer software and distributed it by way of internet downloads. Oracle licence agreements explicitly stated that the right to use the programs was 'non-transferable'. This case concerned the marketing by UsedSoft of used licenses for Oracle computer programs. UsedSoft marketed, among other, used licences for the Oracle software informing the buyers that the maintenance agreement concluded between the original licence holder and Oracle was still in force and that the lawfulness of the original sale was confirmed by a notarial certificate. Customers of UsedSoft could who had acquired such a used licence could download a copy of the program directly from Oracle's website

[326] Council Directive (EC) 2009/24/EC of 23 April 2009 on the legal protection of computer programs (replacing Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs) [2009] OJ L 111/16.

[327] Article 5(2) provides that "[t]he making of a back-up copy by a person having a right to use the computer program may not be prevented by contract in so far as it is necessary for that use."

[328] Case C-128/11, O J C 120, 16.4.2011 (referral to ECJ); Case C-128/11, O J C 287/10, 22.9.2012 (ECJ's judgment).

while customers who already had the Oracle software and then purchase further licences for additional users could copy the program to the work stations of those users. In this context, Oracle asked the Regional Court, Munich, to order that UsedSoft stops marketing used licences for Oracle software and the court allowed Oracle's application. Since UsedSoft's appeal against this decision was dismissed the company appealed on a point of law to the Bundesgerichtshof (Federal Court of Justice) which referred the following questions to the CJEU.

In particular, the German Federal Court of Justice asked whether the person who can rely on exhaustion of the right to distribute a copy of a computer program is a 'lawful acquirer' within the meaning of Article 5(1) and, if this is so, whether the right to distribute a copy of a computer program is exhausted when the acquirer has made the copy with the rightsholder's consent by downloading the program from the internet onto a data carrier. The CJEU ruled that, indeed, according to Article 4(2) of the Software Directive, the right of distribution of a copy of a software is exhausted if the rightsholder has authorized the downloading of that copy from the internet onto a data carrier (even free of charge) and has also conferred a right to use that copy for an unlimited period (in return for payment of a fee). As concerns the second question, the CJEU ruled that users who can rely on the exhaustion of the distribution right under Article 4(2) can be regarded as lawful acquirers of a copy of a software within the meaning of Article 5(1).

Next, the court asked whether, in case the answer to the second question is also positive, a person who has acquired a 'used' software licence for generating a program copy as 'lawful acquirer' can also rely on exhaustion of the right to distribute the copy of the computer program made by the first acquirer with the rightsholder's consent by downloading the program from the internet onto a data carrier if the first acquirer has erased his program copy or no longer uses it. In response to this question, the CJEU ruled that, according to Articles 4(2) and 5(1) of the Software Directive, in the event of the resale of a user licence entailing the resale of a copy of a software downloaded from the rightsholder's website, that licence having originally been granted by that righsholder to the first acquirer in accordance with what is provided in the previous sentence, the second acquirer of the licence, as well as any subsequent acquirer of it, will be able to rely on the exhaustion of the distribution right under Article 4(2), and thus be regarded as lawful acquirers of a copy of a

software within the meaning of Article 5(1) and benefit from the right of reproduction provided for in that provision.

Based on these recent legal developments, it can be argued that the tendency to recognize an exhaustion right for software could be used as a blueprint for the recognition of a broader exhaustion right for digital dissemination of works in the EU. Even if such right has not been expressly recognised as in the case of US software copy owners who are free to alienate their copies by means of sale, lease or transfer, one cannot ignore that there is space for such recognition. To the extent that such recognition has taken place the users of digital works can base their expectations for the enjoyment of such an exception on it.

3.2.2 Software Directive

Along with the extension of the scope of copyright monopoly in software, the Software Directive introduced new checks and balances to limit the scope of that extension several of which we have already seen.[329] In particular, it was already said that Article 5(1) of the Software Directive provides that the permanent or temporary reproduction of a computer program does not infringe if it is done by the lawful acquirer of the computer program and when they are necessary for the use of the computer program or for error correction. Moreover, it was mentioned that users who can rely on the exhaustion of the distribution right under Article 4(2) can be regarded as lawful acquirers of a copy of software within the meaning of Article 5(1). What is more, the first acquirer of the licence, the second one and any subsequent acquirer of it can rely on the exhaustion of the distribution right under Article 4(2) and can be regarded as a lawful acquirer of a copy of software within the meaning of Article 5(1). Finally, it was also mentioned that Article 5(2) provides for a back-up copy exception reserved to the person having a right to use the computer program.

In addition to the abovementioned exceptions, the Software Directive also contains an exception for the purposes of achieving interoperability. In particular, according to Recital 10 of the Directive, interoperability is the functional interconnection and interaction between elements of software and hardware by means of parts of the computer program which are called 'interfaces'.[330] In other words, interoperability is the ability of two or more systems or

[329] See discussion in Chapter 3, section 3.2.1.3 above.

[330] Recital 10 stipulates that "[t]he function of a computer program is to communicate and work together with other components of a computer system and with users and, for this purpose, a logical and, where appropriate, physical interconnection and interaction is required to permit all elements of

components to exchange information and to perform their required functions. Generally, interoperability allows technologies to work together when they use the same inputs and create the same outputs. For computers, interoperability is the ability of programs and systems running on various kinds of software and hardware to communicate with each other.

The existence or non-existence of standardized solutions can have an impact not only on consumers' access to contents but also on competitors' access to consumers. For example, there is a possibility that users of a specific portable music player are forced to buy music from a particular online music store and not support any of the dominant standards used by competing online music stores. On top of that, the manufacturer of the particular portable music player and the specific music store may not license the particular music format they use to competitors. The lack of interoperability has important policy implications in cases where a proprietary *de facto* industry standard has emerged which monopolizes the market and distorts competition. The two main legal approaches to interoperability are the "more rigid but certain *ex ante* intellectual property rights and more flexible *ex-post* competition laws."[331] However, there is a tendency to refrain from imposing standards on the market and there are arguments against a legal mandate of certain standards because rapid technological or economic developments can overtake them.[332] Interoperability may be achieved either by means of reverse engineering (which is also used for purposes other than achieving interoperability) or by means of decompilation (which is used only for interoperability purposes viewed from a purely commercial standpoint).

Reverse engineering, in particular, is the general process of analyzing a technology specifically to ascertain how it was designed or how it operates, and as a method is not confined to any particular purpose, but is often an important part of the scientific method and technological development. The process of taking something apart and revealing the

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software and hardware to work with other software and hardware and with users in all the ways in which they are intended to function. The parts of the program which provide for such interconnection and interaction between elements of software and hardware are generally known as 'interfaces'. This functional interconnection and interaction is generally known as 'interoperability'; such interoperability can be defined as the ability to exchange information and mutually to use the information which has been exchanged."

[331] Van Rooijen, Ashwin, *The Software Interface between Copyright and Competition Law: A Legal Analysis of Interoperability in Computer Programs* (Kluwer Law 2010) 3.

[332] Helberger, Natali, 'A bite from the apple' (June 2004) 1(1) INDICARE Monitor 25.

way in which it works is often an effective way to learn how to build a technology or make improvements to it. Through reverse engineering, a researcher gathers the technical data necessary for the documentation of the operation of a technology or component of a system. In "black box" reverse engineering, systems are observed without examining internal structure, while in "white box" reverse engineering the inner workings of the system are inspected and is further required that the object code is adapted. However, in cases of both black box and white box reverse engineering, direct (transient) copying of the object code is required, resulting thus a potentially infringing use. This is not the case, though, for black box if the software is licensed and this use is within the license terms, a case which is addressed by Article 5 of the Software Directive as it will shown below.

Disassembly or decompilation refers to the process of reading the object code of the program and translating them into a form of source code. Source code is the category of computer language instructions that is most frequently written and read by software programmers. Object code (i.e. binary code) consists of numeric codes specifying each of the computer instructions that must be executed, as well as the locations in memory of the data on which the instructions are to operate. Since a computer cannot generally run a program in source code form, in the development of software, the source code is translated, with the use of an assembler or compiler, into object code. Decompilation is the opposite of the abovementioned process. In other words, in the context of the decompilation process, a software programmer analyzes the structure of the program and identifies how it operates by presenting the information in a computer language that he can more easily understand and by interpreting the resulting source code using his knowledge and expertise to recreate the data structures of the original program and understand the overall design rationale of the system.

The relationship between reverse engineering and decompilation is complex since not all reverse engineering efforts require decompilation of software. In particular, some "black box" reverse engineering is done by characterizing software through observation of its interaction with system components, other software, and other (external) systems through networks. Therefore, it could be argued that reverse engineering is a wider concept than decompilation.

Article 5(3) of the Software Directive regulates reverse engineering which is defined as the entitlement of the person having a right to use a copy of a computer program to observe,

study or test the functioning of the program without the authorization of the rightsholder in order to determine the ideas and principles which underlie any element of the program. Such observation should take place while performing any acts of loading, displaying, running, transmitting or storing the program which the person having a right to use a copy of a computer program is entitled to do. On the issue of reverse-engineering, Recital 14 also adds that "[a] person having a right to use a computer program should not be prevented from performing acts necessary to observe, study or test the functioning of the program, provided that those acts do not infringe the copyright in the program."

The scope of the reverse engineering exception was recently clarified in the context of a referral addressed to the CJEU. The case concerned is Case C-406/10, *SAS Institute Inc. V World Programming Ltd*.[333] In that case, customers of SAS using an integrated suite of programs widely used for data processing and statistical analysis had to write scripts in the SAS language and to acquire a licence for all the necessary components of the SAS system. World Programming Ltd (WPL) created a software that was emulating the functionality of the SAS system and was running customers' programs using their data stored in the SAS format, thus, providing interoperability with the SAS software without, however, accessing or copying the source code. SAS alleged that WPL infringed their copyright by copying the functionality of the software and the SAS language (instead of the source code) and took an action in the High Court of England and Wales.

The High Court of England and Wales sought a preliminary ruling from the CJEU on, amongst others, the scope of the reverse engineering provision of the Software Directive. In response, the CJEU ruled that Article 5(3) must be interpreted as meaning that a person who has obtained a copy of a computer program under a licence is entitled, without the authorisation of the owner of the copyright, to observe, study or test the functioning of that program so as to determine the ideas and principles which underlie any element of the program, in the case where that person carries out acts covered by that licence and acts of loading and running necessary for the use of the computer program, and on condition that that person does not infringe the exclusive rights of the owner of the copyright in that program by accessing information which is protected by copyright (such as the source code or the object code).

[333] Case C-406/10, O J C 346/26, 18.12.2010 (referral to ECJ); Case C-406/10, O J C 174/5, 16.6.2012 (ECJ's judgment).

Overall, in terms of personal use, this is an important case because customers of SAS were not seeking to produce software for sale, but simply to use the software they had bought by using an interoperable software. This behaviour falls within the ambit of lawful personal use. As a result, it can be argued that the Software Directive allows reverse engineering for interoperability purposes facilitating lawful personal use activities on condition that copyright in the source or object code is not infringed.

Decompilation of computer programs for the purposes of achieving interoperability is addressed in Article 6(1) of the Software Directive. In particular, when reproduction of the code and translation of its form within the meaning of points (a) and (b) of Article 4(1)[334] are indispensable in order to obtain the information necessary to achieve the interoperability of an independently created computer program with other programs, then the authorization of the rightsholder is not required. However, this applies provided that the licensee or another person having a right to use a copy of a program, or a person authorized to do so on their behalf, performs these acts, that the persons referred to in the previous point were not previously given access to the information to achieve interoperability and that the aforementioned acts are confined to the parts of the original program which are necessary in order to achieve interoperability.

Article 6(2) provides that the information obtained during the process of decompilation should not be used for goals other than to achieve the interoperability of the independently created computer program, should not be given to others, except when necessary for the interoperability of the independently created computer program, and should not be used for the development, production or marketing of a computer program substantially similar in its expression, or for any other act which infringes copyright. In other words, decompilation is allowed for purely commercial purposes.

However, notwithstanding the fact that the decomplilation provisions cover simply commercial activities, the wider notion of reverse engineering done for interoperability, among other, purposes seems to be wide enough to cover a wide range of activities done for interoperability purposes which facilitate lawful personal uses. In addition, even though

[334] Points (a) and (b) of Article 4(1) refer to the acts of the permanent or temporary reproduction of a computer program by any means and in any form, in part or in whole which may also be the result of loading, displaying, running, transmission or storage of the computer program as well as to the translation, adaptation, arrangement and any other alteration of a computer program and the reproduction of the results thereof.

decompilation is allowed only for commercial purposes, the outcome for someone who wants to engage in lawful personal use activities is positive since the development of interoperable products by competitors give him more opportunities to engage in such activities. In other words, in this latter instance, the fact the user is not allowed under the decompilation provisions to decompile a particular product for his lawful personal use is definitely a drawback which is counterbalanced, however, by the fact that usually the commercial competitors will take the time to decompile the particular product for the development of interoperable (but not competing) products.

The scope of the exception for interoperability purposes under the Software Directive is further broadened by the fact that Article 8(2) provides that any contractual provisions contrary to decompilation exception (Article 6) and to the reverse-engineering exception (Article 5(3)) shall be null and void. Apart from the 'interoperability exception', Article 5(2) of the Software Directive provides that any contractual provisions contrary to the back-up copy exception shall similarly be null and void. Shielding the exceptions against contractual erosion ultimately strengthens and broadens their scope.

In sum, the Software Directive contains several provisions that pertain to lawful personal use. These are, firstly, Article 5(1) providing that the permanent or temporary reproduction of a computer program does not infringe if it is done by the lawful acquirer of the computer program and when they are necessary for the use of the computer program or for error correction; secondly, Article 4(2) providing for an exhaustion of the distribution right under Article 4(2) for the lawful acquirer of a copy of software within the meaning of Article 5(1); thirdly, Article 5(2) providing for a back-up copy exception reserved to the person having a right to use the computer program; and, finally, the provisions on achieving interoperability either by means of reverse engineering or decompliation. To the extent that all these provisions create a favourable environment for users, they further elaborate on the notion lawful personal use of works disseminated digitally.

3.2.3 Database Directive

There is no clear statement in the law as to what lawful personal use of a database is. It has been argued that although the database right could potentially capture all collections of information, the Database Directive gives the proprietor the right to prohibit a very wide range of activities and does not offer realistic exceptions for educational and scientific uses

or generally "fair" or "private" uses.[335] Following the transformation of tangible compilations into digitized databases, the database industry was faced with similar problems encountered by software producers prior to the adoption of the Software Directive. In the same way software producers were afraid that pirated copies would flood the market, the inadequate protection of digitized databases was discouraging commercial publishers from making the investment required to create or maintain a database.

Digitization "caused a review of traditionally familiar but diverse interpretations of originality regarding collection of works".[336] This review resulted in the adoption of the Database Directive in Europe.[337] Article 1(2) of the Directive defines a database as "a collection of independent works, data or other materials arranged in a systematic or methodical way and capable of being individually accessed by electronic or other means." The Directive applies to all databases in any form and not only to the ones that are accessible by electronic means thus creating a unified legal regime (Article 1(2)).

The new *sui generis* 'database right' was designed to protect investment in databases by their makers. The essence of this right is found in Article 7 which stipulates that a sui generis database right exists in cases where "there has been qualitatively and/or quantitatively a substantial investment in either the obtaining, verification or presentation of the contents." This *sui generis* right allows rightsholders "to prevent extraction and/or reutilization of the whole or of a substantial part, evaluated qualitatively and/or qualitatively, of the contents of the database" and, thus, grants rightsholders an exclusive right of reutilisation and an exclusive right of extraction.

The reutilisation right allows a database maker to prevent anyone to make available to the public all or a substantial part of the contents of a database by the distribution of copies, by renting, by online or other forms of transmission.[338] The scope of the *sui generis* database

[335] Dutfield, Graham M. & Suthersanen, Uma, 'The innovation dilemma: intellectual property and the historical legacy of cumulative creativity' (2004) 4 IPQ 379, 414.

[336] Deveci, Hasan A., 'Databases: Is *Sui Generis* a Stronger Bet than Copyright?' (2004) 12 Int. J. Law Info. Tech. 205, 205; see also ibid. for a discussion on the boundaries of copyright protection for databases and of the new *sui generis* database right.

[337] Council Directive (EC) 96/9 of 11 March 1996 on the Legal Protection of Databases [1996] OJ L77/20-28.

[338] Article 7(2)(b).

re-utilisation right is at the core of a referral by the Gerechtshof (the Hague Court of Appeal) to the CJEU in 2012.[339] In the particular case, the technology of a website's search engine, namely Innoweb's, was translating a user's search-commands in order that that search engine could connect to other search-engines, Wegener's search engine amongst others, in order to provide the user with a more efficient way of searching though information. The question whether Innoweb infringed Wegener's *sui generis* database right in its collection of adverts on its website eventually reached the Hague Court of Appeal.

In particular, the question of the Court was whether the repeated re-utilisation by Innoweb of insubstantial parts of the contents of Wegener's database that resulted in making a substantial part of the contents of the database available to Innoweb's users infringed Innoweb's database *sui generis* right. Thus, the broader question raised in that case is whether a website owner should be allowed to use the *sui generis* database right (even the provision concerning the repeated re-utilisation of insubstantial parts of a database) to stop search engines from copying insubstantial parts of a website. The CJEU's answer is awaited with great interest since if it is positive then it would point towards the recognition of a broad *sui generis* reutilisation right in copyright law with no respective broad exceptions to this right as a counterbalance.

The extraction right is more perverse and focuses on the taking and reproduction of the contents of the database.[340] The definition can include the downloading and printing of contents or the loading and running of electronic or online databases. In respect of the latter situation, it further appears that online screen displays which result in a temporary transfer of the whole or a substantial part of the database contents fall under the extraction right.[341] The extraction right is not limited to the "expression" or "arrangement or selection or organisation" of the database,[342] as is the case with copyright in databases, and, therefore, it has been argued that the prohibition against extraction in combination with the not broad

[339] Reference for a preliminary ruling from the Gerechtshof's Gravenhage (Netherlands) lodged on 30 April 2012-*Innoweb B.V. v Wegener ICT Media B.V.*, *Wegener Mediaventions B.V.*. Case C-202/12, O J C 243/2, 11.8.2012.

[340] Article 7(2)(a).

[341] *Dutfield & Suthersanen* (fn 335) 413. See also EU Database Directive Recital 44.

[342] Case C-203/02 *British Horseracing Board Ltd v William Hill Organisation Ltd* Opinion of A.G. Stix-Hackl, June 8, §70-71.

exceptions found in the Database Directive moves dangerously close to the creation of an intellectual property right in information.[343]

In relation to exceptions to the *sui generis* right, Article 9 of the Database Directive provides that Member States may allow a lawful user of a database extract a substantial part of its contents in the case (a) of extraction for private purposes of the contents of a non-electronic database (Therefore, if the database is protected under the *sui generis* regime established by the Directive, then "extraction for private purposes" is only allowed with regard to non-electronic databases, that is only by photocopying.); (b) of extraction for the purposes of illustration for teaching or scientific research, as long as the source is indicated and to the extent justified by the non-commercial purpose to be achieved (That means, however, that a law professor could extract a substantial part of an electronic database in the course of his teaching but he could not distribute this part to his students, namely "re-utilize" the database.). Article 9(c) provides that Member States may allow a lawful user of a database extract and/or reutilise for the purposes of public security or an administrative or judicial procedure.

The only limitations that apply to the extraction and the reutilisation rights are addressed to the "lawful user." Article 8 covers the rights and obligations of lawful users and applies both to electronic and non-electronic databases. Article 8(1) provides that a lawful user of the database can extract and/or re-utilize insubstantial parts of the contents of a database that has been made available to the public, evaluated qualitatively and/or quantitatively, for any purposes whatsoever. Article 8(2) provides that a lawful user of a database shall not infringe the three-step test by performing acts which conflict with a normal exploitation of the

[343] *Dutfield & Suthersanen* (fn 335) 414. A basic question that was raised after the adoption of the Directive was whether what is protected under the *sui generis* right is limited to the qualities of arrangement and accessibility of the contents of a protected database, or whether protection extends to works, data or other materials derived from the database. The ECJ in its judgment in *British Horseracing Board v William Hill* (Case C-203/02 9 November 2004, [2005] RPC 260 (ECJ)) stipulated that, in order to qualify for protection, there had to be substantial investment in the database itself. Resources spent in creating the data in the database could not be taken into account. The ECJ ruling suggests that many databases which consist of information originating from the database maker ('single source databases') do not enjoy the database right protection. The ECJ also noted that the process of transforming data, once created, into a database might amount to a substantial investment. Generally, the owner had to show that he had spent significant investment on the right sort of activities, i.e. obtaining, verifying or presenting contents, before the database right would attach to the database. The EU *sui generis* database right is similar to a cause of action in misappropriation in that the aim of the property right is to safeguard the position of makers of databases against misappropriation of financial and professional investment by competitors.

database or unreasonably prejudice the legitimate interests of the maker of the database, while Article 8(3) stipulates that a lawful user of a database shall "not cause prejudice to the holder of a copyright or related right in respect of the works or subject matter contained in the database."[344] Finally, with regard to the contractual overridability issue, Article 15 provides that "[a]ny contractual provision contrary to Article […] 8 shall be null and void".

However, The Directive does not provide a definition of "lawful user". The absence of any definition has led to differing notions of this hypothetical person in Member States' laws and to many debates.[345] Recital 34 refers to a user authorised by agreement with the rightholder to access and use the database.[346] Based on this vague definition, arguably, a lawful user of a database can be both a user who is implicitly licensed, e.g. the users of most free internet websites, and a user having legally acquired the right to access an electronic database, such as the subscribers to an online database. On the contrary, a user who is the beneficiary of an exception within the bound of which he is allowed to make a certain use of the protected work is not necessarily a lawful user. In other words, one cannot become a lawful user by relying on the exceptions since these are only provided for those who already are lawful users.[347] If one could become a lawful user relying on the exceptions then this interpretation would have been circular since it would have been accepted that a lawful user is the one

[344] An interpretation of the term "substantial" and of the two-step test found in Article 8 that takes into consideration the interests of users of (scientific) data and thus provides important insight regarding the scope of the rights of the lawful user of a database can be found in Waelde, Charlotte, 'Databases and lawful users: the chink in the armour' (2006) 3 IPQ 256, where the case study of a scientific database is provided. Moreover, see Waelde, Charlotte & McGinley, Mags, 'Public Domain; Public Interest; Public Funding: focusing on the 'three Ps' in scientific research' (2005) 2(1) SCRIPT-ed 71 < http://www.law.ed.ac.uk/ahrc/script-ed/vol2-1/3ps.asp>

[345] *Dutfield & Suthersanen* (fn 335) 415.

[346] In particular, Recital 34 states "[w]hereas, nevertheless, once the rightholder has chosen to make available a copy of the database to a user, whether by an on-line service or by other means of distribution, that lawful user must be able to access and use the database for the purposes and in the way set out in the agreement with the rightholder, even if such access and use necessitate performance of other restricted acts".

[347] For this discussion see Hugenholtz, Bernt et al., Institute for Information Law, University of Amsterdam, The Netherlands 2006, 'The Recasting of Copyright & Related Rights for the Knowledge Economy' (final report) European Commission DG Internal Market Study Contract No. ETD/2005/IM/DI/95 <http://ec.europa.eu/internal_market/copyright/studies/studies_en.htm> accessed 15 February 2011, at 72; Vanovermeine, Vinciane, 'The Concept of the Lawful User in the Database Directive' (2000) 31 I.I.C. 63; Synodinou, Tatiana-Eleni, 'The lawful user and a balancing of interests in European copyright law' IIC 2010, 41(7), 819-843.

who relies on the exceptions at the same time when the exceptions are only provided for lawful users.

The lawful user's rights to extract or reutilise the database according to the above-stated circumstances are further endangered by the following wide qualification to all the stated exceptions in Article 8(2) according to which a lawful user of a database "may not perform acts which conflict with normal exploitation of the database or unreasonably prejudice the legitimate interests of the maker of the database."[348] It has been argued that this "draconian provision" that inserts the second element of three-step test in the area of the *sui generis* database right has the potential of stifling even the exceptions give to lawful users in respect of "insubstantial use" (Article 8(1)) and "educational and teaching" (Article 9(b)). In other words, rightholders may argue that the second step of the three-step test requires that any act of the lawful user which affects a potential or related market amounts to prejudicing his legitimate interests if these interests include loss of licence fees.[349] However, this is an issue of interpretation which could be dealt with successfully if one follows the interpretative method of the second step of the three-step test proposed earlier in this work.[350]

Article 3 regulates copyright in databases by providing that "databases which, by reason of the selection or arrangement of their contents, constitute the author's own intellectual creation shall be protected as such by copyright." Article 3(2) explicitly provides that the copyright protection of databases "shall not extent to their contents and shall be without prejudice to any rights subsisting in those contents themselves". The copyright protection of the expression of the database means that the author of a database shall have the exclusive right to carry out or to authorise

[348] The Directive does not explain these terms; it only states in Article 7(5) that "the repeated and systematic extraction and/or re-utilisation of insubstantial parts of the contents of the database implying acts which conflict with a normal exploitation of that database or which unreasonably prejudice the legitimate interests of the maker of the database shall not be permitted".

[349] *Dutfield & Suthersanen* (fn 335) 414-415. Moreover, at 415 it is stated that "[...] the terms "normal exploitation" and "legitimate interests" point to the fact that substantiality has everything to do with the perceived market harm from the perspective of the rights owner, as opposed to that of the society as a whole who may perceive the "market harm" as "competitive product innovation.""

[350] See Part I, Chapter 2, Section 2.4.2. As an alternative justification *Dutfield & Suthersanen* (fn 335) 415, state that not every conceivable utilisation of a database should be included in the licensing fee structure and that "after all, the terms "normal exploitation" and "legitimate interests" point to the fact that substantiality has everything to do with the perceived market harm from the perspective of the rights owner, as opposed to that of the society as a whole who may perceive the "market harm" as "competitive market innovation"."

> (a) temporary or permanent reproduction by any means and in any form, in whole or in part; (b) translation, adaptation, arrangement and any other alteration; (c) any form of distribution to the public of the database or of copies thereof. The first sale in the Community of a copy of the database by the rightholder or with his consent shall exhaust the right to control resale of that copy within the Community; (d) any communication, display or performance to the public; (e) any reproduction, distribution, communication, display or performance to the public of the results of the acts referred to in (b).

In relation to exceptions to the copyright in a database, Article 6 provides that certain acts are allowed without authorisation "in respect of the expression of the database which is protectable by copyright", that is an electronic or non-electronic database that is protectable by copyright. In particular, Article 6(1) states that the performance by the lawful user of a database of the acts reserved to the rightsholder in respect of the expression of the database which is protectable by copyright shall not require the rightsholder's authorization if such performance is necessary for the purposes of access to and normal use of the contents of the database by the lawful user of the database.[351] The recognition of such an element of lawful personal use under the particular circumstances is based on the recognition in copyright law that the exclusive right of the rightholders are limited by the user's need to engage in certain 'normal' uses of the work.

However, it should be noted here that the abovementioned exception has certain limitations from the viewpoint of the user of a database, namely it is not very helpful to him. In particular, since copyright exists only in the expression, arrangement and selection of the contents of a database, this exception only applies to the same elements, i.e. to the expression, arrangement and selection of the contents of a database. However, usually, the users would like to make a lawful use of the contents of the database and not of the expression of the database or of the arrangement and selection of its contents. As a result, it seems that most database users who would want to take advantage of this exception are businesses.

[351] Article 5 of the Databases Directive provides that "[i]n respect of the expression of the database which is protected by copyright, the author of a database shall have the exclusive right to carry out or to authorize: (a) temporary or permanent reproduction by any means and in any form, in whole or in part; (b) translation, adaptation, arrangement and any other alteration; (c) any form of distribution to the public of the database or of copies thereof. The first sale in the Community of a copy of the database by the rightholder or with his consent shall exhaust the right to control resale of that copy within the Community; (d) any communication, display or performance to the public; (e) any reproduction, distribution, communication, display or performance to the public of the results of the acts referred to in (b)."

Article 6(2) provides that Member States may provide for limitations to the rights in respect of the expression of the database which is protectable by copyright established in Article 5 in case (a) of reproduction for private purposes of a non-electronic database; (b) of use for the sole purpose of illustration for teaching or scientific research, as long as the source is indicated and to the extent justified by the non-commercial purpose to be achieved; (c) of use for the purposes of public security of for the purposes of an administrative or judicial procedure; (d) of involvement of other exceptions to copyright which are traditionally authorized under national law, without prejudice to points (a), (b) and (c). Moreover, Article 6(3) requires that the aforementioned exceptions to restricted acts are interpreted in accordance with the three-step test, namely that they do not unreasonably prejudice the legitimate interests of the rightholder or conflict with the normal exploitation of the database. Finally, with regard to the contractual overridability issue, Article 15 provides that "[a]ny contractual provision contrary to Article 6(1) […] shall be null and void".

The problem with Article 6 from a user's perspective is, first, that it provides that "reproduction for private purposes" should only be allowed in the case of non-electronic databases and not in the case of electronic databases which have acquired significant importance nowadays.[352] Second, generally its scope of application is limited given that the scope of protection afforded to databases by means of copyright is rather limited since it only concerns "the selection or arrangement of [the database's] contents" and does not extend to its contents *per se*.[353]

In sum, the Database Directive offers a very restrictive definition of lawful personal use. In relation to electronic databases, in particular, the lawful user may only make use of their insubstantial parts, evaluated qualitatively and/or quantitatively (Article 8(1)). Therefore, the exception for extraction and/or reutilisation for private purposes in the case of electronic databases is rather limited since it only covers insubstantial parts of its contents. Moreover, it has been argued that "the lawful user cannot distribute or make available a non-electronic database to other persons within the family circle, even though there may be no accompanying element of profit/commerce or market harm to the database proprietor."[354] By way of contrast, reproduction for private purposes is permitted only with

[352] Article 6(2)(a).

[353] Article 3.

[354] *Dutfield & Suthersanen* (fn 335) 413.

regard to non-electronic databases as provided both under the Database Directive's copyright regime (Article 6(2)) and the *sui generis* regime (Article 9(a)).[355] The exception found in Article 6(1) of the Database Directive also applies in the case of electronic databases and therefore forms part of the lawful personal use. As already said, Article 6(1) provides an exception to the copyright protection afforded to the expression of the database. This exception covers the performance of all the acts reserved to the rightholder in accordance with the copyright protection afforded to him which are "necessary for the purposes of access to the contents of the databases and normal use of the contents by the lawful user" without the authorisation of the author of the database (Article 6(1)). The fact that Article 15 shields Article 6(1) and Article 8 against any contrary contractual provisions establishes, however, the binding nature of this minimum of lawful personal use in the context of the Database Directive.

Finally, the exceptions to the *sui generis* right are addressed only to the lawful users while, most probably, rightholders may be able to prohibit virtually all activities by unlawful users.[356] Therefore, the scope of the notion of 'lawful user' is important for the understanding of the scope of the lawful personal use in the context of electronic databases. For the time being, the notion of 'lawful user' has been interpreted to cover any person using the database within the limits drawn by a contract from the right holder of the database, such as users implicitly licensed, as will be the case for most website offered freely on the Internet, and users who have legally acquired copies of the database, such as the purchaser of a database in paper form or on CD-ROM. As to whether the notion of 'lawful user' extends to a person using a database based on the exceptions provided in the Database Directive, this is unclear since one cannot become a lawful user by relying on the exceptions mainly because these are only provided for lawful users (circular definition).

[355] Another exception that does not strictly fall within the scope of lawful personal use of electronic databases since it is not strictly done for private entertainment/enjoyment/consumption is the exception reserved to the lawful user of an electronic database for the extraction of a substantial part of its contents "for the purposes of illustration for teaching or scientific research, as long as the source is indicated and to the extent justified by the on-commercial purpose to be achieved" (Article 9(b)). The requirement of a non-commercial aspect of the exempted acts has been criticised since "[w]ithin the United Kingdom at least, the current ethos of encouraging collaboration between the public and private sectors, coupled with the reality of fee-paying students, makes the demarcation between commercial and non-commercial teaching and research impossible" (*Dutfield & Suthersanen* (fn 335) 413).

[356] *Dutfield & Suthersanen* (fn 335) 415.

Therefore, the characterisation of one as a lawful user must precede his entitlement to rely on the exceptions to the particular exclusive rights.

3.3 Users' Expectations

3.3.1 Origin of users' expectations

Users' expectations can provide a tool to ascertain a more clear answer to the question of the contents and scope of lawful personal use. Consumers of digital products have been accustomed to certain uses of and experiences with traditional media. Users' expectations are part of the rationale for copyright because the also help secure the benefit to society of works being used by telling us what society wants, in terms of ability to use works. Therefore, users' expectations give an idea about the expected benefit which copyright should deliver. Several reasons exist why consumers have shaped their expectations in relation to digital products in a particular way.

Based on these uses and experiences consumers may not always recognise copyright's distinctions based on format since for them a book is always a book and music is always music which must exhibit the same use abilities in all formats. The law sometimes explicitly accommodates their expectations based on such uses and experiences, e.g. by recognising the lawfulness of time-shifting digital works for personal use purposes that matches the lawfulness of time-shifting analogue works to which they are used.[357] What is more, rightsowners themselves have also in certain instances accommodated consumers' expectations, e.g. by abandoning the application of DRM to music.[358] Finally, not all private users realise that copyright law is addressed to them, so they may base their actions on non-legal concepts of fairness that match their experiences with uses of analogue works. The issue of non-legal concepts of fairness links to the issue of knowledge and awareness of DRM which was examined by two European studies, one regarding digital music usage and

[357] For example, the Sony Betamax video tape recorders were used in the mid-1970's to make time-shift copies of broadcast television programming since courts have generally regarded time-, space-, and platform-shifting to be fair uses of analogue copyrighted works.

[358] Apple removed DRM from the songs available in the popular iTune music store in 2009. On this issue see Stone, Brad, 'Want to Copy iTunes Music? Go Ahead, Apple Says' The New York Times, 6 January 2009 <http://www.nytimes.com/2009/01/07/technology/companies/07apple.html?_r=0> accessed 10 December 2011.

the other regarding digital video usage, back in 2005.[359] If users have a lack of knowledge and awareness of copyright law and DRM, they, arguably, they will base their actions on non-legal concepts of fairness that match their analogue use experiences.

The study on digital music usage, in particular, showed that many European teenagers do not know or do not care about copyright and there is a high degree of insecurity among digital music users about which uses of digital music are legal.[360] Regarding awareness of copyright issues, the numbers show that half of the digital music users either do not know exactly what copyright means or do not care whether the music they download onto their computers is copyrighted.[361] More detailed figures show that different age groups appreciate differently copyright issues with the share of teens who either do not exactly know what copyright means or who do not care about copyright being well above more mature users.[362] Moreover, large differences between countries exist since in France about half of the users care about copyright, in Germany about two thirds care about copyright while in the UK, Sweden and Hungary only about 35% care whether their downloaded music is copyrighted.[363]

As concerns copyright awareness, in particular, the users were asked whether they think it is legal to make a copy of a CD/ file, which they bought, for themselves, make a copy of a CD/ file, which they bought, for their friends or family members, play a file, which they bought, on different devices, download music from P2P networks, offer music, which they bought, on P2P networks and remove electronic copy-protection from files/CDs, which they

[359] Duff, Nicole et al., INDICARE Project, EU Commission DG Information Society Ref. EDC-53042 INDICARE/28609 'Digital Music Usage and DRM-Results from a European Consumer Survey' (Berlin, 24 May 2005) <http://indicare.org> accessed 20 November 2008, and Duff, Nicole et al., INDICARE Project, EU Commission DG Information Society Ref. EDC-53042 INDICARE/28609 'Digital Video Usage and DRM-Results from a European Consumer Survey' (Berlin, 23 February 2006) <http://indicare.org> accessed 20 November 2008. For a reference to more studies on consumer acceptability of copyright and of DRM in particular see *Hugenholtz et al.* (fn 346) 206-207. Similar concerns to the ones expressed in these two studies were also expressed in Helberger, Natali (ed), 'Digital Rights Management and Consumer Acceptability-A Multi-Disciplinary Discussion of Consumer Concerns and Expectations' State-of-the-Art Report, December 2004 <http://indicare.org/tiki-page.php?pageName=Downloads> accessed 20 December 2010.

[360] *Duff et al. 'Digital Music Usage and DRM'* (fn 359).

[361] Ibid 40.

[362] Ibid 41.

[363] Ibid.

bought.[364] The majority answered that making a copy of a CD they bought for themselves and that playing a file they bought on different devices is legal,[365] that making a copy of a CD, which they bought, for their friends, offering music, which they bought, on P2P network and removing electronic copy protection from files they bought is illegal[366], and, finally, that it is unclear to them whether downloading music from P2P networks is a legal or illegal activity.[367] Regarding DRM in Europe, there is also a significant lack of knowledge since 63% of the European users of digital music have never heard about DRM and an additional 23% does not exactly know what DRM is.[368]

Similar results emerged from the study on digital video usage.[369] In particular, it was shown that one quarter of digital video users do not care much about copyright protection, 6% do not know exactly what copyright means and 11% did not provide an answer to the question whether they care about copyright in videos they watch.[370] Similarly to the results regarding music copyright, teenage users care the least or do not know what copyright is and there are differences among different countries since copyright is least acknowledged in France and most acknowledged in Germany and Spain.[371] However, the fact that users care about copyright does not automatically mean that users prefer lawful sources of copyright works;

[364] Ibid 42, where it is also said that "[a]lmost one third of the digital music users is not sure whether downloading or uploading of music via P2P networks is legal or not. Particularly older users are not informed about the lawfulness (or not) of P2P networks."

[365] In particular, on the first issue the 73% said it is legal, 11% said it is illegal, 7% said it depends on the case and 9% said they are not sure, while on the second issue 81% said it is legal, 3% said it is illegal, 6% said it depends on the case and 10% said they are not sure whether it is legal or illegal.

[366] In particular, on the first issue 41% said it is illegal, 27% said it is legal, 15% said it depends on the case and 18% said that they are not sure, on the second issue they 48% said that it is illegal, 12% said it is legal, 9% said it depends on the case and 30% said they are not sure and on the third issue 72% said it is illegal, 7% said this legal, 6% said it depends on the case and 15% said they are not sure.

[367] In particular, 31% said they are not sure, 30% said it is illegal, 22% said it is legal and 17% said it depends on the case.

[368] *Duff et al. 'Digital Music Usage and DRM'* (fn 359) 49.

[369] *Duff at al. 'Digital Video Usage and DRM'* (fn 359).

[370] Ibid 31.

[371] Ibid.

for example, in Spain, there exists a high level of acknowledgement of copyright and a high level of file-sharing networks usage at the same time.[372]

As regards DRM, a large share of users of users of digital video content is not aware of their application to digital video content at all. In particular, 62% of all respondents that have experience with digital video content have never heard about DRM, an additional 21% has heard about it but does not know exactly what it is and only 14% say that they have a precise idea about it.[373] The lack of knowledge about DRM is evident in all age groups and even frequent digital video users are only slightly better informed about DRM than average users. There are only insignificant differences between countries, with the exception of France, where consumers seem to be much better informed about DRM than consumers in other Member States (even though it is found that, at the same time, French consumers care least about copyright).[374]

With respect to usage restrictions, half of the users asked said that they do not know whether usage was restricted or not, and an additional 15% did not know or did not answer the question which adds up to 67% not knowing about usage restrictions, which is in line with the findings from the digital music survey (71% said that they do not know whether usage of music files was restricted).[375] Teenagers, once more, are the largest group of users that are unaware of usage restrictions.[376] Regarding differentiations among Member States, Swedish and French users are best informed about usage restrictions while Spanish users are least informed (even though they use very frequently digital video).[377] Only a minority of 13% of all downloaders said that they downloaded restricted content.[378] In sum, both in relation to digital video usage and in relation digital music usage it was concluded that the

[372] Ibid.

[373] Ibid 32.

[374] Ibid 33.

[375] Ibid 34.

[376] Ibid.

[377] Ibid.

[378] Ibid.

majority of users is not aware of DRM and that the majority of downloaders is not informed about usage restrictions and this definitely shapes their expectations.[379]

Apart from the studies on digital video usage and digital music usage, another study concerned with expectations of personal use can be used as a complementary guide of what is the content of lawful personal use.[380] In particular, in an empirical study carried out in 2002, Mulligan, Han and Burstein examined whether currently popular DRM applications are meeting consumers' expectations of personal use.[381] This was an empirical study to examine the extent to which representative services offering DRM-based delivery of music and movies support consumer expectations of personal use. They studied the behavior of six music and two film online distribution services and they found that none of them supported the range of personal uses of copyrighted works that individuals expect. The music services examined were divided into subscription and non-subscription services. The researchers extracted several classes of functions of a DRM system that would support consumers' expectations, namely portability, excerpting, and limited relationship between users and copyright holders based on the expectations set in other media.[382] Therefore, this study which identifies these three characterizes of digital products as the content of consumers' expectations can be used as another area from which the theory of users' expectations stems from.

Apart from 'traditional' uses, digital technologies enable new uses of works; therefore, consumers may, for example, "expect to be able to link works together, format-shift, annotate them, tinker with them, remix and mashup existing digital content, and share their

[379] Ibid 26-28; *Duff et al. 'Digital Music Usage and DRM'* (fn 359) 32-35.

[380] *Mulligan et al.* (fn 27).

[381] Ibid.

[382] Ibid 79 it is noted that the criterion of a limited relationship between users and copyright holders refers to "the extent to which services relationship and interaction with individuals reflect expectations set in other media. It considers the extent to which services require ongoing relationships from their users, and the breadth of those relationships in terms of time commitment and content usage rules and requirements. One aspect examined of the nature of these relationships is the complexity of information transaction required to acquire content; in other words the number of entities collecting and using services user's personal information, the independence of those entities' respective privacy policies, and the complexity of relationships for information exchange between those entities."

new creations with others."[383] In other words, users expect to have "the ability to excerpt from, modify, and in other ways tinker with content" just like they did in the past.[384] Moreover, in the past "individuals have been able to sample content from physical media for use in reviews, commentary, and the composition of new creative works."[385]

3.3.2 Content of users' expectations

What actually users expect from digital products such as digital music and digital video can be discovered if one reviews consumer surveys in this area. The particular surveys aimed at analyzing the acceptability of DRM and in order to avoid biased answers the DRM-related questions were put at the end of the questionnaire.[386]

In particular, the survey on digital music usage discussed above aimed at gathering reliable data on the preferences and behavior of European consumers with respect to digital music goods and on their awareness and acceptance of DRM.[387] This survey concluded that although the sources for digital music are own CDs, CDs of family/friends, P2P networks, music related websites, received messages, online music stores, mobile music services and subscription services, CDs are the most important source of digital music. On the contrary, online music stores, which focus on a pay-per-download model, and subscription services, which offer access to a music portfolio for a certain subscription period at a given price, are not an important source of digital music and they play only a minor role. The legitimate burning and ripping of CDs is the most important source for obtaining digital music. Burning means copying digital music files from one's computer to a CD while ripping means transferring music from a CD into a digital music file.

It was concluded that the majority engaged often in burning and sharing of music.[388] Moreover, a significant share of all digital music users have more than 500 digital music files

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[383] Samuelson, Pamela & Schultz, Jason, 'Should Copyright owners have to give notice of their use of technical protection measures?' (2007) J. on Telecomm. & High Tech. L. 41, 45.

[384] *Mulligan et al.* (fn 27) 79.

[385] Ibid 82.

[386] *Duff et al. 'Digital Video Usage and DRM'* (fn 359) 26-28; Duff et al. 'Digital Music Usage and DRM' (fn 359) 7.

[387] *Duff et al. 'Digital Music Usage and DRM'* (fn 359).

[388] Ibid 19.

stored on their computer. In particular, the preferences of digital music users cover the ability to transfer files between devices (device interoperability), the ability to share music with friends and family, the acceptance that listening (e.g. via streaming) is more important than storing, the usability of the files in the future and the ability to resell the files.[389] As concerns the usage of P2P networks, this study shows that although it is very widespread in Europe there are clear differences between age groups and countries with Spain having the highest share of P2P users in Europe and France and the Netherlands having the lowest percentage of sharers.[390] There also exists a high level of legal uncertainty regarding the usage of P2P networks since almost one third of the digital music users is not sure whether downloading or uploading of music via P2P networks is legal or not and older users, in particular, are not informed about the lawfulness or lack of lawfulness of P2P networks.[391] The fact that users engage often in file-sharing via P2P networks and at the same time they are unsure about the lawfulness of such networks that they expect to be able to use P2P networks irrespectively of their lawful character. Indeed, users' expectations are not always connected to what is provided for by copyright law as was said earlier and this is not necessarily bad since this is exactly why they can be used as a tool to fix copyright law when the latter does not deal adequately with a problem.

Regarding their willingness to pay for alternative offerings, the consumers are willing to pay for more usage rights and device interoperability but they are not willing to give up their flexibility in the use of digital music, even if restricted content would be offered at half the price.[392] Regarding streaming music and renting music, that is services where DRM technology makes songs expire after a certain subscription period, seem to be only attractive to a limited share of users (only 21% would prefer paying just 1 cent for a streamed song over paying 1€ for a downloaded song).[393] As concerns digital music stores, users stated that digital music stores have several advantages such as pre-listening and recommendation features and offer superior quality over P2P networks[394] but they should,

[389] Ibid 23.

[390] Ibid 16.

[391] Ibid 42.

[392] Ibid 25.

[393] Ibid 27.

[394] Ibid 30.

however, work on their customer care; on the contrary, subscription services are attractive to less than half of digital music store users and there are great differences between Member States.[395] However, the importance of both online music stores and subscription services is still significantly behind P2P networks (except in Germany where online music stores are used by as many users as P2P networks).[396]

As concerns digital video usage, in the respective survey it was argued that "looking at current usage behavior gives rather clear ideas about what consumers will expect from future commercial offerings."[397] That survey explicitly excluded videos watched from physical media such as DVDs or Video CDs on the computer and videogames and it did not differentiate explicitly between licensed and unlicensed video content. The second and the third part of the survey are most important for our discussion.

The second part, in particular, asked consumers to reveal their usage habits, preferences and expectations in more detail, gather information about content sources and identified differentiations between content types.[398] It was concluded that music videos are the most popular content category while private content (e.g. family videos) and movie previews/advertisements follow.[399] Moreover, there are several channels for obtaining digital video files, the most important of which are company websites, followed by ripped DVDs and P2P networks.[400] As concerns P2P networks, they do not play an important role as a source for digital video in general but they have reached a very significant share in certain countries (e.g. 67% of digital video users in Spain compared to only 11% in Germany).[401] Finally, since a quite significant share of consumers said that they would like to watch digital

[395] Ibid 35.

[396] Ibid 16.

[397] Ibid 26-28. *Duff et al. 'Digital Video Usage and DRM'* (fn 359) 26-28.

[398] *Duff et al. 'Digital Video Usage and DRM'* (fn 359) at 7.

[399] Ibid 23.

[400] Ibid.

[401] Ibid.

movies and TV shows in the future and to use services from TV stations, download portals or mobile operators it is believed that such services will become popular in the future.[402]

The third part of the survey was designed to provide information about usage rights consumers are willing to pay for when purchasing digital video content. According to the writers of the survey, this is important as DRM systems should support these needs and preferences.[403] The two major advantages of digital video usage according to consumers are, first, the ability to watch content wherever and whenever they want (time-shift) and, second, the ability to avoid commercials, both showing that consumers' attitude towards content consumption becomes more active since viewers want control over their own schedules and content preferences.[404] Users were asked if they were willing to pay in order to burn, time-shift, share, store, transfer, remix videos, namely whether they are interested in commercial digital video content offerings which will meet their expectations of what they can do with the content. A significant share of consumers is actually willing to pay for extended usage rights such as burning, time-shifting or sharing and particularly in the case of high-value content such as full-length movies.[405] On the contrary, the majority did not show willingness to pay for P2P offerings and to switch to commercial P2P services most probably due to the absence of any usage restrictions (given that a significant share of users would be willing to pay extra for extended usage rights).[406]

Finally, of significant interest are the findings regarding whether the majority of consumers accepts digital music and digital video usage restrictions for specific objectives and whether it agrees that the application of DRM is justified to allow consumers to pay only for what they really want. Regarding digital music usage, in particular, it was noted that

> [o]ne important argument in favour of DRM is that it enables consumers to pay only for the music they really want (e.g. only single tracks from an album). However, only a little more than half of these users agree to this argument. 61% of the users above 40 acknowledge this advantage of

[402] Ibid.

[403] Ibid 7.

[404] Ibid 30.

[405] Ibid 26-28.

[406] Ibid; *Duff et al. 'Digital Music Usage and DRM'* (fn 359) 28-30.

> DRM, but only 47% of the teenagers. In France and Spain about 60% of users recognize this advantage of DRM, in Sweden only 36% do so.[407]

Regarding digital video usage, it was noted that generally consumers accept DRM for particular objectives one of which being allowing consumers pay only for what they want. The percentage, however, is not very high in the case of digital video either since it is stated that "[i]f DRM technologies are intended to allow consumers to pay only for what they really want, an overall of two thirds agree to the application of technical measures such as DRM for this reason".[408] Therefore, it seems that although consumers acknowledge the ability of DRM to enable price discrimination they seem not to be very interested in this practice.

In sum, it could be argued that consumers expect to be able to burn, time-shift, place-shift, platform-shift, share and store on any of their devices the music they have bought. Moreover, they expect device interoperability, usability of the files in the future and an ability to resell content they have bought. Given that CDs are the most important source of digital music it was concluded that commercial P2P services, online music stores, subscription services, streaming and renting content services are not so popular. P2P file-sharing networks are also very popular and although consumers are unsure about their lawfulness they expect to be able to use them.

In relation to digital video content, it was concluded that the most popular categories are music videos, private content (e.g. family videos) and movie previews/advertisements, which are mainly obtained through company websites, ripped DVDs and P2P networks (although it is expected that services from digital TV stations, download portals or mobile operators will also become popular in the future). In relation to digital video content, consumers expect to be able to watch content wherever and whenever they want (time-shift) and to be able to avoid commercials. Users also expect to be able to burn, time-shift, share, store, transfer and remix videos which they have bought (to burn, time-shift, or share particularly in the case of high-value content such as full-length movies) while they also expect to be able to continue using non-commercial P2P services due to the absence of any usage restrictions.

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[407] *Duff et al. 'Digital Music Usage and DRM'* (fn 359) 45.

[408] *Duff et al. 'Digital Video Usage and DRM'* (fn 359) 37.

Moreover, it was noted above that in an empirical study carried out in 2002, Mulligan, Han and Burstein, considered that portability, excerpting, and limited relationship between users and copyright holders based on the expectations set in other media form the main part of DRM functions that would support consumers' expectations.[409] In particular, 'portability' was defined as "the ability to use acquired content on any suitable device, regardless of ownership interest in the device or its physical surroundings"[410] and was also said that portability also refers to the ability to shift the format of a copy. Because format-shifting can also operate as space-shifting, the notion of space-shifting is also covered by portability.[411] Finally, portability covers also the act of 'lending' in the analogue world. Therefore, the acts of portability, i.e. device interoperability, format and space-shifting, excerpting, and limited relationship between users and copyright holders based on the expectations set in other media also form part of users' expectations.

As a result, DRM systems that heavily restrict expected device interoperability, usability of the files in the future, an ability to resell content, burning, sharing and storing of digital music bought and the ability to time-shift, avoid commercials, burn, share, store, transfer and remix digital videos could limit the acceptance of consumers. Consumers also expect to be able to use non-commercial P2P networks which impose no usage restrictions. Finally, in terms of sharing music or videos to experience them or using non-commercial file-sharing services then buying the digital products (i.e. music or video) is not a pre-requisite as we can conclude from the way the questions are put to the consumers, contrary to all other usages discussed.

[409] Mulligan et al. (fn 27). Ibid 79 it is noted that the criterion of a limited relationship between users and copyright holders refers to "the extent to which services relationship and interaction with individuals reflect expectations set in other media. It considers the extent to which services require ongoing relationships from their users, and the breadth of those relationships in terms of time commitment and content usage rules and requirements. One aspect examined of the nature of these relationships is the complexity of information transaction required to acquire content; in other words the number of entities collecting and using services user's personal information, the independence of those entities' respective privacy policies, and the complexity of relationships for information exchange between those entities."

[410] Ibid 79.

[411] See the definition of "space-shifting" in Wikipedia <http://en.wikipedia.org/wiki/Space_shifting> accessed 6 June 2011.

3.3.3 Relation between consumers' expectations and lawful personal use

Following the definition of the scope and content of consumers' expectations the question is how these expectations can be connected to copyright law. Firstly, copyright exceptions play a normative role in consumer law, so that the copyright exceptions are by definition part of consumers' reasonable expectations in relation to a product. It follows that consumers do not expect to lose the benefit of those exceptions through technology such as DRMs, or through licence terms. Secondly, reasonable consumers' expectations are part of the benefit society expects copyright law should deliver by telling us what society wants, in terms of ability to use to use works. Therefore they should be respected by copyright law and not be overridden by broad exclusive rights. This balancing exercise mainly happens by means of an interpretation of copyright exceptions so far a possible as to give effect to those expectations. Therefore, the relationship between copyright exceptions and consumer' reasonable expectations is twofold.

Regarding the first aspect of this relationship, it is unclear to what extent copyright exceptions support the existence of an element of reasonableness regarding users' expectations.[412] Speculatively, it has been argued that two potential lines of reasoning of the courts are possible.[413] First, courts could conclude that because the scope of copyright exceptions in the digital era is unclear consumers' expectations are not reasonable. Alternatively, courts could conclude that it is the lawmaker and not the private parties to an agreement who concludes on the interpretation of the copyright exceptions and consumers' expectations to personal use might be considered reasonable, at least until the lawmaker decides the opposite.

An important limitation to the ability of copyright exceptions to play a normative role in the context of consumer law is the fact that users cannot expect different things from what they were told.[414] Thus, traders usually inform consumers on the qualities of the products and usually consumers cannot claim at a later stage that their expectations have not been met. However, this is a general observation since a more sophisticated analysis of when a

[412] *Helberger & Hugenholtz* (fn 233) 1087 discuss the normative role that the private copying exception plays in the context of consumer law.

[413] For this discussion see ibid 1087-1088.

[414] *Helberger & Hugenholtz* (fn 233) 1088.

consumer is well-informed is needed. In particular, 'well-informed' consumers must have a sound understanding of the situations, such as the extent and scope of the copyright exceptions. Where consumers lack such an understanding, they will probably be ignorant about the fact that their traditional user freedoms are in danger. However, information overload could possibly negatively affect the consumer's abilities to take correct decisions. Therefore, it has been said that information consumers need intelligent information that informs them not only of the product or service itself, but also of its impact on consumers' rights and legitimate interests, not simply more information, and the general standard of such information in relation to information services and products may be determined by representatives of the information industry.[415]

Regarding the second aspect of this relationship, consumer law establishes certain consumers' expectations about the products they buy as being reasonable and therefore respects and safeguards them from erosion.[416] The same should be true in the context of IP licences. A digital content transaction could be categorized as a license or a sale. The nature of the distinction between a license and a sale is controversial, but their main difference is that in the first case the content transaction falls under contract law while in the second case falls under copyright law. Obviously, the provisions of the licence regulating IPRs in the particular digital content should not override legal provisions belonging in other areas of law such as consumer protection law, competition law, etc, thus being illegal. In this context, what is prescribed by consumer protection law in relation to IPRs found in an IP licence is important since it can support several consumers' reasonable expectations in relation to the particular licensed IP content.

But what does consumer protection law actually prescribe? The European Directives that apply in the area of IP licensing include the Distance Selling Directive[417], the Electronic Commerce Directive[418], the Consumer Rights Directive[419], and the Unfair Commercial

[415] Ibid 1094-5.

[416] Council Directive (EC) 93/13/EEC of 5 April 1993 on unfair terms in consumer contracts, [1993] OJ L 095/29-34.

[417] Council Directive (EC) 97/7/EC of the European Parliament and of the Council of 20 May 1997 on the protection of consumers in respect of distance contracts [1997] O J L144/19, 4.6.97.

[418] Council Directive (EC) 2000/31/EC of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market [2000] OJ L178/1-16

Practices Directive,[420] while recently there has been a Proposal for a Regulation on a Common European Sales Law (CESL).[421] In relation to this very recent and important initiative of the Commission regarding a CESL, it should be mentioned that it aims to deal, among other, with differences in contract law between Member States that hinder consumers who want to engage in cross-border trade within the internal market since one of the important reasons consumers are hesitant to engage in cross-border e-commerce is that they are often uncertain about their rights and also because they are often faced with the business practice of refusal to sell which is often due to differences in contract law.[422]

The Commission stated that object of improvement of the establishment and functioning of the internal market by the facilitation and expansion of cross-border purchases for consumers can be achieved by making available a self-standing uniform set of contract law rules including provisions to protect consumers, which "is to be considered as a second contract law regime within the national law of each Member State".[423] This proposal is of great importance because it is one of the few instances (the other is the Consumer Rights Directive, as it will be shown below) in which the Commission directly deals with the regulation of 'digital content', namely

> data which are produced and supplied in digital form, whether or not according to the buyer's specifications, including video, audio, picture or written digital content, digital games, software and digital content which makes it possible to personalize existing hardware of software […].[424]

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[419] Directive 2011/83/EU of the European Parliament and of the Council of 25 October 2011 on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and of the Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and of the Council, [2011] OJ L304/64 22.

[420] Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market and amending Council Directive 84/450/EEC, Directives 97/7/EC and 2002/65/EC of the European Parliament and of the Council and Regulation (EC) No 2006/2004 of the European Parliament and of the Council, [2005] O J L 149/22, 11.6.2005.

[421] Commission (EC), Proposal for a Regulation of the European Parliament and of the Council on a Common European Sales Law, Brussels, 11.10.2011, COM(2011) 635 final.

[422] Pp.4-5 of the CESL Proposal.

[423] P. 4 of the Proposal.

[424] Article 2(j) CESL Proposal.

Recital 17 of the Proposal explicitly states that the scope of the ECSL should also cover contracts for the supply of digital content due to the increasing importance of the digital economy and that

> [t]he transfer of digital content for storage, processing or access, and repeated use, such as a music download, has been growing rapidly and holds a great potential for further growth but is still surrounded by a considerable degree of legal diversity and uncertainty. The Common European Sales Law should therefore cover the supply of digital content irrespective of whether or not that content is supplied on a tangible medium.

Recital 18 is more specific in that it says that the CESL should also cover digital content that is supplied

> not in exchange for a price but in combination with separate paid goods or services, involving a non-monetary consideration such as giving access to personal data or free of charge in the context of a marketing strategy based on the expectation that the consumer will purchase additional or more sophisticated digital content at a later stage.

Therefore, Article 5 of the proposed CESL provides that the CESL may be also used for "contracts for the supply of digital content whether or not supplied on a tangible medium which can be store, processed or accessed, and re-used by the user, irrespective of whether the digital content is supplied in exchange for the payment of a price." Recital 19 also provides that the services or repair, maintenance or installation of the digital content and generally services closely related the digital content are also included in the scope of the CESL.

Moreover, Recital 26 states that the rules of the CESL "should cover the matters of contract law that are of practical relevance during the life cycle of the types of contracts falling within the material and personal scope, particularly those entered into inline" including the rights and obligations of the parties, the remedies for non-performance, pre-contractual information duties, the conclusion of a contract including formal requirements, the right of withdrawal and its consequences, avoidance of the contract resulting from a mistake, fraud, threats of unfair exploitation and the consequences of such avoidance, interpretation, the contents and effects of a contract, the assessment and consequences of unfairness of contract terms, restitution after avoidance and termination and the prescription and preclusion of rights, sanctions available in case of the breach of all the obligations and duties arising under its application. Therefore, the proposed CESL will have quite a broad scope of application.

In relation to the ways consumer protection law could be helpful in shaping consumers' expectations, the following can be noted. Firstly, consumer protection introduces an information requirement and an informed consent requirement. Such information requirements can mainly be found in the Distance Selling Directive, the Electronic Commerce Directive and the Consumer Rights Directive (and, more recently, in the Proposal for a CESL). Not providing the necessary information or not obtaining an informed consent means that the trader can be found guilty not only for breaching the respective Directives but also for breaching the Unfair Commercial Practices Directive.[425] In particular, not providing the necessary information can be considered a type of unfair commercial practice, i.e. 'misleading', which makes the consumer to take an economic decision that he would not have taken if he was properly informed.[426] The misleading practice here can be further analysed into a type of a misleading omission, i.e. the information that was omitted and which was prescribed according to several consumer law Directives mislead the consumer who then exhibited an economic behaviour which he would not had exhibited if he was properly informed.

Secondly, several consumer expectations can be considered reasonable when they are based on consumer protection provisions regulating liability and indemnity clauses. Traders may include clauses/terms disclaiming liability for third party IPRs infringement claims in relation to rights licensed to consumers, e.g. music or movies, or for any IPRs infringement by restricting users' rights in relation to faulty software. Moreover, traders may place indemnity obligations on consumers in relation to third party IPRs when consumers are not liable for infringement of such rights. Before we proceed analyzing the Directive dealing with this issue, it should be noted here that all these instances may be dealt with in the context of the Unfair Commercial Practices Directive as well. Since these liability and indemnity clauses

[425] For this discussion see Naylor, David & Patrikios, Antonis, 'Mass Market Technology Contracting' in Reed, Chris (ed), *Computer Law* (7th ed. OUP 2011).

[426] Article 5(1) of the Unfair Commercial Practices Directive provides a definition for unfair commercial practices according to which "[a] commercial practice shall be unfair if (a) it is contrary to the requirements of professional diligence, and (b) it materially distorts or is likely to materially distort the economic behaviour with regard to the product of the average consumer whom it reaches or to whom it is addressed, or of the average member of the group when a commercial practice is directed to a particular group of consumers." A misleading practice is defined in Article 6(1) as practice which "contains false information and is therefore untruthful or in any way, including overall presentation, deceives or is likely to deceive the average consumers, even if the information is factually correct, in relation to one or more of the following elements, and in either case causes or is likely to cause him to take a transactional decision that he would not have taken otherwise: […]".

pertain to the information requirements, failure to inform consumers properly on this issue could be considered an unfair commercial practice, i.e. a misleading act, or, usually, a misleading omission.[427]

Regarding the core EU legislation on this matter, consumers' reasonable expectations in relation to digital copyright products could possibly be based on the provision of the Directive on Sale of Consumer Goods.[428] According to this Directive, the right to expect quality in goods that is in conformity with consumers' reasonable expectations cannot be restricted or abrogated by contract.[429] Although the Directive on Sale of Consumer Goods, was not extending product conformity for tangible products rules to services and intangible goods (e.g. software or other digital goods),[430] the European authorities reviewed this matter with the aim to achieve consumer protection and competiveness.[431]

In particular, the Commission was concerned that since software and data is excluded from the scope of the Directive on Sale of Consumer Goods the right owners might try to avoid liability for defective products via contractual terms.[432] Such a possibility would create a "potential consumer protection lacuna."[433] At this point, it should be added that not only right owners might try to avoid liability but also users might not realize that there is indeed a distinction between digital products and their physical counterparts in terms of legal treatment. To the extent users believe that digital products are still products and are treated like their physical counterparts, they will expect the same protection when buying digital content. That the users are actually in such a state of mind could be proven if one looks at their answers in the study regarding music usage and DRM on the issue of understanding the

[427] For this discussion see *Naylor & Patrikios* (fn 425).

[428] Council Directive 1999/44/EC of 25 May 1999 on certain aspects of the sale of consumer goods and associated guarantees (Directive on Sale of Consumer Goods), [1999] OJ L 171/12-16.

[429] See Articles 2(2)(d), 7(1) and (2) of Directive on Sale of Consumer Goods.

[430] The Directive on Sales of Consumer Goods applies only to consumer goods and it defines a consumer good as a "tangible moveable item" (Article 1(2)(b)).

[431] Commission (EC), 'Review of the Consumer Acquis' (Green Paper) COM(2006) 744 Final, 8 February 2007.

[432] Ibid 6.

[433] Ibid 24.

legal issues surrounding digital content discussed earlier.[434] Indeed, music users stated that they do not understand the legal issues surround digital content and being in a confused state of mind they might believe to an extent that digital products are like conventional/analogue products. This reality could provide another motive for the Commission to try to harmonise the protection afforded to consumers irrespective of whether they buy digital products or their analogue counterparts in order to avoid a "potential consumer protection lacuna."[435]

As a result, the European Parliament adopted a Resolution which acknowledged the need to re-examine issues relating to the protection of consumers when they conclude contracts for the provision of digital content[436] and also asked the Commission "to examine the matter in detail so as to determine whether it is appropriate to propose one or more specific rules or to extend the rules set out in that Directive to this type of contract."[437] Finally, this Directive became also one of the Directives that have been merged together into the Directive on Consumer Rights.

Unfortunately, the Directive on Consumer Rights did not extend to digital content the right to expect quality in products that is in conformity with consumers' reasonable expectations, a right which cannot be restricted or abrogated by contract. Recital 19 of the Directive on Consumer Rights defines digital content as "data which are produced and supplied in digital form, such as computer programs, applications, games, music, videos or texts, irrespective of whether they are accessed through downloading or streaming, from a tangible medium or through any other means." Next, it is explicitly noted that "[c]ontracts for the supply of digital content should fall within the scope of [the] Directive [on Consumer Rights]" and should not be classified, for the purposes of that Directive, neither as sales contracts nor as service contracts. In particular, Recital 19 stipulates that in the case of such contracts the consumer has a right of withdrawal "unless he has consented to the beginning of the performance of the contract during the withdrawal period and has acknowledged that he

[434] See Section 3.3.1 and 3.3.2 above.

[435] *Commission 'Review of the Consumer Acquis'* (fn 431) 24.

[436] European Parliament, 'Resolution on the Green Paper on the Review of the Consumer Acquis' 2007/2010(INI), 6 September 2007.

[437] Ibid.

will consequently lose the right to withdraw from the contract." Moreover, it provides that additionally to the general information requirements,

> "the trader should inform the consumer about the functionality and the relevant interoperability of digital content. The notion of functionality should refer to the ways in which digital content can be used, for instance for the tracking of consumer behaviour; it should also refer to the absence or presence of any technical restrictions such as protection via Digital Rights Management or region coding. The notion of relevant interoperability is meant to describe the information regarding the standard hardware and software environment with which the digital content is compatible, for instance the operating system, the necessary version and certain hardware features."

Notwithstanding the detailed provisions regarding the information requirements, Recital 19 and the Directive in general do not further harmonise issues pertaining to the right to expect quality in digital content and it is simply stated that "the need for further harmonization of provisions in respect of digital content" will be further examined by the Commission which will submit, if necessary, a legislative proposal for addressing this matter in the future (Recital 19). In sum, the reasonableness of the expectation of an information requirement regarding the functionality and interoperability of the digital content supplied online and the right of withdrawal reserved to the user cannot automatically be extended to mean that a right to expect quality in digital content that is in conformity with consumers' reasonable expectations cannot be restricted or abrogated by contract.

However, the Proposal for a CESL deals with this issue explicitly. In particular, Article 99 provides that

> [i]n order to conform with the contract, the […] digital content must: (a) be of the quantity, quality and description required by the contract; (b) be contained or packaged in the manner required by the contract; and (c) be supplied along with any accessories, installation instructions or other instructions required by the contract.

The same article in paragraph 4 provides that in a consumer sales contract the parties may not to the detriment of the consumers exclude the application of the Article 100 on the criteria for conformity of digital content, Article 102 on third party rights or claims and Article 103 on limitation on conformity of digital content, unless at the time of the conclusion of the contract the consumer knew of the specific condition of the digital content and accepted it as being in conformity with the contract when concluding it, and this not a provision whose application the parties may exclude, or derogate from or vary its effects.

Thirdly, in relation to copyright exceptions it must be noted that what is provided for by consumer protection law is not always clear. For example, although clauses according to which the seller escapes liability for the lack of interoperability of the product can be considered unfair under the Unfair Contract Terms Directive, the same is not true regarding contractual clauses that override copyright exceptions. In particular, although the Annex to the Unfair Contract Terms Directive contains an indicative and non-exhaustive list of the terms which may be regarded as unfair (Article 3(3)) contractual clauses that depart from the private copying limitation or copyright exceptions in general are not contained in the Annex. Unfortunately, the Directive on Consumer Rights which harmonises consumer protection in the Internal Market in the context of business-to-consumer sales and respective consumer contractual rights does not add contractual clauses that depart from the private copying limitation or copyright exceptions in general to the purely indicative list of unfair contractual terms contained in the Annex to the Unfair Contract Terms Directive (the Proposal for a CESL does not deal with this issue either).

However, since this is only an indicative list it could be plausibly maintained that clauses restricting the exercise of the copyright exceptions are potentially unfair under the general test in the Unfair Terms Directive since they create an imbalance in rights and since they are contrary to good faith. The 'unfairness test' laid out in Article 3 of the Unfair Contract Terms Directive for determining whether a standard form contract unduly restricts consumers' rights has received a narrow interpretation by national courts which hold that while terms that prevent copying and restrict playability only to certain regions do fall under Article 3, they are not inherently unfair.[438] In a recent study it has been concluded that

> [i]n so far as the contract contains standard terms preventing the consumer to copy a music file or restricting its playability to only a certain region, such terms will be subjected to the unfairness test of the Unfair Terms Directive. So far, such clauses have not been considered unfair by courts. In Spain, the legislation on intellectual property rights even indicates that, when certain conditions are met, traders are allowed to impose such access controls technologies. Terms that respect such conditions will not be considered unfair.[439]

[438] On how national courts have dealt with the issue see University of Amsterdam 'Digital content services for consumers: Comparative analysis of the applicable legal frameworks and suggestions for the contours of a model system of consumer protection in relation to digital content services' Report 1: Country reports, Centre for the Study of European Contract Law (CSECL) & Institute for Information Law (IViR), 2012 <http://www.ivir.nl/onderzoek/projecten/digitalcontentservicesconsumers.html> accessed 20 December 2012.

[439] Ibid 4.

This discussion seems to link a finding of unfairness to whether copyright exceptions have been made compulsory and enforceable against DRM. Since Members States have adopted differing solutions to this issue and some have made exceptions enforceable against DRM while some not, a finding of unfairness will probably be the case only in those Members States which have declared exceptions enforceable.[440] On the contrary, users in Member States where exceptions are not given an elevated status against DRM will not probably be in a position to plausibly argue that contractual overridability of copyright exceptions made technically possible by the application of DRM constitute an unfair contract term. It seems as the national judges expect this issue to be solved by means of copyright legislation and European and national initiatives in the area of copyright. Generally, terms that restrict interoperability have been declared unfair by courts while it is also possible to declare terms that restrict the vendor's liability with regard to the absence of interoperability to also be unfair.[441] But the issue of contractual overridability of copyright exceptions has not so far been dealt with by national courts in the context of the unfair contract terms legislation.

[440] Regarding the interface between private copying limitations and applied technological measures, some countries, e.g. Austria, opted not to regulate it at all by not implementing Article 6(4). Other Member States, e.g. Belgium, have not included the particular limitation to list of limitations enforceable by beneficiaries against the application of technological protection measures under the respective implementation of Article 6(4). In Belgium, however, the King can include the private copying exception by way of decree into the respective enumeration of enforceable limitations. Moreover, Member States like France, the Netherlands, Italy, Spain and to an extent, the UK, have included the private copying exception into the list of limitations covered by Article 6(4) and have provided a dedicated procedure which must be followed by the beneficiaries of the exceptions. In particular, only France, Italy, Spain, the Netherlands and, to some extent, the UK, have made the private copying limitation enforceable against TPM. Finally, in Norway and Sweden, enjoyment of a work by certain acts of copying, e.g., ripping, are not protected by technological protection measures.

[441] Ottolia, Andrea, 'Preserving users' rights in DRM: dealing with "juridical particularism" in the information society' IIC 2004, 35(5), 491-521. Valimaki, Mikko & Oksanen, Ville, 'DRM interoperability and intellectual property policy in Europe' EIPR 2006, 28(11), 562-568. For example, consumer protection authorities in Denmark, Norway, Sweden, France and Germany have demanded that Apple should open up its FairPlay format because its practice infringes consumer protection laws by adding copying and other restrictions to downloaded songs and thus making them incompatible with other but Apple's own music players (iTunes software and iPod portable player) (Ibid *Valimaki & Oksanen* 562. See also Out-Law.com, part of Pinsent Masons, 'France and Germany join Nordic campaign to unlock iTunes' 24 January 2007 <http://www.out-law.com/page-7689> accessed 15 December 2011). In the first case, the Norwegian Consumer Council filed a complaint with the Consumer Ombudsman against iTunes Music Store Norge in January 2006 (See Norwegian Consumer Council's press release, 'The Consumer Council of Norway is on track to win case against iTunes' June 6, 2006 <http://forbrukerportalen.no> accessed 20 December 2011 and Norwegian Consumer Ombudsman's press release, 'iTunes violates Norwegian law' June 7, 2006 <www.forbrukerombudet.no> accessed 15 December 2011). In the end, however, Norway dropped the complaint over Apple's FairPlay when Apple announced that songs sold at iTunes will be DRM-free and they will be in AAC form which is compatible to most portable media players in the market (Yoskowitz, Andre "Norway drops complaint

Moreover, a certain degree of uncertainty existing in the Directive may inhibit its application in the area of lawful personal use to the extent that this is comprised of copyright exceptions and there may be different decisions on the same issue among Member States depending on their implementation of the Directive. Article 4(2) of the Unfair Contract Terms Directive bars the application of the Directive to "the main subject matter of the contract". Since the term "main subject matter" is not defined, a question arises whether terms that limit copyright exceptions or otherwise seek to alter the balance between the consumer's and rightsholders rights as provided in other areas of law comprise "the main subject matter of the contract" (in which case such terms are outside of the scope of consideration), or fall outside of it (in which case such terms fall within the scope of the legislation). Generally, this issue is dealt differently among Member States; Finland, for example, has implemented the Directive to mean that a term may be regarded unfair irrespective of whether it is classified "the main subject matter".[442]

The Unfair Commercial Practices Directive may be of use here if it is accepted that Annex I, Clause 10 may apply in such instances. Clause 10, in particular, provides that "[p]resenting rights given to consumers in law as a distinctive feature of the trader's offer" is a commercial practice that will be in all circumstances considered unfair because it is a misleading commercial practice. This could mean that presenting the opportunity offered to the consumer to exercise copyright exceptions of which he is the beneficiary as a distinctive feature of the product would be unfair. However, there exists uncertainty about the scope of application of the Unfair Commercial Practices Directive since it only prohibits misleading actions (Article 6) and misleading omissions (Article 7) in relation to the "main characteristics of a product". While the Directive provides an indicative list of what constitutes a "main characteristic", it is unclear whether information relating to interoperability, compatibility and playability of device and files fall within the scope of the Directive. Arguably, such functions could be interpreted as falling under Article 6(1)(b) reference to "results to be

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over Apple's FairPlay DRM" <http://www.afterdawn.com/news/article.cfm/2009/02/05/norway_drops_complaint_over_apple_s_fairplay_drm> accessed 20 December 2011).

[442] University of Amsterdam 'Digital content services for consumers: Comparative analysis of the applicable legal frameworks and suggestions for the contours of a model system of consumer protection in relation to digital content services' Report 1: Country reports, Centre for the Study of European Contract Law (CSECL) & Institute for Information Law (IViR), 2012 <http://www.ivir.nl/onderzoek/projecten/digitalcontentservicesconsumers.html> accessed 20 December 2012, at p.19.

expected from [the product's] use", but such application remains unclear due to lack of explanatory case law.

Finally, reference should be made to the notion of 'normal use' in the case of digital dissemination of digital content which is closely related to the notion of 'reasonableness' of consumers' expectations since, apart from the aforementioned consumer law consideration, consumers' expectations will be considered reasonable if they concern a 'normal use' of such digital content disseminated digitally. It has been suggested that normal use can refer to the ability to listen to, read or watch digital products and therefore is closely connected to consumptive use in a narrow sense.[443] Moreover, it can also encompass "consumptive uses in a broader sense, including the making of private copies. However, in relation to consumptive uses which consumers were grown accustomed to consider normal, it has been said that

> […] if DRM protected content distribution systems reach a threshold of ubiquity, consumer expectations of what uses they may make, and with what level of anonymity and privacy, with content will begin to change. Music and movie users may not like limitations on the portability of content they own, but if no comparable alternatives exist, those individuals may be forced to adjust their normative behaviors and expectations.[444]

As another scholar puts it,

> The main goal of DRM mandates is not, as the industry often claims, to stop "piracy" but to change consumer expectations. In the content industry's view, consumers don't have rights; they have expectations. Consumers may not like DRM systems, but if "legitimate" content is available only on this basis, they'll get used to it.[445]

However, the possible conclusion of a court that the making of private copies constitutes "normal use" that was based solely on the fact that consumers have grown accustomed to

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[443] Tribunal de grande instance [T.G.I.] ordinary court of original jurisdiction] Nanterre, 6e ch., Sept. 2, 2003, Françoise M. (Fr.), available at <http://www.legalis.net/breves-article.php3?id_article=33>; Tribunal de grande instance [T.G.I.] [ordinary court of original jurisdiction] Paris, 5e ch., 1e sec., Jan. 10, 2006, Christophe R. (Fr.), available at <http://www.legalis.net/breves-article.php3?id_article=1567>; both cases holding that a DRM-protected CD that cannot play on a car radio is "defective" under that French rules on nonconformity (Article 1646 of the Civil Code), in part because consumers had not been informed about this prior to purchase).

[444] *Mulligan et al.* (fn 27) 85.

[445] Pamela Samuelson, 'DRM {AND,OR,VS.} THE LAW", Communications of the ACM April 2003/Vol.46, No.4, 41-45, at p.44.

certain forms of use is no guarantee that such uses will always be considered "normal."[446] Apart from uses which consumers have grown accustomed to consider normal and, accordingly, to expect certain qualities from a product, the content and scope of normal use also depends on external factors such as "the state of the market, the state of technology and the nature of comparable goods."[447] Therefore, even if DRM start changing consumers' expectations, these other factors can be used to support those expectations. For example, if comparable products are offered without DRM, then consumers might be in a position to claim that this is the normal use of the particular products, i.e. to operate without DRM. Or, in case the state of technology and of the market justifies use of DRM-free products by means for example of the creation of secure and legitimate file-sharing platforms, the consumers may also be in a position to argue that a DRM-free use of a particular product is its normal use.

European surveys, which have demonstrated that the making of copies for private use, e.g. for social purposes (e.g. sharing with close family or friends), making back-up copies or time-shifting, is an important element of how consumers have grown accustomed to use digital content, might provide some arguments and help courts in deciding whether consumers can legitimately expect to make private copies in a specific case.[448]

3.4 Conclusion

This chapter provided a definition of lawful personal use in terms of its content and scope. In particular, the lawful personal use was defined by reference to the digital copyright exceptions and the expectations of consumers of copyright content distributed digitally. The digital copyright exceptions contain, firstly, the exceptions to the reproduction right which

[446] See *Helberger & Hugenholtz* (fn 233) 14 (footnotes omitted); ibid 14-15, the writers also add the following example: "[…] if music, or software on a CD is sold at a considerably lower price than other, comparable products, one could argue that consumers might also expect the CD to be of a lower quality or to have more limited functionality. In this situation being able to make private copies might arguably not be a reasonable consumer expectation. In the (unlikely) scenario that all digital content were subject to technological copy control protection, consumers would no longer have good reason to believe that the making of private copies is still "normal"."

[447] Ibid 14 (footnotes omitted).

[448] *Duff al. 'Digital Video Usage and DRM'* (fn 359) 26-28; *Duff et al. 'Digital Music Usage and DRM'* (fn 359) 26-28. For a reference to more studies on consumer acceptability of copyright and of DRM in particular see *Hugenholtz et al.* (fn 347) 206-207.

further mainly contain, for the purposes of this work, the exception for transient and incidental copying and the exception for private and non-commercial use. The digital copyright exceptions contain, secondly, the exceptions to the making available to the public right. Although several exceptions to this right are recognised, none of them concerns personal use and enjoyment purposes. Similarly, the exceptions to the exclusive reproduction right for transient and incidental copying and for private, non-commercial use do not operate in the context of the making available right. Mainly based on the possible overlap between the reproduction and the making available right, an interpretation was suggested in order to allow the recognition of a private copying exception for the downloader of works, and accordingly for the users of on-demand services. The aim of such a recognition would be to broaden slightly the narrow exceptions to the exclusive making available to the public right.

Thirdly, the digital copyright exceptions contain the exceptions to the distribution right, i.e. the exhaustion and the first sale doctrine, which arguably can operate in digital settings as well. In digital settings, in particular, the exhaustion and the first sale doctrine can take the form either of forward-and-delete or of modification of digital media for purposes of device shifting or access to digital media from a remote place. Finally, the digital copyright exceptions contain the exceptions found in the Software Directive (reproduction for the purposes of creating a back-up copy and for error correction, reproduction in the context of reverse engineering/decompilation done for interoperability purposes and reproduction exempted from protection under the exhaustion doctrine) and in the Database Directive (exception to the extraction and/or reutilization right for private purposes and exception to the copyright in the expression of databases, both exceptions applying in the case of electronic databases).

Regarding consumers' expectations, their role is important both because copyright exceptions play a normative role in their shaping and because consumer protection law supports them against erosion in the context of contractual agreements. Most importantly, however, they are significant because they form part of the rationale for copyright that is to secure the benefit to society of works being used. In particular, they tell us what society wants, in terms of ability to use to use works, and inform the legislator about the expected benefit which copyright should deliver. Therefore, since consumer expectations are closely related to digital copyright exceptions they are treated in this work as the second important component of lawful personal use. Several conclusions were reached in relation to what

constitutes a 'reasonable expectation'. First, in consumer law cases, in cases of doubt (i.e. when the content and scope of copyright exceptions is unclear), the court should decide that consumers' expectations in relation to the digital content are reasonable at least until the judge decides otherwise. So far as possible, the exceptions should be interpreted in line with those expectations.

Second, the information requirement does not mean that the consumer's reasonable expectations are pre-empted by the information requirement (i.e. the information given to him by the trader) and there may still be space for the recognition of several reasonable expectations in relation to digital content. Third, IP licenses should not override consumer protection law provisions and since the user is at the same time a consumer he has several reasonable expectations in relation to digital content that are given to him by consumer protection law. In particular, I am referring here to consumer protection law provisions that pertain to and regulate IPRs. Finally, the definition of the scope of "normal" use (either through technology such as DRMs or licence terms) should not be left to rightsholders but instead it should be a matter for the law to decide by taking into consideration several factors one of which should be users' expectations.

Overall, a minimum of lawful personal use requires that users of digital content can engage in reproductions for the purpose of exercising digital copyright exceptions and their reasonable expectations. Remuneration is not always a pre-condition but only in the context of the private copying exception. Rightholders can be remunerated for reproductions that happen outside the context of this exception depending on the position of their Member State on this issue. The existence of reasonable consumer expectations in relation to works disseminated digitally adds the requirement of reasonableness to the minimum of lawful personal use. That means, for example, that a situation that has no precedents in analogue settings and that is not covered by digital copyright exceptions could be analysed under the prism of 'reasonableness' and, ultimately, fall under lawful personal use. Therefore, a use that involves reproduction and is not exempted by copyright exceptions may be exempted under the analysis of reasonable expectations. Examples of lawful personal use are instances of forward-and-delete, of sharing with family and friends, of downloading for personal use (i.e. exercise of the private copying exception) even in pay-per-use settings. In this context, time-, device-, format- and space-shifting are considered lawful by definition as well.

Part II. The Current Balance

Chapter 4. The Impact of DRM to the minimum Core of Lawful Personal Use – Current Copyright Laws

4.1 Introduction

DRM frequently block non-infringing uses of copyright works and a number of scholars have struggled with the question of whether and how anti-circumvention law could better accommodate those non-infringing uses.[1] We saw in Part I that there is a minimum core of users rights to interact with digital works that is based on what laws provide coupled with users' reasonable expectations. This minimum contains the ability of the user to engage in transformative and non-transformative uses for non-commercial purposes and to resell a product, the preservation of the reproduction for private use in the context of the online dissemination of works and the interoperability of products. In Part II, we will investigate whether and in what ways the application of DRM to works prevents users from enjoying this minimum of core rights.

The rapid expansion of online dissemination of information has increased the need for guaranteeing access in order to make sure that information is not subject to absolute control. It is obvious that online dissemination replaces day by day the current distribution channels, namely books, T.V. and radio and, at the same time, information becomes subject to restrictive contractual agreements supported by DRM technologies. Intervention seems necessary in order to secure access to information. While copyright law of the 20th century was designed to solve the problem of free riding in a context in which no contracting was

[1] Indicatively see Benkler, Yochai, 'Free as the Air to Common Use: First Amendment Constraints on Enclosure of the Public Domain' (1999) 74 N.Y.U. L.Rev. 354; Cohen, Julie E., 'Copyright and the Jurisprudence of self-help' (1998) 13 Berkeley Tech.L.J. 1089 ; Cohen, Julie E., 'Some Reflections on Copyright Management Systems and Laws Designed to Protect them' (1997) 12 Berkeley Tech. L. J. 161; Dusollier, Séverine 'Tipping the Scale in Favour of the Right Holders: The European Anti-Circumvention Provisions' in Becker, Eberhard et al. (eds), *Digital Rights Management-Technological, Economic, Legal and Political Aspects* (Springer 2003); Koelman, Kamiel J., 'A Hard Nut to Crack: the Protection of Technological Measures' (2000) 22(6) EIPR 272; Lessig, Lawrence, *Free Culture: How big media use technology and the law to lock down culture and control creativity* (Penguin Press 2004) at 156-160; Litman, Jessica, *Digital Copyright* (Prometheus Books 2006) Chapter 9; Litman, Jessica, 'Sharing and Stealing' (2004) 27 Hastings Comm. & Ent. L. J. 1; Netanel, Neil W., 'Locating Copyright within the First Amendment Skein' (2001) 54 Stan. L. Rev. 1; Samuelson, Pamela, 'Intellectual Property and the Digital Economy: Why the Anti-Circumvention Regulations Need to be Revised' (1999) 14 Berkeley Tech. L. J. 519; Vinje, Thomas C., 'A Brave New World of Technical Protection Systems: Will There Still be room for copyright' (1996) 18 EIPR 431.

possible, the copyright law of the 21st century is different or should be different from the traditional copyright principles in many ways.

The lawful personal use zone is shrinking because a variety of initiatives was launched in recent years to replace unmonitored personal uses with licensed ones. Digital devices are increasingly equipped with copy-prevention technology before being made available to consumers. As it has been argued, "[i]ncreasingly, what consumers have viewed as a "right" to make fair uses of copyrighted works is painted as historically and technologically contingent privilege that may need to yield to copyright owners' new licensing strategies."[2]

Restrictive measures have always been employed by rightsholders to strengthen their control over their works. What actually disables consumer choice is the anti-circumvention legislation. DRMs have been employed to compromise consumer rights in a growing number of cases and this is closely related to the fact that it was presumed that technological measures employed by rightsholders could only be effective when it is possible to efficiently prevent their circumvention. Consumers cannot legally hack technical measures that limit their ability to use copies they have legally purchased. What is more, the fact that the law makes it illegal to provide circumvention tools further limits the opportunities for consumers to remove technical measures which restrict the functionality of their purchased copies.[3]

DRM systems enable post-purchase control which, in turn, may affect consumer welfare both directly and indirectly.[4] Directly, a great amount of post-purchase control over the use of works is available to copyright owners today that was not available in the past and which is not usually available to suppliers of other commodities. DRMs regularly prevent copying, modification, and re-distribution of music files, software, images or textbooks, thereby limiting the ability of consumers to freely experience the copies purchased. EBooks for instance, such as Adobe's Acrobat eBook platform, are using encryption to limit the number of copies, or prevent any modification of the text.

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[2] Litman, Jessica, 'Lawful Personal Use' (2007) 85 Tex. L. Rev. 1871, 1873-4 where it is also noted that "Today, however, the recording industry has sued more than 20,000 individual for making personal uses that can be characterized as "commercial" only by redefining commercial to mean "unlicensed""; on the expansion of the meaning of the term "commercial" see ibid 1914.

[3] Elkin-Koren, Niva, 'Making Room for Consumers under the DMCA' (Summer 2007) 22(3) Berkeley Tech. L. J. 1119, 5-7 (footnotes omitted).

[4] Ibid.

Indirectly, DRMs may affect consumer welfare when employed to protect dominance in the market for platforms and applications. For instance, Apple used its DRM to prevent RealNetworks' digital download store from using Harmony, a DRM designed to be compatible with Apple's Fairplay DRM and iPods.[5] iPod, the most popular digital music player, used to read only Apple's Fairplay. Incompatibility with formats used by other music distributors made it difficult for competitors, such as RealNetworks, to compete with Apple.[6] Similarly, gamers are prevented from playing legally purchased copies of games on different game consoles and purchasers of video games are prevented from playing their games over the Internet.[7] Locking consumers into a specific hardware device makes it cost-prohibitive to switch to a different device since they will lose their sunken investment in their current collection, and is thus a direct attack at consumer welfare.

DRM are protected against circumvention by means of anti-circumvention legislation. In the United States, the relevant anti-circumvention provisions can be found in the Digital Millennium Copyright Act 1998 while in Europe the relevant anti-circumvention provisions can be found in the EUCD. Reference to the US anti-circumvention regime is necessary since it was introduced earlier than the European regime and also because important case law was developed in the context of the DMCA 1998 some of which will be mentioned in this work for illustrative purposes.

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[5] Apple threatened legal action under the DMCA in case RealNetworks was not giving up its initiative. See Borland, John, 'Apple fights RealNetworks' 'hacker tactics'' CNET News.Com, December 14, 2004 <http://news.cnet.com/Apple-fights-RealNetworks-hacker-tactics/2100-1027_3-5490604.html> accessed 1 June 2008. RealNetworks moved on with its initiative and Apple release an iPod update that blocked RealNetwork's workaround and Harmony couldn't load music onto iPods. Apple was eventually sued by an iTunes user, Thomas Shatterly, in 2005 for violating antitrust laws when it required iTunes users to only use iPods.

[6] However, things have changed and since 2009 iTunes shells music without the FairPlay DRM (although FairPlay is still used to protect movies and TV shows sold on iTunes). Moreover, the majority of FairPlay-encrypted content is purchased through the iTunes Store, using the iTunes software. The iTunes software relies on Apple's Quicktime multimedia software for decoding and playback of the encrypted files. Every media player capable of using QuickTime is capable of playing back FairPlay-encrypted files, including RealPlayer (by RealNetworks), Media Center, Media Player Classic and Songbird.

[7] The technique of region coding that prevents the use of a purchased DVD/CD outside a particular region (e.g., the owner of a DVD purchased in the US cannot play the movie on a computer that is set for Europe) is an example of both how companies protect their market dominance in a specific region and of the imposition by means of DRM of usage restrictions. However, since region coding mainly concerns digital works distributed via material carriers it will not be further analysed in this work.

In principle, both legislations protect both access and copy controls. In relation to the notion of access, arguably, it is a notion around which current market trends are centered. Access controls became extremely important to publishers and content providers and this has been noted in many court decisions.[8] For instance, in *Universal City Studios, Inc. v Corley*[9] and *Real Networks, Inc. v Streambox, Inc.*,[10] reference was made to the investment put into the creation of DRM mechanisms and the importance of DRM for the content providers in the market place. The term access controls refers to the management of admission to system and network resources. The first part of an access control is authenticating the user, which proves the identity of the user or client machine attempting to log on. The second part is granting the authenticated user access to specific resources based on company policies and the permission level assigned to the user or user group. Control over access allows the rightsholder to set the terms of access and use; therefore, by setting the terms of access and use he can engage in the online licensing of works as well.

For example, Westlaw legal database's effective technological measure is its password page/home page. In the case of Westlaw institutions and individual users are required to pay license fees in order to obtain the password to access the articles in the database. In the case a user deactivates or avoids the Westlaw password page because although he has not paid the required license fee he wants to access the articles in the database then he violates the respective anti-circumvention legislation.[11] Another example of an access control would be a 'cloud' since access to the underlying information inside a cloud would usually require "[…] the application of information, or a process or a treatment, with the authority of the copyright owner, to gain access to the work", according to Section 1201(a)(3)(B) of the DMCA, or the "application of an access control or protection process, such as encryption,

[8] Griffin, James G. H., 'The Need for a New Paradigm in IP Law: A Focus on Authorship' (October 2005) 14(3) I&CTL 267, 274.

[9] 273 F.3d 429 (2d Cir. 2001).

[10] No. C99-2070P, 2000 U.S. Dist. LEXIS 889 (W.D. Wash. 18 January 2000).

[11] Tian, YiJun, *Re-thinking Intellectual Property: The political economy of copyright protection in the digital era* (Routledge-Cavendish 2009) 220.

scrambling or other transformation of the work or other subject-matter [...]" according the Article 6(3) of the EUCD.[12]

As concerns copy controls, these are also known as copy prevention or copy restriction or rights controls because they are directly linked to copyright infringement since the exclusive reproduction right is involved.[13] Copy controls refer to technical measures designed to prevent duplication of information.[14] For example, when a copy-control is applied to a document downloading or printing of this document will not be allowed. Obviously, access to this document in order to read it in that case may be permitted to the extent such access does not constitute copying of the work.[15]

This chapter has two parts. The first deals with the core anti-circumvention legislation, i.e. the EUCD, and the second deals with the broader European anti-circumvention legislation, i.e. the EUCD plus the Software, Databases and Conditional Access Directives. The purpose is to show that the anti-circumvention legislation, i.e. the legal protection of access and copy controls, is problematic from the viewpoint of the user of copyright works. In the first part reference will also be made to the DMCA 1998 for illustrative purposes since it preceded the EUCD and since US courts have provided several interesting and important decisions in this area. In particular, this chapter will show that the European anti-circumvention legislation

[12] Jiang, George, 'Rain or shine: Fair and other non-infringing uses in the context of cloud computing' 36(2) (2010) J. Legis. 395, 414. In the same page, it is argued that cloud-TPM are better at combating piracy that other TPM because "[w]hereas other TPM that protect locally stored content serve only to limit the functionality of the user's computer or device, cloud computing offers additional value to the consumer. Subscribers may find that the benefits of having on-demand access to an infinite library of remotely stored music outweighs the prospects of storing pirated content locally."

[13] Copy controls are in fact part of the wider category of right controls that are protected under section 1201(b)(1)(A) of the DMCA. That section provides that "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 protection afforded by a technological measure that effectively protects a right of a copyright owner under this title in a work or a portion thereof;".

[14] Copy Control is the name of a copy protection system, used since 2001 on several digital audio disc releases by EMI and Sony BMG Music Entertainment in several regions (Europe, Canada, the United States, Australia) which was basically intended as a means of copy-protecting compact discs. See http://en.wikipedia.org/wiki/Copy_Control.

[15] See, for example, *Tian* (fn 11) 223-224 where it is argued that "[m]any websites allow users to access online documents (no access-controls), but they do not allow user to download or print a copy of these documents. A typical example would be the 'Australian Guide to Legal Citation' (AGLC) website."

does not distinguish between human and technological access which results in prohibiting access in cases when no human actually access a work. Moreover, it will be shown that in the case of human access to a DRM-protected work the locking-up phenomenon usually appears in which case beneficiaries of copyright exceptions are not permitted to exercise these exceptions resulting in an unfair environment for user. Finally, it will be shown that the relation between copyright exceptions and exceptions to anti-circumvention provisions create a complicated and insecure environment in the first place, i.e. before the unfair treatment of the users and beneficiaries of copyright exceptions comes into play, since they do not deal with the issue harmoniously.

4.2 Impact of DRM on interoperability and the ability to exercise copyright exceptions

4.2.1 Anti-Circumvention Provisions

In the United States, the case for legal access protection was set forth by the Clinton Administration's White Paper, *Intellectual Property and the National Information Infrastructure*,[16] which argued for laws to forbid the use of technologies that could be used to circumvent such protection. The White Paper heavily influenced the subsequent DMCA. The provisions on access protections are included in Section 103 of the WIPO Copyright and Performances and Phonograms Treaties Implementation Act which is a part of the DMCA which, in this way, adds a new chapter 12 to Title 17 of the United States Code.[17] The new Chapter 12 of the United States Code, starts with Section 1201 entitled "Circumvention of Copyright Protection Systems." In this way, the US met its treaty commitments that had been established under Article 11 of the WIPO Copyright Treaty and Article 18 of the WIPO Performances and Phonograms Treaty.

[16] U.S. Department of Commerce, Patent and Trademark Office, Information Infrastructure Task Force, Intellectual Property and the National Information Infrastructure, 'The Report of the Working Group on Intellectual Property Rights' (Washington: Library of Congress 1995) <http://www.uspto.gov/web/offices/com/doc/ipnii/> accessed 10 April 2007.

[17] See Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860 (1998). Sec. 103. Copyright Protection Systems and Copyright Management Information. (A) In general Title 17, United States Code, is amended by adding at the end the following new chapter: Chapter 12 – Copyright Protection and Management Systems.

In particular, the new Section 1201 implements the obligation of the WIPO Treaties concerning technological protection measures and copyright management systems. The WCT, in particular, originally provided in Article 11 that

> 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.

Similarly, the WPPT provided in Article 18 that

> 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.

In implementation of the abovementioned provisions of the WIPO Treaties of 1996, Section 1201 of the DMCA identifies three categories of anti-circumvention violations, namely a basic provision, a ban on trafficking, and additional violations. In particular, the first disposition of Section 1201 is related to circumvention of technological protection measures that control access to copyrighted works,[18] the second is associated to the manufacturing, distribution or offering of products, services or devices, that circumvent access controls[19] and the third is related to the manufacturing, distribution, or offering of products, services or devices that circumvent a technological measure that "effectively protects a right of the copyright owner" (i.e. the so-called copy controls or rights controls).[20]

The basic anti-circumvention provision (first disposition) provides that "no person shall circumvent a technological measure that effectively controls access to a work protected under this title."[21] A technological measure "effectively controls access to a work" if, in the ordinary course of its operation, it involves "the application of information, or a process or a

[18] 17 U.S.C. (a)(1).

[19] 17 U.S.C. (a)(2).

[20] 17 U.S.C. (b).

[21] 17 U.S.C. 1201(a)(1)(A).

treatment, with the authority of the copyright owner."[22] In this framework, to "circumvent a technological measure" implies "to descramble a scrambled work, to decrypt an encrypted work, or otherwise to avoid, bypass, remove, deactivate, or impair a technological measure, without the authority of the copyright owner."[23]

Regarding the ban on trafficking (second disposition), Section 1201(a)(2) provides that it is forbidden to "manufacture, import, offer to the public, provide, or otherwise traffic in any technology, product, service, device, component, or part thereof" that is primarily designed or produced for the purpose of circumventing, has only limited commercially significant purpose or use other than circumventing or is marketed for circumventing a technological measure "that effectively controls access" to a protected work. In the context of the third anti-circumvention provision (third disposition) entitled 'additional violations', a technological measure "effectively protects a right of a copyright owner" if, in the ordinary course of operation, it "prevents, restricts, or otherwise limits the exercise of a right of a copyright owner" under Title 17 of the United States Code.[24] In this context, to circumvent a copy control/rights control measure means to avoid, bypass, remove, deactivate, or otherwise impair such a measure.[25]

Importantly, the DMCA provides differing levels of protection to access controls as opposed to copy controls/rights controls. In particular, according to Section 1201(a)(1)(A), "no person shall circumvent a technological measure that effectively controls access to a work protected under this title." Since no corresponding provision for copy control/rights controls exists, it is inferred that although users are permitted to circumvent copy controls in private in order to engage in non-infringing use they cannot circumvent access controls for the same purpose (or, more accurately, for whatever reason). This distinction between technological measures that prevent unauthorized access to a copyrighted work and measures that prevent unauthorised copying of copyrighted work was used to assure that the public will have the continued ability to make fair use of copyrighted works. Since the copying of a work may be fair use under appropriate circumstances, Section 1201 does not prohibit the

[22] 17 U.S.C. 1201(a)(3)(B).

[23] 17 U.S.C. 1201(a)(3)(A).

[24] 17 U.S.C. 1201(b)(2)(B).

[25] 17 U.S.C. 1201(b)(2)(A).

act of circumventing a technological measure that prevents copying. By way of contrast, since the fair use is not a defense to the act of gaining unauthorized access to a work, the act of circumventing a technological measure in order to gain access is prohibited. Therefore, one notices the evolution of a right not to have one's access controls circumvented (instead of a positive right to control access), a so-called "access right".

In the same spirit of distinguishing between copy controls and access controls, the prohibition on trafficking and the additional violations provision (Section 1201(b)) represent two different types of anti-trafficking provisions as well. The former refers to devices and services that circumvent access controls while the latter refers to devices and services that circumvent copy controls. In particular, Section 1201(a)(2)(A) provides that

> [n]o 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; […].

Moreover, Section 1201(b)(1)(A) provides that

> [n]o 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 protection afforded by a technological measure that effectively protects a right of a copyright owner under this title in a work or a portion thereof.

As concerns the European anti-circumvention legislation, Article 6(1) of the EUCD provides that 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." Article 6(3) of the EUCD defines "technological measures" as

> "any technology, device or component that, in the normal course of its operation, is designed to prevent or restrict acts, in respect of works or other subject-matter, which are not authorised by the rightsholder of any copyright or any right related to copyright as provided for by law or the *sui generis* right provided for in Chapter III of Directive 96/9/EC."

The same Article states that technological measures are "effective"

> "where the use of a protected work or other subject-matter is controlled by the rightsholders 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."

The EUCD does not distinguish between access and copy controls and provides in Article 6(3) that DRM technologies are protected by the Directive as long as they protect an "act not authorized by the right holder."

4.2.2 Human Access and Technological Access

It is possible to differentiate between human access and technological access to a work. Humans access information in a significantly involuntary way when they receive the signals and external stimuli with their senses and cognition that represent the message. For example, humans access information when they listen to music, read books, watch a theatrical play, read a Braille script or smell a perfume. Regulation can only influence the physical conditions allowing human-access, such as the location of the subjects and/or objects, and not the process of reception because the latter is internal. Once having accessed the message, the human recipient becomes a new "possessor" of it and he can also communicate to others.[26]

As was already noted, human access to information is separated into "access-conducts," "communication conducts," and "facilitation conducts" all of which can be regulated (access-regulation).[27] However, although access regulation may apply to access-conducts it does not apply to human access *per se*.[28] In particular, Efroni argues that only the physical conditions such as the location of the subject and/or the object of human-access can be regulated while, on the contrary, the internal process of reception triggered by exposure to external stimuli (human-access) cannot be regulated.[29] He explicitly states that

> [h]uman access per se is non-regulatable, but human *conducts* related to access are. Most importantly, government regulation intervenes to curtail human-access in two ways by promulgating legal rules that impose restrictions on two categories of conducts called *access-conducts* and *communication conducts*.[30]

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[26] Efroni, Zohar, *Access-right: the future of digital copyright law* (Oxford University Press 2011) at 128-129 (footnotes omitted).

[27] See Part I, Chapter 2, Section 2.5.1.

[28] *Efroni* (fn 26) 129.

[29] Ibid 129, 139-142.

[30] Ibid 139 (emphasis of the author). Ibid 141 where we also read that "[t]he conclusion is that access-conducts are principally regulatable. In imposing legal constraints on access-conducts, the law indirectly regulates human-access by reducing access opportunities. Public policy may sometimes

By way of contrast, technological access refers to "certain processes in which absorption (and related processing or manipulation) of message signals occur *independently of human access to a message*."[31] In the context of digital copyright works, this applies to the cases where human access the naked binary code of copyright works that are either initially expressed in digital code or can be digitized (whether simultaneously with creation or at a later stage). In these cases the human recipient of the message cannot comprehend the message from the moment that it is expressed in binary strings of ones and zeros and reception is not secured. In particular, the conversion process of binary digits into letters, images or sounds is conducted by computer programs that technologically access the encoded message. An example of technological-access is when application software interacts in order to achieve a certain result or perform an operation.[32]

Arguably, the distinction between human access and technological access for resolving copyright questions is not merely academic since anti-circumvention provisions should only be employed in the case of human-access while in the case of technological access there ought to be no copyright infringement and, accordingly, no infringement of the anti-circumvention provisions. For example, in the US *Chamberlain*[33] and *Lexmark*[34] decisions the

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justify regulation of access-conducts (e.g., in the case of the right to privacy), and the freedom to pursue access to information, like most other freedoms, is not absolute. The distinction between human-access and access-conducts emphasizes that access regulation may apply to the latter but not the former."

[31] Ibid 130.

[32] Ibid 130-131.

[33] *Chamberlain Group, Inc. v. Skylink Techns., Inc.*, 381 F.3d 1178, 1183 (Fed. Cir. 2004). The plaintiff manufactured and sold homeowners' garage doors together with remote control devices. The technology at issue was the garage door opener system (GDO), which facilitated the opening of the door through an opening device (which was mounted on the door and consisted of a receiver with associated signal processing software and a motor performing the opening and closing of the door) when the homeowner used a remote control device to send a radio frequency signal to the receiver located on the opening device. Only upon receiving a recognised signal from the remote control device would the signal processing software activate the opening device and instruct the motor to open or close the door. The court held that the door opener and the remote control device incorporated computer programs "protected by copyright." GDOs contained a copyrighted "rolling code" computer program that each time changed the recognised signal from the remote control required to open the door for security purposes (that was deemed by the court to be a technological measure that controls access). The defendant, that was marketing and selling remote control devices, designed a model that interoperated with common GDOs and activated Chamberlain's door opening device bypassing the "rolling code" computer program. Although the court rejected Chamberlain's DMCA violation claim (for lack of connection between unauthorized use of Chamberlain's copyrighted software and Skylink's remote control device) it did not question the contention that sending a digital radio sequence (which interacts with the computer program in the door opening device instructing it

courts did not question the assertion that technological access may count as "access" to works in the meaning of the applicable anti-circumvention provisions. However, the anti-circumvention legislation of the EUCD does not distinguish between human access and technological access and it considers every act of access to be unlawful. In other words, it seems that the EUCD does not accept that there must be a copyright infringement for the anti-circumvention provisions to apply but it accepts, on the contrary, that every act of access is prohibited even if does not result to copyright infringement.

4.2.3 The Problem of Digital Lock-Up

The US's four national academies (National Academy of Sciences, National Academy of Engineering, Institute of Medicine, and National Research Council) have expressed their concerns regarding access protection.[35] The concerns regard the creation of a "pay-per-use" society and the establishment of a regime of superdistribution where copyright owners would attach fees to each subsequent copy of any original download.[36] The four academies

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to perform a certain task) was access to work in the meaning of the DMCA and it did not took under consideration that no one was exposed to a copyright protected wok as a result of the defendant's acts.

[34] *Lexmark International, Inc. v. Static Control Components, Inc.*, 387 F.3d 522 (6th Circuit 2004). Lexmark was selling discounted toner cartridges for its printers that only Lexmark could refill. Those cartridges contained a microchip designed to prevent Lexmark printers from functioning with toner cartridges Lexmark itself did not refill and two relevant copyrightable computer programs were incorporated in Lexmark's products for that purpose. The defendant manufactured SCC's "SMARTEK" chip that allowed third party companies to refurbish Lexmark's cartridges by refilling them and replacing the original chip with the SMARTEK chip. Those refilled cartridges were sold to consumers at a price lower than new Lexmark cartridges and also enabled them to satisfy Lexmark's access control system. To achieve interoperability with Lexmark's printers, the defendant copied Lexmark's copyrightable access control software to its own SMARTEK chips. The court rejected the Lexmark's violation of the DMCA claim because the access-control measure used by Lexmark was not deemed to be effective but no reference was made to the fact that human-access to Lexmark's copyrightable software did not take place.

[35] U.S. National Research Council, *The Digital Dilemma: Intellectual Property in the Information Age* (National Academy Press 2000).

[36] For a definition of "superdistribution" see Wikipedia <http://en.wikipedia.org/wiki/Superdistribution> where it noted that "[s]uperdistribution is an approach to distributing digital products such as software, videos, and recorded music in which the products are made publicly available and distributed in encrypted form instead of being sold in retail outlets or online shops." See also Still, Viveca, 'On the Theoretical Foundations of the Principle of Free Flow of Information as Applied to Copyright' Stockholm Institute for Scandinavian Law 1957-2010, 203 <http://www.scandinavianlaw.se/pdf/47-10.pdf> accessed 27 November 2010, at 211-212 where it is said that "[s]uperdistribution enables contracting both within business-to-business, business-to-consumers and consumers-to-consumers business models. Superdistribution systems enable extensive granular licensing throughout the whole value chain and life cycle of the content. It is highly

also feared that digital protection may lead to loss of historic records, the deliberate non-sharing of content, constraints on audience activities and access times, and general difficulties that may result as digital presentation comes to replace offline production as the means by which published information is made available. Apart from eroding the end users interests in interacting with the works, access controls might also enable copyright owners to leverage a "thin" copyright in informational works to protect public domain information.[37] Accessibility to existing information is often necessary for the creation of new innovation.

It is exactly this right not to have one's access controls circumvented that has been extensively criticised for its wide-ranging scope that can impede consumers from engaging in fair uses of copyrighted work.[38] While traditional copyright law gave the rightsholder a negative right to stop others from copying, in the context of DRM technologies the rightsholder has the power to control precisely how others use the work. Therefore, access controls often operate as use controls that dictate exactly how to use the work. Three times in the year 2000 litigation in the United States tested the legal use of circumvention technologies and access controls.[39] The Courts interpreted broadly the access right by not

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compatible and makes it possible to license different kinds of works for different media. Compared to the conventional copyright paradigm the possibility of contracting increases tremendously. But whereas contracting in the conventional copyright paradigm is done case by case and is based on negotiations, digital contracting is an automatic mass transaction system, where individual negotiation is rare or non-existent. Automatic contracting does normally only give the user the right to either accept or reject the terms of the contract, not a possibility to negotiate the terms. It is clear that the power to set the terms increases the power of copyright owners to the detriment of the user." See also Goldstein, Paul, *Copyright's Highway-From Gutenberg to the Celestial Jukebox* (revised ed. Stanford University Press 2003).

[37] Ginsburg, Jane C., 'Copyright and Control Over new Technologies of Dissemination' (November 2001) 101(7) Colum. L. Rev. 1613, 1635-1636.

[38] See, for instance, von Lohmann, Fred, 'Unintended Consequences: Twelve Years Under the DMCA' February 2010 <http://www.eff.org/files/eff-unintended-consequences-12-years.pdf> accessed 10 March 2011; Samuelson, Pamela, 'DRM {AND, OR, VS.} THE LAW' (April 2003) 46(4) Communications of the ACM 41; Seltzer, Wendy, 'The imperfect is the enemy of the good: anticircumvention versus open user innovation' (2010) 25 Berkeley Tech. L. J. 911; Brown, Ian, 'The evolution of anti-circumvention law' (2006) 20 (3) Int'l Rev. L. Comp. & Tech. 239; Samuelson, Pamela, 'Intellectual Property and the Digital Economy: Why the Anti-Circumvention Regulations Need to be Revised' (1999) 14 Berkeley Tech. L. J. 519; Lipton, Jacqueline D., 'Solving the digital piracy puzzle: disaggregating fair use from the DMCA's anti-device provisions' (Fall 2005) (19)1 Harv. J. L. & Tech. 112; Nimmer, David, 'A Riff on Fair Use in the Digital Millennium Copyright Act' (2000) 148 U. Pa. L. Rev. 673; Jackson, Matt, 'Using Technology to Circumvent the Law: The DMCA's Push to Privatize Copyright' (2001) 23 Hastings Comm. & Ent. L.J. 607.

[39] *RealNetworks, Inc. v Streambox, Inc.*, No. C99-2070P, 2000 U.S. Dist. LEXIS 889 (United States District Court for the Western District of Washington 18 January 2000); *Universal City Studios, Inc. v.*

requiring the existence of a nexus between circumvention of access controls and copyright infringement.

It is invariably the case that digital works must first be accessed in order to be used and/or copied and many technological measures that are part copy control and part access control. Since in the digital context data always has to be accessed before it can be read, the more extensive access controls will apply in considerably more circumstances than the copy controls. Where the two coexist, then the rightsholder will enjoy the benefit of the extra protection for access controls. If every act of rendering protected content is an act of accessing the content and the statute prohibits individual circumvention of access controls, the individual privilege to circumvent copy controls exists only in theory and there are serious implications for the ability of the user to use the work based on the copyright exceptions and engage in non-infringing uses.

The question whether the DMCA improperly altered the balance between authors and users has been argued in the affirmative by authors. They argue that the main problem is that the DMCA provisions control access to *the work* rather than access to *a copy of the work*. By way of contrast, traditionally, copyright only regulated access to copies. The author could decide not to disclose his work to the public but once disclosed and once lawfully acquired by the public then copyright allowed certain non-infringing uses. The imbalance consists of the fact that although rightsholders are allowed to impose technological measures that regulate access to the work the users of the work cannot defeat those measures in order to engage in non-infringing uses.[40]

Reimerdes, 111 F. Supp. 2d 294, (S.D.N.Y. 2000), *aff'd* sub nom. Universal v. Corley, 273 F.3d 429 (2d. Cir. 2001); *Universal City Studios, Inc. v Corley* 273 F.3d 429 (2d Cir. 2001).

[40] *Ginsburg* (fn 37) 1634-1635 (footnotes omitted) where it is argued that "[i]n an earlier era, copyright owners maintained control over access by exercising the public performance right and by withholding copies from the public. Today, technology has overtaken those techniques, so copyright owners respond with more technology. Arguably, the post-DMCA allocation is out of balance, because copyright owners may, with some exceptions protect the technological measures they employ to prevent access and copying, while users are not similarly free to defeat those measures. But users were not similarly free to access and copy works before: Copyright law is *supposed* to disable unauthorized copying, at least so long as that copying does not qualify as a fair use. As for access, the copyright law has neither compelled copyright owners to make a general disclosure of their works, nor traditionally obliged right holders to make their works, once disclosed, available in a way that would facilitate either access or copying, even for fair use purposes. That said, the DMCA, by enabling copyright owners to control access to "a work," rather than simply to a "copy" of a work, arguably limits use of a work (including fair and other non-infringing uses), even if the user has lawfully

The issues that followed the introduction of the digital video disc, DVD, in March of 1997 are indicative of the challenges posed by access controls. DVDs were themselves protected by a content scrambling system (CSS) that controlled access by restricting the play of all commercially released DVDs to licensed DVD players. The content of DVDs was scrambled, and the studios licensed DVD player manufacturers to build CSS descrambling software into their DVD players. The CSS license incorporated a host of conditions and specifications that the studios wanted to be sure were built into the players, and could easily be modified to mandate additional specifications as technology developed. Some of those specifications involved copy protection while others aimed at the maintaining of the status-quo of the pre-digital distribution market by incorporating, for example, to DVD players hardware or software that disabled them from playing DVDs released in different geographic regions. However, CSS did not prevent copying of DVDs and since CSS operated to restrict access (that is, play) infringers simply copied the DVDs without playing them. As a result, pirate DVDs that worked exactly like the authorized ones, complete with CSS access-protection appeared in the market.[41]

In the case of DVDs, consumers began to complain about being unable to watch a DVD legally purchased in one country on a DVD player purchased in another country. The motion picture industry took the position that since it controlled the content, it was entitled to condition access on any terms it chose, and since the new statute prohibited circumvention of access controls, any device or service that permitted consumers to evade those terms, regardless of reasons, violated the law. When a couple of amateurs reverse-engineered CSS DVD player software for the Linux operating system, and posted a CSS decryption program (dubbed "DeCSS") on the Internet, the motion picture industry filed three different lawsuits against sites posting the code or linking to sites that posted it, contending that the availability of the program raised a massive piracy threat.[42]

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acquired a copy of it. If the access control is "persistent," for example, if the technological measure requires the user to enter a password each time the user seeks to view a work that is made available only in access protected format, then every act of reading that work implicates the copyright owner's control of access."

[41] Litman, *Digital Copyright* (fn 1) 152.

[42] *DVD Copy Control Association v. McLaughlin*, Case No. CV 786804 (Cal Super. Santa Clara, January 20, 2000); *Universal City Studios v. Reimerdes*, 82 F. Supp. 2d 211 (SDNY); *Universal City Studios v. Hughes*, No. 300 CV 72 RNC (D.Conn., filed January 14, 2000).

In this context, the question is whether access means only initial access or whether it means continuing access. In the first case, DeCSS does not violate the anti-circumvention provisions of the DMCA since people that do have a DVD in hand are authorized to gain access to the content in order to view it while it is useless to people who do not already have a DVD. In the second case, irrespective of the reason behind access if access means each act of viewing, listening, or using the work, then DeCSS violates the anti-circumvention provisions. In the first judicial decision to interpret the DMCA, that court agreed with the industry in interpreting the law to bar circumvention of access controls for any reason except the narrow and conditional exceptions explicitly enumerated in the statute.[43] The defendants argued that creating and posting the DeCSS fell under the fair use exemption. The court agreed with the industry in that fair use was no defense to an anti-circumvention charge. This was a broad interpretation of an 'access right' resulting from the protection of access controls under the DMCA.[44]

Generally, technological protection measures distort the "copyright exceptions interface" and "frustrate the ability to benefit from exceptions specifying lawful acts under copyright law" and thus can result in a "digital lock-up."[45] The "digital lock-up" is defined as the situation where

> exceptions specifying lawful uses under copyright law are without practical effect either due to contractual restrictions which require any user to agree to terms restricting the lawful use or uses before copyright material can be used or because a rights-holder's technological measures frustrate or make it impossible to use copyright material in a way permitted by copyright law.[46]

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[43] *Universal City Studios v. Reimerdes*, 82 F. Supp. 2d 211 (SDNY).

[44] See *Universal Studios v. Reimerdes*, 111 F. Supp. 2d 294, 324 (S.D.N.Y. 2000) where it was stated that "The policy concerns raised by defendants were considered by Congress. Having considered them, Congress crafted a statute that, so far as the applicability of the fair use defense to Section 1201(a) claims is concerned is crystal clear. In such circumstances, courts may not undo what Congress has so plainly done by "construing" the words of the statute to accomplish a result that Congress rejected."

[45] Heide, Thomas, 'Copyright, Contract and the Legal Protection of Technological Measures-Not "the Old Fashioned Way": Providing a Rationale to the "Copyright Exceptions Interface"' (2003) 50 J. Copyright Soc'y U.S.A. 315, 316.

[46] Ibid. The issue of the creation of pay-per-use business models and the lack of alternatives is also discussed in Waelde, Charlotte, 'The Quest for Access in the Digital Era: Copyright and the Internet', (2001) 1 Journal of Information, Law & Technology < http://www2.warwick.ac.uk/fac/soc/law/elj/jilt/2001_1/waelde > accessed 10 June 2010, where in p.8 it is noted that the Librarian of Congress dealt with this issue in the First Triennial Review of

In a European context, Akester distinguished between privileged and non-privileged exceptions depending on whether their application prevails over the application of technological measures. Based on Article 6(3) entitled 'obligations as to technological measures' in the Explanatory Memorandum of the Commission's Proposed EUCD, it has been argued that the Commission's initial proposal was that all copyright exceptions should prevail over technological measures and not only the privileged ones.[47] In particular, Article 6(3) provided that

> [f]inally, the provision prohibits activities aimed at an infringement of a copyright, a related right or a *sui generis rights* in databases granted by the Community and national law: this would imply that not any circumvention of technical means of protection should be covered, but only those which constitute an infringement of a right, i.e., which are not authorized by law or by the author.[48]

However, this idea was rejected by the Council and was replaced by the primacy of privileged exceptions only over DRM since only these exceptions are based on core human rights. According to Akester, this is also confirmed by an argument *a contrario* based on Article 6(4)(4), according to which, when works are distributed over the internet rightsholders may prevent the exercise of all copyright exceptions (privileged exceptions included).[49]

According to Akester, privileged exceptions are linked to core freedoms and prevail over DRM.[50] In particular, the privileged exceptions are listed in Article 6(4) and refer to (a) reprographic copying, (b) copying by libraries, educational establishments or museums, (c)

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section 1201 of the DMCA. According to the Librarian of Congress (United States Federal Register, Rules and Regulations 37 CFR Part 201 'Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies: Final Rule' Vol. 65, No. 209, Friday, October 27, 2000, p.64564) "[t]he record in this proceeding does not reveal that 'pay-per-use' business models have, thus, far, created the adverse impacts on the ability of users to make non-infringing uses of copyrighted works that would justify any exemptions from the prohibition on circumvention. If such adverse impacts occur in the future, they can be addressed in a future rulemaking proceeding."

[47] Akester, Patricia, 'Technological accommodation of conflicts between freedom of expression and DRM: the first empirical assessment' 5 May 2009 <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1469412> accessed at 25 July2009, at 123.

[48] Commission (EC), 'Proposal for a Directive on the harmonization of Copyright and Related Rights in the Information Society' (Explanatory Memorandum) COM(97)628 final, 10 December 1997, Appendix C-Brief account of the legislative passage of the Information Society Directive; *Akester* (fn 47) 123.

[49] *Akester* (fn 47) 124.

[50] Ibid 123.

ephemeral recordings made by broadcasting organizations, (d) copying of broadcasts by non-commercial social institutions, (e) copying for illustration for teaching or scientific research, (f) copying for people with a disability and (g) copying for purposes of public security or for the proper performance or reporting of administrative, parliamentary or judicial proceedings. At the national level, Article 6(4) of the EUCD provides that Member States must promote voluntary measures taken by rightsholders to guarantee that beneficiaries of privileged exceptions are able to benefit from them and if this does not happen Member States have to take appropriate measures.[51]

At the EC level, Article 12 of the EUCD provides that every three years the European Commission must examine whether acts which are permitted by law are being adversely affected by the use of effective technological measures and, based on findings, submit a report on the application of the EUCD and proposals for its amendment.[52] Interestingly, beneficiaries of privileged exceptions are not given a right to circumvent. With regard to the private copying exception that, according to Akester, is not linked to a human right, Article 6(4)(2) provides that, in the absence of voluntary measures taken by rightsholders, Member States may take appropriate measures to ensure that rightsholders make available to users the means of benefiting from this exception.[53]

A survey conducted by Akester "filled an existing gap by assessing, through empirical lines of enquiry, (1) whether certain acts which are permitted by law are being adversely affected by the use of DRM and (2) whether technology can accommodate conflicts between freedom of expression and DRM."[54] While the circumvention of DRM was made illegal by the EUCD, it was attempted at the same time to ensure that the legal protection of DRM does not prevent certain entities such as, libraries, the visually impaired, teachers, students and researchers from carrying out certain acts of copying.

Data was collected with the British Library (BL), the Royal National Institute of Blind People (RNIB), the National Consumer Council (NCC), and the film lecturers and students/researchers community. The following findings regard the first research question:

[51] Ibid.

[52] Ibid.

[53] Ibid 147.

[54] Ibid 12.

The BL identified the following two problematic issues, namely a preservation issue and an issue regarding the degree of enjoyment of an exception, regarding BL's remote users. Moreover, the RNIB uncovered two main issues, namely a reported access problem for which scant evidence was provided by the RNIB and also the existence of voluntary measures to facilitate access to works by the visually impaired. However, the NCC which was concerned because the way DRM systems are being used is causing serious problems for consumers, including unreasonable limitations on the use of digital products and infringement of consumer rights was not able to provide any particular examples of DRM preventing the consumer from benefiting from an exception to copyright. Finally, data collection within the film lecturers and students/researchers community revealed that DRM protection of cinematographic works is impeding the extraction of portions of those works for educational use and that those difficulties result in isolated acts of self-help for academic and educational purposes.

It can be concluded that some beneficiaries of privileged exemptions (namely, the BL and the film lecturers and students/researchers community) are being adversely affected by the use of DRM. In some instances, beneficiaries report limited or no enjoyment of a privileged exception and it could be argued that this undermines the public interest considerations underlying the exception and distort user expectations.[55]

Arguably, there are three ways to legally access a DRM-protected work.[56] First, one can legally access a work when one has permission to do so. Second, one can legally access the DRM-protected work when no infringing conduct is involved due to the application of the copyright exceptions. However, in this case circumvention is not allowed even if the use is non-infringing and justified under the copyright exceptions. Therefore, Article 6(4)(1) does not apply because there is no "legal access" to the work. Third, there is the possibility to legally access the work by being granted permission to partially access the work. In that case further operations necessary in order to exercise copyright exceptions are not allowed.

If there are no alternative ways to access the work, e.g. if there are no non-restricted versions freely available in the market, then the "appropriate measures" provided for by Article 6(4)(1) of the EUCD may help beneficiaries who will still "need to secure some explicit

[55] Ibid 61-64.

[56] *Efroni* (fn 26) 375.

permission to cover additional uses to satisfy the "legal access" condition" in the relevant scenario.[57] However, it has been argued that given that "in most real-life situations beneficiaries will depend on *some* level of individual authorization" and given that "under the "legal access" clause, it is reasonable to assume the "appropriate measures" mechanism would be inapplicable in the case of access-control TPMs", one can conclude that the "appropriate measures" solution might be helpful only "in case the TPM in question could clearly be classified as a "rights control" protection measure".[58] Therefore, it has been argued that "the ground covered by Article 6(4)(1) is very narrow" since it does not cover access controls.[59]

Finally, the problems identified by Akester and the fact that the EUCD accepts and even supports the creation of pay-per-use business models is also obvious from Recital 35 and 36 of the EUCD. In particular, Recital 36 explicitly provides that fair compensation for rightholders may be provided by Member States "also when applying the optional provisions on exceptions or limitations which do not require such compensation." Recital 35 seems to recognize that there may be some instances where compensation is not necessary by providing that

> […] When determining the form, detailed arrangements and possible level of such fair compensation, account should be taken of the particular circumstances of each case. When evaluating these circumstances, a valuable criterion would be the possible harm to the rightholders resulting from the act in question. In cases where rightholders have already received payment in some other form, for instance as part of a licence fee, no specific or separate payment may be due. The level of fair compensation should take full account of the degree of use of technological protection measures referred to in this Directive. In certain situations where the prejudice to the rightholder would be minimal, no obligation for payment may arise.

It has been argued that the scope of this provision is narrow and does not deal adequately with the problem of a pay-per-use society since this provision would apply, for example,

> [...] where a library has taken on a subscription to an on-line journal in hard copy form, where the work is also available over the Internet. The Internet access might be considered as a part of the fee already paid for the hard copy, and no further payment should be due where access is

[57] Ibid 375-376.

[58] Ibid.

[59] Ibid.

> required either to exercise one of the limitations specified in the [...] Directive or, it would appear, more generally. [...] The EU has recognized that [the pay-per-use business] model may have undesirable implications, but in so doing has done little more than to make suggestions that in certain circumstances a charge should not be levied for access. It would appear that access to the public domain, and the price of that access, will be dictated by market forces."[60]

4.2.4 The EUCD's Unbalanced Provisions

Arguably, the objective of balancing the authors' and the users' interests was not achieved by the EUCD whose objectives were to adapt legislation on copyright and related rights to reflect technological developments, to transpose into Community law the main obligations arising from the two treaties on copyright and related rights adopted within the framework of the WIPO in December 1996 and to foster growth and innovation of digital content services in the European Union. The fact that this objective was not achieved was shown in a Study that was commissioned by the European Commission on the implementation of the EUCD by Member States to assist the Commission to evaluate whether the Directive remains the appropriate response to the continuing challenges faced by the stakeholders concerned, such as rightsholders, commercial users, consumers and educational and scientific users.[61] The particular Study also focused on the impact of the Directive on the development of online business models.

Because the time frame between implementation and assessment of the Directive was short the writers of the Study tried to predict, rather than actually describe, its impact based on its principal goals, as reflected in its legal history and recitals. The writers of the Study defined a benchmark test consisting of five criteria that are likely to influence market behavior by digital content providers and users and that directly relate to the quality of the legislative framework resulting from the Directive and correspond to the goals of the

[60] *Waelde* (fn 46) 9-10. Although the writer refers to the relevant Recital of the Draft EUCD, the same observations are still relevant since the content of the particular Recital has been transposed with no changes to the EUCD and, particularly, to Recitals 35 and 36 of the EUCD.

[61] Guibault, Lucie, Institute for Information Law, University of Amsterdam, The Netherlands (2007), 'Study on the implementation and effect in Member States' laws of the Directive 2001/29/EC on the Harmonisation of certain aspects of copyright and related rights in the information society, Final Report, Part I, The Impact of Directive 2001/29/EC on Online Business Models' European Commission DG Internal Market Study Contract No. ETD/2005/IM/D1/91<http://ec.europa.eu/internal_market/copyright/studies/studies_en.htm> accessed 15 June 2010.

European legislator. 'Balance' is one of the five criteria for which conclusions were reached in relation to economic rights, copyright limitations, DRM, and contracts.[62]

For the purposes of this work we will focus in the findings of the study regarding the relationship between DRM and balance. Before we examine the study results it is necessary to say what the EUCD provides in relation to exceptions to the anti-circumvention provisions. The protection of Article 6 covers certain devices, against certain acts, but recognizes certain exceptions, known as "exceptions to anti-circumvention." In particular, Article 6(4) subparagraph 1 stipulates that

> in the absence of voluntary measures taken by rightholders […] 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"

given that the beneficiary has "legal access" to the protected work.

Article 6(4)(2) stipulates that such measures may be taken in the case the beneficiary needs to benefit from the exception provided for in Article 5(2)(b) but only if reproduction for private use has not already been made possible by rightsholders "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." Article 6(4)(3) provides that both the technological measures applied voluntarily by rightsholders, "including those applied in implementation of voluntary agreements," and those "applied in implementation of the measures taken by Member States, shall enjoy the legal protection provided for in paragraph 1" against circumvention.

In particular, Article 5(2)(b) of the EUCD provides that private copying may be allowed "on condition that the rightholders receive fair compensation which takes account of the application or non-application of technological measures". Moreover, Article 6(4)(2) of the EUCD provides that Member States have the discretion and are not obliged to take measures to ensure that rightsholders make available to the beneficiary of the European private copy exception established in Article 5(2)(b) of the EUCD the means to benefit from it. Thus, it is implied that the private copy exception may be abolished altogether since neither the rightsholders nor the Member States are obliged to take measures to preserve

[62] The other four are 'consistency with norms', actual level of harmonization achieved', 'legal certainty', and 'sustainability.'

the exception in the case of digital works. What is more, Article 6(4)(4) of the EUCD provides that the reproduction for private use is strictly prohibited in the case of works that are "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" thus excluding the exercise of the particular exception in the majority of content transmissions over the internet.

Most importantly, Article 6(4)(4) clearly allows DRM users to deviate from legally regulated limitations under the terms of a contractual, interactive business relationship with a consumer and has been severely criticised by scholars. That practically means that a school teacher who wants to copy parts of an educational movie for her school class cannot raise the defence of "illustration for teaching" against the owner of the copyright in the movie and circumvent the DRM that protect it. The only solution in that case would be to refer to the obligation of the rightsholder to take voluntary measures to accommodate the needs of the teacher. If this is not enough then the relevant Member State shall take the appropriate measures to ensure that rightsholders make available to the school teacher the means of benefiting from the "illustration for teaching" exception. This would not have been the case if the DRM-protected work was streamed online through a conditional access service since in that case there is no obligation of the rightsholder to take voluntary measures to accommodate the needs of the school teacher.

Regarding the legal protection of DRM and balance, the study concluded that Article 6 of the Directive does not establish a correlation between the legal protection of DRM and acts of circumvention that result in copyright infringement.[63] Circumventing a DRM is always illegal, even if it is done in the context of exercising a copyright exception. Thus, the protection against the circumvention of DRM would seem to also extend to acts that are authorized by law, which goes well beyond the requirements of the WIPO Treaties. The anti-circumvention rules do not differentiate between reasons for applying or circumventing DRM and no act of circumvention is allowed, irrespective of the purpose to do so. This policy fails to recognize that certain acts of circumvention may be done for entirely legitimate purposes.

It has been argued that both the DMCA and the EUCD went too far by choosing the particular language regarding the anti-circumvention provisions contrary to the

[63] *Guibault* (fn 61) 100.

requirements of the WIPO Treaties.[64] In particular, the WIPO Copyright Treaty (WCT) in Article 11 entitled "obligations concerning Technological Measures" provides that contracting parties shall provide legal protection

> 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.

Contrary to the WCT, Sections 1201(a) and 1201(b) of the DMCA omit the requirement that the use of technological measures be "in connection with the exercise of their rights," and also omit the words "or permitted by law." Moreover, the EUCD provides that member states shall provide legal protection against the circumvention of technological measures and in Article 6(3) states that

> the expression "technological measures" means any technology, device or component that, in the normal course of its operation, is designed to prevent or restrict acts, in respect of works or other subject-matter, which are not authorized by the rightholder of any copyright or any right related to copyright as provided for by law or the sui generis [database] right […].

Thus, both the EUCD and the DMCA allow proponents of expanded copyright power to interpret these provisions to mean that, a new *sui generis* law has been created which protects against the circumvention of technological access controls even where these controls do not protect the exercise of their exclusive rights, the so-called "para-copyright".[65] As a result, rightsholders can now privately expand their control over non-infringing and lawful uses of their works.

If DRMs are deployed for reasons beyond the rationale underlying copyright protection, e.g. to protect market share or to create and protect de facto standards that shield against competition by locking consumers into vendors' device-content-ecosystems, their protection actually means protection of content providers' and technology developers' business models that lead to decreased usability of legally purchased content. Therefore, legislation should

[64] Mitchell, John T., 'DRM: The Good, the Bad, and the Ugly' Colleges, Code and Copyright: The Impact of Digital Networks and Technological Controls on Copyright: Publications in Librarianship no.57, chapter 8, American Library Association, Presented June 10-11, 2004, Symposium sponsored by the Center for Intellectual Property in the Digital Environment, University of Maryland University College, Adelphi, Maryland, USA <http://www.ftc.gov/os/comments/drmtechnologies/539814-00747.pdf> accessed 10 June 2007, at 18.

[65] Ibid.

differentiate between the various purposes of applying DRM and should not be used to protect commercial interests that are not related to copyright. Moreover, two other sources of potential imbalance are the facts that rights owners may prevent the exercise of certain limitations on copyright and related rights by means of DRM and that whenever DRM are applied to work that are made available on demand under agreed contractual terms, rights owners can exclude all limitations on copyright and related rights.[66]

It must be noted here that there is a close relationship between the anti-circumvention provisions of the EUCD and the Database Directive since the anti-circumvention provisions found in the EUCD also apply in the case of databases. In particular, Article 6(3) first sentence provides that

> [f]or the purposes of this Directive, the expression "technological measures" means any technology, device or component that, in the normal course of its operation, is designed to prevent or restrict acts, in respect of works or other subject-matter, which are not authorised by the rightholder of any copyright or any right related to copyright as provided for by law or the sui generis right provided for in Chapter III of Directive 96/9/EC.

Therefore, databases fall within the scope of DRM protection just like literary works, dramatic works, musical works, graphic works, cinematographic works etc do. Moreover, Article 6(4)(5) of the EUCD provides that "[w]hen this Article is applied in the context of Directives 92/100/EEC and 96/9/EC, this paragraph shall apply mutatis mutandis." Therefore, it is made clear that the anti-circumvention provisions of the EUCD apply in the case of databases as well and that the use of DRM may have an impact to the enforcement of the exceptions to the exclusive database right accordingly.

Regarding the impact of DRM on users, three sources of potential imbalance in the context of Article 6(4) were found as a result of the relevant study.[67] First, Article 6(1) does not even oblige rightsholders to ensure that the beneficiaries of the mandatory limitation of Article 5(1) of the Directive on transient and incidental acts of reproduction have the means to exercise it. Second, essential limitations based on free speech and other human rights, such as those permitting criticism, comment, news reporting, parody, scholarship, or research, are not mentioned in article 6(4) and rightsholders are left with the discretion to override them by using DRM. Third, Article 6(4)(4) rules out the application of this provision to works

[66] *Guibault* (fn 61) 100-101.

[67] Ibid 132-133.

or other subject-matter 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 affecting the balanced character of the Article to the detriment of the users.[68]

Moreover, it should be added here that there is another problem not mentioned in the Study but is identified in relation to the impact of DRM on users. This problem concerns the fact that the Member States are not obliged to take measures to safeguard the exception covering reproduction for personal use in Article 5(2)(b) but they simply have the discretion to take such measures if reproduction for private use has not already been made possible by rightsholders "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)" and at the same time "without preventing rightholders from adopting adequate measures regarding the number of reproductions" allowed.[69]

An effort to effectively enforce the traditional copyright exceptions against DRM is made by the insertion of Article 12 of the EUCD. The purpose of Article 12 is to introduce some monitoring systems acknowledging in this way that unrestricted use of rights management technologies could undermine copyright exceptions. In particular, the first paragraph of Article 12 stipulates that the European Commission is bound to examine "whether acts which are permitted by law are being adversely affected by the use of effective technological measures" every three years.[70] According to the third paragraph of this provision, a contact committee is established which would act as an advisor to the Commission for the monitoring of the impact of the Directive on the functioning of the Internal Market and with regard to the exchange of information "on relevant developments in legislation and case-law, as well as economic, social, cultural and technological developments."[71] The monitoring system is established with regard to all of the exceptions

[68] Ibid 133.

[69] Article 6(4)(2).

[70] See Article 12(1) of the EUCD.

[71] See Article 12(3) of the EUCD.

listed in Article 5 and not just with regard to the few exceptions listed under the system of Article 6(4).[72]

4.3 Impact of DRM to the Interpretation of the exclusive Rights

4.3.1 An Extensive Interpretation of the Making Available Right

An extensive interpretation of the making available right can be implied by the fact that the exceptions to this right can be enforced against DRM only in case the beneficiary of the exceptions has obtained legal access to the work. In particular, Article 6(4)(1) stipulates that where technological measures protected under the EUCD control access to and use of the protected work, only users who have obtained legal access to the protected work are effectively entitled to exercise copyright exceptions.[73] Thus, through the user's contractual consent and the operation of access-control technologies, lawful uses can be unlimitedly restricted since the user could actually give up his statutory usage rights by means of a combination of licenses and DRM in order to access the work.

Moreover, Article 6(4)(4) which stipulates that no exceptions shall apply in the case of DRM applied to works offered on-demand is problematic to the extent that digital distribution technology still develops and it is unclear what level of interactivity it involves. In particular, it is not clear what constitutes an "on-demand" service, i.e. delivery at a time and place individually chosen by the user that consists in pull rather than push technology, and there are no clear limits between the communication to the public right (mainly broadcasting) and

[72] However, this system has been criticized by legal scholars as ineffective. See, for instance, Mazziotti, Giuseppe, *EU Digital Copyright Law and the End-User* (Springer-Verlag Berlin Heidelberg 2008) 103 where it is argued that "[...] the monitoring system envisaged by Article 12 reveals a rather constructive approach. By leaving the door open for a revision of the Directive, it entrusts a committee of specialists the task of periodically observing how digital markets for copyrighted goods develop, and whether, in the context of these markets, users are allowed to engage effectively in acts permitted by law. [...] Nonetheless, Article 12 does not create special and faster procedures for the Commission to submit proposals for amendments to the Directive. Under the ordinary co-decision procedure, any initiative to amend the Directive may take several years to be enacted and enter into force. A more appropriate strategy to deal with the fast-developing nature of technological measures was adopted by Section 1201 of the 1998 DMCA, which amended the U.S. Copyright Act."

[73] Article 6(4)(4) provides that "[n]otwithstanding the legal protection provided for on paragraph 1, in the absence of voluntary measures taken by righholders, 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 form that exception or limitation, to the extent necessary to benefit from that exception or limitation and where that beneficiary has legal access to the protected work or subject-matter concerned."

the making available right. For example, internet radio may transmit near-on-demand music that is very similar to 'true' music on demand because it is transmitted at very short intervals and consists of multi-channel broadcasts with highly specific content per channel (e.g. only certain artists, or a genre, or period music) or it may transmit in a more simple way displaying no interactivity at all.[74] Moreover, podcasting, that is "a type of digital media consisting of an episodic series of files (either audio or video) subscribed to and downloaded through web syndication",[75] is difficult to qualify as making available because "[u]nlike webcasting it is not merely streaming (ephemeral, not destined to be saved) content".[76] With regard to whether podcasting could qualify as broadcasting, it has been argued that "podcasts may be automatically distributed to subscribers using automated feed, thus showing characteristics of "push technology" associated with broadcasting, or 'linear' services in terms of the proposed revised Television without Frontiers Directive."[77]

It has been argued that the interactivity levels also differ in the case of personalised or searchable online services. The former allow listeners to create play-lists according to their own preferences, while the latter allow users of webcasting services, for example, to search for individual artists or genres. Tiscali's Jukebox service, for example, delivered music streams according to individual users' tastes. However, the European recording industry claimed that Tiscali did not have a license to offer such 'interactive' services and the Internet Service Provider stopped offering the particular service shortly after its market introduction.[78] For that reason, the issue of the delineation of the scope of the communication to the public right (mainly broadcasting) and the making available right is

[74] *Guibault* (fn 61) 28.

[75] The definition was taken from Wikipedia <http://en.wikipedia.org/wiki/Podcast> accessed December 30, 2011, where it is also noted that "[t]he word is a neologism derived from "broadcast" and "pod" from the success of the iPod, as podcasts are often listened to on portable media players." "Web syndication" is also defined in Wikipedia as "a form of syndication in which website material is made available to multiple other sites. Most commonly, *web syndication* refers to making web feeds available from a site in order to provide other people with a summary or update of the website's recent content […]. The term can also be used to describe other kinds of licensing website content so that other websites can use it".

[76] *Guibault* (fn 61) 28.

[77] Ibid.

[78] Ibid 28-29.

very important. According to the Explanatory memorandum to the EUCD, near video-on-demand, pay-per-view and pay-TV are not acts of making available.[79]

4.3.2 An Extensive Interpretation of the Reproduction Right

Article 2 of the EUCD provides for a rather broad reproduction right for all categories of works whether transient or permanent by providing that "Member States shall provide for the exclusive right to authorise or prohibit direct or indirect, temporary or permanent reproduction by any means and in any form, in whole or in part: (a) for authors, of their works; […]." Article 5(1) provides an exception to this right for purposes of transient or incidental copying. In particular, Article 5(1) provides that

> [t]emporary acts of reproduction […], which are transient or incidental [and] and integral and essential part of a technological process and whose sole purpose is to enable: (a) a transmission in a network between third parties by an intermediary, or (b) a lawful use of a work or other subject-matter to be made, and which have no independent economic significance, shall be exempted from the reproduction right […].

The EUCD does not refer to the person of the user, but to the actual use of the work while on the contrary the Computer Programs and Database Directives refer to the lawful acquirer/user of a work.[80] It was already mentioned that according to Recital 33 of the EUCD, "a use should be considered lawful where it is authorized by the right holder or not restricted by law."[81] This definition of "lawful use" would therefore cover uses that are expressly or implicitly authorized by the rightsholder. Arguably, offering a protected work on a website without any restrictions could be interpreted as a form of authorization by the rightsholder to download his work.

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[79] *Explanatory Memorandum to the EUCD* (fn 48) 26 where it is noted that "[t]he element of individual choice hints at the interactive on-demand nature of access. The protection offered by the provision thus does not comprise broadcasting, including new forms of it, such as pay-TV or pay-per-view, as the requirement of "individual choice" does not cover works offered in the framework of a pre-defined programme. Similarly, it does not cover so-called near-video-on-demand, where the offer of a non-interactive programme is broadcast several times in parallel at short intervals. Furthermore, the provision does not cover mere private communication, which is clarified by using the term "public"." See also Baratsits, Alexander, 'Copyright in the Digital Age-Exceptions and Limitations to Copyright and Their Impact on Free Access to Information' (August 2005) <http://www.rechtsprobleme.at/doks/baratsits-copyright-digital-age.pdf> accessed 20 June 2008, at 27 where it is stated that web-casting, pay-per-view, or near-on-demand services do not constitute on-demand services and therefore Article 6(4)(4) does not apply to them.

[80] See Recital 13 and Article 5(1) of the Software Directive and Articles 6(1) and 8 of the Database Directive.

[81] See Part I, Chapter 3, Section 2.1.1.

The question is whether the expression 'lawful use' in the EUCD extends to uses relying on the limitations.[82] According to Bechtold, if a Member State has implemented a copyright limitation of those listed in Articles 5(2) and 5(3), and a transient copy is made to enable a user to benefit from this limitation, such reproduction does not violate the right of reproduction since the copy is not restricted by law.[83] Thus, Article 5(1)(b) ensures that the right of reproduction cannot be used by rightsholders to undermine the copyright limitations listed in Articles 5(2) and (3) of the EUCD.[84] Heide also suggests that the term 'lawful use' "could be interpreted to extend to the reproduction involved in benefiting from various limitations and exceptions to copyright, but only to the extent that the conditions of Article 5(1) are met."[85] He supports his opinion by referring to Recital 33 but he also wonders what will happen if an exception for a transformative or productive use is involved, that is "would the exemption be sufficient to create an intermediate, working copy used in creating the competing work? Additionally, could the resulting competing work be said to have "no economic significance"?"[86]

Even if it is accepted that lawful use covers, among others, the copyright exceptions, the enforceability of lawful use can be restricted by DRM systems which bar access to the protected work to all unauthorized users, regardless of their lawful or unlawful purposes. By providing that the beneficiary of an exception or limitation shall have legal access to the protected work, the wording of Article 6(4) of the EUCD has conferred legitimacy to unlimited restrictions of lawful uses achieved through the user contractual consent and the operation of access-control technologies.[87] In particular, Article 6(4)(1) stipulates that where

[82] See Part I, Chapter 3, Section 3.2.1.1 above.

[83] Bechtold, Stefan in Dreier, Thomas & Hugenholtz, Bernt T. (eds), *Concise European Copyright Law*, Concise IP Series vol. 2 (Alphen aan den Rijn: Kluwer Law International 2006) 373.

[84] Hugenholtz, Bernt et al., Institute for Information Law, University of Amsterdam, The Netherlands 2006, 'The Recasting of Copyright & Related Rights for the Knowledge Economy' (final report) European Commission DG Internal Market Study Contract No. ETD/2005/IM/DI/95 <http://ec.europa.eu/internal_market/copyright/studies/studies_en.htm> accessed 15 February 2011, at 72-73.

[85] Heide, Thomas, 'Copyright in the E.U. and United States: what "access right"?' (2001) 23(10) EIPR 469, 473.

[86] Ibid fn 25 in p.473.

[87] Article 6(4)(4) provides that "[n]otwithstanding the legal protection provided for on paragraph 1, in the absence of voluntary measures taken by righholders, including agreements between rightholders and other parties concerned, Member States shall take appropriate measures to ensure that

technological measures protected under the EUCD control access to and use of the protected work, only users who have obtained legal access to the protected work are effectively entitled to exercise copyright exceptions. Therefore, the user could actually give up his statutory usage rights by means of a combination of licenses and DRM in order to access the work.

Article 5(2) (3) also contain exceptions to the reproduction right. Article 5(2)(a), in particular, provides for a reprography exception while Article 5(2)(b) provides a reproduction for private use exception

> […] in respect of reproduction on any medium made by a natural person for private use and for ends that are neither directly not indirectly commercial, on condition that the rightholders receive fair compensation which takes account of the application or non-application of technological measures […] to the work or subject-matter concerned; […]

Regarding the remaining exceptions in Article 5(2) and (3), these do not fall within the scope of lawful personal use so their legal treatment against DRM will not be examined here (although, in general, it can be said that the pre-requisite of lawful access to the work in fact means that the user may have to give up his statutory usage rights by means of a combination of licenses and DRM in order to access the work, as discussed earlier).

As concerns the enforcement of the reproduction for private copying exception against DRM, Article 6(4)(2) provides that

> [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.

Arguably, this provision favours an extensive interpretation of reproduction for two reasons. First, it does not oblige Member States to take measures in respect of a beneficiary of this exception but simply leaves it to their discretion. Second, it allows rightholders to adopt adequate measures regarding the number of reproductions allowed in accordance with

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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 form that exception or limitation, to the extent necessary to benefit from that exception or limitation and where that beneficiary has legal access to the protected work or subject-matter concerned."

Article 5(2)(b) and (5) (paragraph 5, in particular, provides that the exception for private use shall not infringe the three-step test).

The EUCD does not provide expressly that contractual provisions which restrict uses permitted by law should be deemed null or void. In particular, the EUCD does not oblige the Member States to create a contract interface in order to preserve the effectiveness of usage rights and to forbid the contractual overriding of copyright exceptions. On the contrary, Recital 45 of the EUCD practically encourages such contractual overriding by providing that "[t]he exceptions and limitations referred to in Article 5(2), (3), and (4) should not, however, prevent the definition of contractual relations designed to ensure fair compensation for the rightholders insofar as permitted by national law." Not even the copyright limitation contained in Article 5(1), namely the copyright exemption of digital temporary reproduction for mere purposes of communication, which is the only limitation that Member States are compelled to transpose into national law, enjoys an imperative nature against contractual provisions.[88]

Finally, as concerns the exceptions to the reproduction right, although the adoption of a balanced notion of lawful use and of an exception for reproduction for private use may imply that Article 5 caters for lawful personal use, this Article has been criticized for not liberalizing to a great extent the exceptions mechanism. The main reason for this criticism is that it provides that only by means of exceptions listed therein can deviations from the general principle that "everything is reproduction" be allowed.[89]

4.3.3 The Replacement of Equitable Remuneration by Fair Compensation

According to the EUCD, Member States should grant "fair compensation" to copyright holders in order to recognise the private copying exception. The Directive does not explicitly refer to levies as a form of "fair compensation" but it seems that it prefers the use of DRM instead since Article 5(2)(b) instructs Member States that in calculating the amount of "fair

[88] On the contrary, the Software and the Databases Directive reject the contractual overridability of exceptions as an option. In particular, Article 5(2) of the Software Directive states that "[t]he making of a back-up copy by a person having a right to use the computer program may not be prevented by contract insofar as it is necessary for that use" and Article 9(1) that "Any contractual provision contrary to Article 6 or to the exceptions provided for in Article 5(2) and (3) shall be null or void." Article 15 of the Database Directive provides that "Any contractual provision contrary to Article 6(1) and 8 shall be null and void."

[89] *Efroni* (fn 26) 243-244.

compensation" for acts of digital private copying the "application or non-application of technological measures" must be taken into account. In other words, as DRM is viewed as a tool to overcome market failure and as it gradually displaces private copying, levies are to be phased out.

In the context of the EUCD, 'equitable remuneration' is given in the case of analogue copying for private use and in the case of digital copying for private use on condition that no technological measures are applied.[90] On the contrary, 'fair compensation' for digital reproduction is given when technological protection measures have been applied and the work is distributed in a digital form, e.g. a DVD, or when the work is distributed online on request.[91] In the first case Article 6(4)(2) of the EUCD applies while in the second case Article

[90] Recital 38 of the EUCD provides that "Member States should be allowed to provide for an exception or limitation to the reproduction right for certain types of reproduction of audio, visual and audio-visual material for private use, accompanied by fair compensation. This may include the introduction or continuation of remuneration schemes to compensate for the prejudice to rightholders. Although differences between those remuneration schemes affect the functioning of the internal market, those differences, with respect to analogue private reproduction, should not have a significant impact on the development of the information society. Digital private copying is likely to be more widespread and have a greater economic impact. Due account should therefore be taken of the differences between digital and analogue private copying and a distinction should be made in certain respects between them." See also Recital 39 of the EUCD which provides that "[w]hen applying the exception or limitation on private copying, Member States should take due account of technological and economic developments, in particular with respect to digital private copying and remuneration schemes, when effective technological protection measures are available. Such exceptions or limitations should not inhibit the use of technological measures or their enforcement against circumvention."

[91] At this point reference should be made to case C-387/09 *EGEDA v Magnatrading SL* (O J C 312/18, 19.12.2009) in the proceedings of which a reference for a preliminary ruling was made to the ECJ. Although this reference for a preliminary ruling was not maintained in the end it is worth mentioning it since it concerned the interpretation of the notion of fair compensation for private copying. The Court asked, in particular, whether the concept of fair compensation in Article 5(2)(b) is a new Community concept which must be interpreted in the same way in all the Member States or not. Depending on whether the reply to this question would be negative or affirmative, several other questions followed. It also interesting to say that this case had been stayed pending the judgment in case C-467/08 *Padawan SL v Sociedad General de Autores y Editores de España (SGAE)* (European Court reports 2010 Page I-10055) and following the judgment in that case it was decided that the referral for a preliminary ruling should not be maintained. This development leads us to examine the decision in case C-467/08 which apparently satisfied the national judge and answered his questions that arose during the proceedings in case C-387/09. In that case it was clarified that the concept of fair compensation is an autonomous concept of EU law which must be interpreted uniformly in all Member States and which must be regarded as recompense for the harm suffered by the author from the reproduction of his protected work without authorization. It was also decided that the application of the "private copying levy" (for the purposes of financing fair compensation) to reproduction equipment acquired by undertakings and professional persons for purposes other than private copying is not consistent with EU law. Thus, it was impliedly decided that any national equitable remuneration systems should be in accordance with the newly introduced concept of fair compensation.

6(4)(4) applies. Fair compensation replaces reasonable remuneration in relation to digital works and denotes the shift in the law's approach regarding private and personal use. Essentially, the Directive provides that the rightsholder shall be compensated for the loss arising from the exempted use while in the past the rightsholder had to be remunerated in exchange for allowing a private and personal use of the work in the context of the copyright bargain.[92]

Article 5(2)(a) of the EUCD provides that

> Member States may provide for exceptions or limitations to the reproduction right […] 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.

That the reprography provision promotes fair compensation instead of equitable remuneration can be implied from the fact that the particular provision takes account of the possible application of technological protection measures on the work provided for in Article 6(4)(1). In particular, Article 6(4)(1) provides that

> [n]otwithstanding 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) [...] the means of benefiting from that exception or limitation, to the extent necessary to benefit from that exception or limitation and where that beneficiary has legal access to the protected work or subject-matter concerned.

[92] The Provincial Court of Barcelona (Spain) made a reference for a preliminary ruling to the ECJ in the context of a dispute between the major Spanish collective rights management entity and a distributor of blank digital storage devices. The question raised by the Spanish Court of Appeal was whether a professional use of digital equipment, devices and media is subject to the fair compensation obligation. The ECJ delivered a judgment regarding fair compensation for the private copying exception in Case C-467/08 *Sociedad General de Autores y Editores v Padawan SL* [2011] E.C.D.R. 1 ECJ. In this important judgment the ECJ said in paras 40-42, 46, 49 that It was clear from recitals 35 and 38 to the Directive that the fair compensation were linked to the harm caused to the author by the reproduction for private use of his protected work without his authorisation, and that the EU legislature intended to establish a specific compensation scheme triggered by the existence of harm to the rightholders, which gave rise in principle to the obligation to compensate them. Therefore, fair compensation in Article 5(2)(b) should be calculated on the basis of the criterion of the harm caused to authors by the introduction of the private copying exception. For an analysis of the case see Case Comment by Batchelor, Bill et al., 'Copying levies: moving towards harmonisation? The European Court rules on the concept of fair compensation for rightholders' (2011) 32(6) ECLR 277. See also Minero, Gemma, 'Fair compensation for the private copying exception: private use versus professional use' (2011) 33(7) EIPR 465.

Similarly, Article 5(2)(b) of the EUCD provides that

> Member States may provide for exceptions or limitations to the reproduction right […] in the following cases:[...] (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.[93]

If technological protection measures have been applied, then rightsholders can either totally prevent reproduction for private use, or they can turn reproduction for private use into a new way of exploitation of the work. In particular, in the case of on-demand services, rightsholders can either totally prevent the reproduction for private use or turn it into a new way of exploitation of the work, according to Article 6(4)(4) which provides that

> [t]he 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.

The reproduction for private use is also transformed into a new way of exploiting the work in the case of Article 6(4)(2) which only applies in the case digital works are distributed offline embodied in material carriers and which provides that

> [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.

Generally, the term 'compensation' instead of the tern 'remuneration' is closer to an economic analysis of intellectual property rights and far from a system of exclusive

[93] At this point reference should be made to Cases C-457/11 to C-460/11 *VG Wort and Others* O J C 362/10-13, 10.12.2011 (pp.15-18). The Courts in these cases addressed several questions to the ECJ. Amongst others they asked whether the possibility of applying technological measures under Article 6 of the EUCD abrogates the condition relating to fair compensation within the meaning of Article 5(2)(b) of the EUCD and whether the condition relating to fair compensation (Article 5(2)(a) and (b) of the EUCD) and the possibility thereof is abrogated in case the rightholders have expressly or impliedly authorized reproduction of their works. The answers to these questions will help clarify the relationship between fair compensation and application of TPMs and fair compensation and authorized reproduction of works. Although the answer to these questions will not reverse the tendency to replace equitable remuneration by fair compensation, it can lead to a balanced application of the fair compensation principle in the case of DRM-protected works and private copying exception.

intellectual property rights. According to such an approach, the motives to create (utilitarian approach) are more important than an exclusive right given to the author (natural law approach). Arguably, such an approach is problematic both for the author and for the user of the work. With regard to the author, such an approach is problematic because it seems that it favours a utilitarian approach according to which he does not have an exclusive right but he is only compensated for his efforts in order to carry on creating. With regard to the user, such an approach is problematic because the private copying exception becomes a new way of exploitation and loses the character of a "privilege" preserved traditionally to him.

4.4 The Relationship between DRM protection and Copyright Exceptions in EU law

4.4.1 Areas of Overlap between the EUCD and the Conditional Access Directive and between the EUCD and the Software Directive

The EUCD's scope of application overlaps both with the Software Directive's and the Conditional Access Directive's scope of application. As concerns the simultaneous application of the EUCD and the Software Directive, arguably, this is an issue when the same DRM that prevents unauthorised access to or use of the code that generates the output of a copyright work (technological access) also serves the function of impeding access to or use of the work as such (human access). In that case, to the extent the DRM regulates technological access the Software Directive should apply and to the extent that the DRM regulates human access the EUCD should apply. However, in the case where a DRM regulates both technological and human access questions are raised as to which anti-circumvention provisions apply, that is the anti-circumvention provisions of the Software Directive or the anti-circumvention provisions of the EUCD.

Apart from the overlap between the EUCD and the Software Directive, there is also a potential overlap between the EUCD and the Conditional Access Directive. The services to which the Conditional Access Directive applies are mainly pay-TV, video-on-demand and electronic publishing. Even if Recital 21 of the Conditional Access Directive and Recital 60 of the EUCD provide that the two directives are without prejudice to the application of each other, they may overlap in practice. The main difference between the protection of the Conditional Access Directive and the EUCD is that the latter protects access to works or other subject matters while the former protects access to services. However, in the case of

an online access to a database, the service is the protected matter and therefore the two Directives overlap.[94]

The Conditional Access Directive protects the remuneration of service providers and not authors' rights. But the remuneration of service providers includes royalties for broadcasting copyrighted works. Moreover, service providers are often rightsholders, or directly linked with them. For example, Apple iTunes' DRM system is covered by the EUCD. However, Apple is not the rightsholder of the works concerned but is just the service provider selling music on behalf of the rightsholders. The DRM system indirectly protects Apple's service because if rightsholders' works are not protected, the service disappears since the rightsholders will not license their works to Apple for the provision of the service. The main difference between Apple iTunes and Sky TV's pay-TV, which is a conditional access service that broadcasts copyrighted movies, is probably that Apple's DRM does not only protect access to the service, but also digital reproduction of works obtained via the service. Since when DRM is used to control access to services linked with copyrighted works or databases, both the Conditional Access Directive and the EUCD apply, the protection afforded by the Conditional Access Directive could have been extended to any DRM system, whether it protects a work or a mere service. Accordingly, it would have been unnecessary to introduce the anti-circumvention legislation in the EUCD.[95]

The relationship between the EUCD and the Conditional Access Directive was somehow clarified in the Explanatory Memorandum to the Proposal for the EUCD which provided that

> It should be stressed that such legal protection is complementary with the initiative already proposed by the Commission in the field of the protection of conditional access services. This latter proposal addresses in fact harmonized protection against unauthorized reception of a conditional access service, which may or may not contain or be based upon intellectual property, whilst this proposal deals with the unauthorized exploitation of a protected work or other subject matter, such as unauthorized copying, making available or broadcasting.[96]

[94] Dusollier, Séverine 'Electrifying the fence: the legal protection of technological measures for protecting copyright' (1999) 21(6) EIPR 285, 290.

[95] For this example see ibid 294.

[96] *Explanatory Memorandum* (fn 48) 33.

A case that explicitly illustrates the link between the two Directives is the *Union of European Football Associations (UEFA) and British Sky Broadcasting Limited v Euroview Sport Ltd.*[97] In that case the plaintiff, UEFA, sold media rights to the UEFA Champions League and the UEFA League to, amongst others, Sky which then provided its paying customers with decoder cards enabling them to receive the relevant broadcasts. The defendant, Euroview Sport Ltd, had the idea to import foreign decoder cards, decoder boxes and other equipment which could be used to view the matches live and sold them to customers, including pubs, at lower prices than a Sky commercial subscription.

Given that copyright works were included in the satellite broadcast which was in an encrypted form, the British Court asked the CJEU for a preliminary ruling on, amongst others, whether (a) encryption constitutes "technological measures" within the meaning of Article 6(3) of the EUCD and, if it does, whether such measures are "effective"; (b) whether the use of a decoder card, which has been issued by the organization making the satellite broadcast to a customer pursuant to a subscription agreement in a first Member State in order to obtain access in a second Member State to the broadcast and the copyright works included in the broadcast, amounts to "circumvention" of such technological measures in circumstances where the broadcasting organization does not consent to such use of the decoder card; (c) whether a trader who imports decoder cards into the second Member State and advertises them for sale facilitates circumvention by trafficking in circumvention devices; (d) whether the above issues are excluded from the scope of Article 6 of the EUCD by reason of the fact that they are more specifically covered by the Conditional Access Directive.

However, on 11 January 2012, this reference was withdrawn following a letter of 24 October 2011 of the CJEU which included a copy of the judgment in Joined Cases C-403/08 and C-429/08 *Football Association Premier League and Others* [2011] ECR I-0000 and requested the national court to inform it whether, in the light of that judgment, it wished to maintain the reference. The latter answered that it did not wish to maintain the reference.[98] The

[97] [2010] EWHC 1066 (Ch).

[98] See Case C-228/10 *Union of European Football Associations (UEFA) and British Sky Broadcasting Limited v Euroview Sport Ltd*. The issues addressed to the CJEU for a preliminary ruling are available online at the UK Intellectual Property Office's website at <http://www.ipo.gov.uk/pro-policy/policy-information/ecj/ecj-2010/ecj-2010-c22810.htm> accessed 1 November 2012. For the order of the President of the Court requesting the removal from the register on 11 January 2012 see < http://curia.europa.eu/juris/document/document.jsf;jsessionid=9ea7d2dc30dbec6fea77461c4e35be

Joined Cases C-403/08 and C-429/08 concerned the marketing and use in the United Kingdom of decoding devices which give access to the satellite broadcasting services of a broadcaster, are manufactured and marketed with that broadcaster's authorization, but are used, without its permission and against its will, outside the geographical area for which they have been issued. As concerns the judgment in Joined Cases C-403/08 and C-429/08 *Football Association Premier League and Others* [99] it was decided, among others, that

> Article 2(a) of [the EUCD] must be interpreted as meaning that the reproduction right extends to transient fragments of the works within the memory of a satellite decoder and on a television screen, provided that those fragments contain elements which are the expression of the authors' own intellectual creation, and the unit composed of the fragments reproduced simultaneously must be examined in order to determine whether it contains such elements.

Moreover, the acts of reproduction at issue in Case C-403/08, which are performed within the memory of a satellite decoder and on a television screen, are covered by the exception laid down in Article 5(1) of the EUCD. Apart from the reproduction right, the communication to the public right (Article 3(1) of the EUCD) also applies in the case at issue since the transmission of the broadcast works, via a television screen and speakers, to the customers present in a public house, constitutes communication to the public within the meaning of the EUCD. As concerns the interpretation of "illicit devices", the question was whether Article 2(e) of the Conditional Access Directive also covers foreign decoding devices, including those procured or enabled by the provision of a false name and address and those used in breach of a contractual limitation permitting their use only or private purposes. Article 2(e), in particular, provides that "illicit device shall mean any equipment or software designed or adapted to give access to a protected service in an intelligible form without the authorisation of the service provider". The CJEU held that the particular Article does not cover

> foreign decoding devices (i.e. devices which give access to the satellite broadcasting services of a broadcaster, are manufactured and marketed with that broadcaster's authorization, but are used, in disregard of its will, outside the geographical area for which they have been issued), foreign decoding devices procured or enabled by the provision of a false name and address or foreign decoding devices which have been used in breach

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56e22d84612995.e34KaxiLc3qMb40Rch0SaxuLax50?text=&docid=118462&pageIndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=1821178> accessed 1 April, 2013.

[99] [2011] ECR I-0000.

> of a contractual limitation permitting their use only for private purposes.[100]

Finally, it was asked whether Article 3(2) of the Conditional Access Directive precludes national legislation which prevents the use of foreign decoding devices, including those procured or enabled by the provision of a false name and address or those which have been used in breach of a contractual limitation permitting their use only for private purposes. Article 3(2), in particular, provides that Member States may not restrict the free movement of protected services and conditional access devices for reasons falling within the field coordinated by the Conditional Access Directive, without prejudice to the obligations flowing from Article 3(1). The Court answered that the particular Article does not preclude such national legislation.[101] Thus, overall, although there is not clear answer to the original reference of the UK Court, this discussion shows that there is a close and sophisticated interplay between the provisions of the Conditional Access Directive and of the EUCD.

4.4.2 The Differing Approaches of the EUCD, the Software Directive and the Conditional Access Directive

Notwithstanding their overlapping scope of application, the relationship between anti-circumvention provisions and copyright exceptions differs considerably between the EUCD, the Software Directive and the Conditional Access Directive. Such a fragmented approach to the same issue creates uncertainty for the users and results in their unfair treatment since different outcomes may arise in similar situations.

In particular, although under the EUCD the circumvention of a DRM is in every case prohibited this not so under the Software Directive. In the context of the Software Directive, the protection of DRM applied to software concerns only trafficking and not circumvention, according to Article 7 of the Software Directive which provides that

> 1. Without prejudice to the provisions of Articles 4, 5 and 6, Member States shall provide, in accordance with their national legislation, appropriate remedies against a person committing any of the following acts: […] (c) any act of putting into circulation, or the possession for commercial purposes of, any means the sole intended purpose of which is to facilitate the unauthorized removal or circumvention of any technical device which may have been applied to protect a computer program. […]

[100] See p.37 para.1 of the CJEU decision.

[101] See p.38 para.2 of the CJEU decision.

Moreover, the Explanatory Memorandum of the Software Directive Part II Article 6(2) stipulates that

> many programs are marketed with a technical protection system which prevents or limits their unauthorized use or reproduction. If such systems are used by rightholders to protect their exclusive rights, it should not be legally possible to remove or circumvent such systems without the authorization of the rightholder. The term 'deal with' should be taken in this context to include sale, offer or advertise for sale, transmit, store or receive such means.

Therefore, arguably, the lawful user is allowed to circumvent a DRM applied in software in order to engage into lawful activities. The term "unauthorized" both in Article 7 and in the Explanatory Memorandum implies that copyright or contract law gives the rightsholder the right to prohibit circumvention on a basis other than the anti-circumvention legislation. It also implies that there should be a link between copyright infringement and infringement of the anti-circumvention provisions and, thus, exceptions to copyright should be regarded as prevailing over the anti-circumvention norms established by the Software Directive. In other words, circumvention is prohibited only if a use is unauthorized by the rightsholder based on copyright or contract law and not by the anti-circumvention provisions. If this is the case then it comes naturally that circumvention is allowed in case exceptions recognized by copyright and contract law can apply in the particular unauthorized by the rightsholder use.

The fact that Article 7(1)(c) of the Software Directive, as implemented in the United Kingdom by means of Section 296 of the Copyright Designs and Patents Act of 1988 (CDPA), allows circumvention where the means of circumvention are used only in order to carry out non-infringing acts was also confirmed by the High Court of England & Wales in *Sony v Ball.*[102] In that case, Sony, the claimant, was designing and manufacturing game consoles and computer games for playing on its consoles which were sold in many places of the world, England included. In particular, this case concerned the Play-Station 2 console (PS2 console). PS2 computer games were protected by copyright that belonged to Sony. Moreover, the PS2 consoles and games were designed to work together since they contained a two part copy protection system one part of which was embedded in the console and the other in the CD or DVD carrying the PS2 game. The PS2 consoles were playing only games manufactured by Sony which had embedded unique codes and not copies of games made on standard copying equipment. Moreover, PS2 consoles were designed to play through standard

[102] *Kabusbiki Kaisha Sony Computer Entertainment Inc. v Gaynor David Ball and others* [2004] EWHC 1738 (Ch) 19 July 2004. Copyright Designs and Patents Act 1988 (CDPA).

television systems. Since there are different signal systems used for color television transmission and reception in different countries a PS2 console designed to be attached to European televisions was producing a signal which was recognized by them but not recognized by televisions recognizing different signals. For example, a European PS2 game was not playable on a different region's console.

The defendants were manufacturing and selling a chip, called Messiah 2, which could be fitted into a PS2 console and make the console believe that the material carrier of the game, CD or DVD, had the necessary embedded codes. As a result, PS2 consoles were able to play not only authentic PS2 games but also unauthorized games and games that were designed to play in consoles operating in different regions of the world. Based on these facts, Sony alleged that the defendant breached Sections 296, 296ZA, ZD and ZF of the CDPA. In his turn, the defendant argued that there was no breach of Sony's rights because, among others, he did not know or had reason to believe that the Messiah 2 chip was going to be used to make infringing copies.

In *Sony v Ball*, the argument of the claimant according to which

> […] the legislative intent behind [the original] s 296 CDPA 1988 [and the Software Directive] is to catch those who know or have reason to believe that the equipment in which they are trading is to be used to overcome copy-protection. As such, whether or not the use of the equipment causes infringement of copyright and, if so, is of little significance[103]

was rejected. On the contrary, the Court was of the opinion that

> [t]his construction would amount to ignoring the words "will be used to make infringing copies" in the subsection. Had the legislature wished to prohibit trade in devices which overcome copy-protection without regard to whether that assisted copyright infringement, it could easily have done so. In this section of the Act it did not.[104]

Moreover, Section 296 required knowledge on behalf of the person who traded in circumvention devices that these devices will be used for unauthorized purposes. The defendant argued that he could not possibly know where his devices will end up if they are exported and whether they will be used for infringing purposes.[105] In his turn, the claimant

[103] Ibid §20.

[104] Ibid §21.

[105] Ibid §19.

argued that there is a need to avoid the danger all the merchants based on the previous argument to be based in one country and conduct an exclusively export trade and oblige companies such as Sony to sue customers in the country of importation.[106] Although the claimant argued that this can be done by disconnecting the knowledge requirement of the possibility to infringe from an actual infringing act, the court decided that the correct answer to this problem is to look where the circumvention devices are sold and accordingly decide; if the devices are to be sold in a country where manufacture of the unlicensed copies is not objectionable, there is no compelling reason why the defendant must be found guilty in the United Kingdom.[107] However, to the extent that the defendant has sold Messiah2 chips in the United Kingdom, he knows or has reason to believe that they will be used to make infringing copies and he has breached Section 296 of the CDPA.[108] The court, by means of this interpretation of the law managed to harmonise the knowledge requirement with the requirement for actual infringement thus ultimately linking the anti-circumvention provisions to copyright exceptions.

The above findings were confirmed to be correct with regard to the new Section 296 that transposed the Software Directive in the United Kingdom. The new Section 296 is restricted to anti-copy-protection devices which allow copyright computer programs to be copied and provides that

> (1) This section applies where— (a) a technical device has been applied to a computer program; and (b) a person (A) knowing or having reason to believe that it will be used to make infringing copies— (i) manufactures for sale or hire, imports, distributes, sells or lets for hire, offers or exposes for sale or hire, advertises for sale or hire or has in his possession for commercial purposes any means the sole intended purpose of which is to facilitate the unauthorised removal or circumvention of the technical device; or (ii) publishes information intended to enable or assist persons to remove or circumvent the technical device. [...] (6) In this section 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.

In paragraph 27 of the decision in *Sony v Ball* it is clearly stated that

[106] Ibid §20.

[107] Ibid §21.

[108] Ibid § 22.

> these provisions seek to achieve much the same result as was achieved by the section prior to its amendment as concerns the protection of computer programs. The same points on "infringing copy" […] apply to this section. Mr Mellor again suggests that this would render the new version of s 296 incompatible with the 1991 Directive which it is designed to implement. Even were that true, the wording used in the section is clear and I do not see how I could construe it in any other way.

Apart from the EUCD and the Software Directive, DRM are protected by the Directive 98/84/EC on Conditional Access as well.[109] According to Article 1 of the Conditional Access Directive, the objective of the Directive is to approximate provisions in Member States concerning measures against illicit devices which give unauthorized access to protected services. Article 4 prohibits only trafficking in such devices and not the act of circumvention. As a result, copyright exceptions can be exercised at least to the extent that it is not extremely difficult to acquire the tools that would help one to circumvent whatever these tools are (e.g. basic 'hacking' knowledge or a machine that would help in circumvention). Thus, the approach of the Conditional Access Directive is, arguably, similar to the approach of the Software Directive.

4.5 Conclusion

This Chapter illustrated how DRM restrict the exercise of copyright exceptions and, accordingly, the exercise of lawful personal use. Following the examination of what the anti-circumvention provisions of the EUCD actually provide, the result was reached that these provisions legally protecting DRM do not distinguish between human access and technological access to works. This may have as a result the application of the anti-circumvention provisions and the respective restriction of circumvention in cases where no copyright infringement takes place, namely in cases of technological access in the context of which the user does not get in contact with the protected work.

Next, the problem of digital lock-up created by DRM and their extended legal protection was examined. Four manifestations of this problem were identified from the view point of the user of works distributed digitally. First, and as a general definition, digital lock-up's main effect is that the copyright exceptions lose their practical significance and they cannot be enforced. Second, a relevant study revealed that more specific manifestations of the digital

[109] Council Directive (EC) 98/84/EC of 20 November 1998 on the legal protection of services based on, or consisting of, conditional access [1998] OJ L320/54-57.

lock-up issue include, first, a preservation issue and an issue regarding the degree of enjoyment of an exception regarding the British Library's remote users and, second, the impediment of the extraction of portions of DRM-protected cinematographic works for educational use by film lecturers and students/researchers that result in isolated acts of self-help for academic and educational purposes. Third, when there is a possibility to legally access the work by being granted permission to partially access the work, the digital lock-up phenomenon takes the form of not allowing further operations necessary in order to exercise copyright exceptions.

In other words, if users have legal access then the adoption of voluntary measures by rightsholders or appropriate measures by Member States is not necessary since this solution is only addressed to users who do not have legal access. However, since everyone has some level of authorization and therefore legal access to an extent to the work the voluntary/appropriate measures solution is addressed to a small category of users only for the purposes of circumventing copy controls. Fourth, a manifestation of the digital lock-up is the creation of a pay-per-view society where rightsholders should be compensated for every act of access to their works by users irrespective of the reason of access, i.e. irrespectively of whether the reason of access is the exercise of copyright exceptions by beneficiaries.

Next, the imbalance in the DRM provisions of the EUCD was examined the main manifestation of which is that it is unclear whether the anti-circumvention provisions apply only in case of copyright infringement or apply irrespective of the reason behind the circumvention. Moreover, four sources of imbalance in relation to the impact of DRM to users were identified. First, the Directive is silent as to whether the exception for transient and incidental acts of reproduction should be enforceable against DRM, something that ultimately preempts the exercise of the exception when works are distributed digitally when works are usually DRM-protected. Second, rightsholders have also the discretion to override essential limitations based on free speech and other human rights, such as those permitting criticism, comment, news reporting, parody, scholarship, or research, by using DRM since no exceptions to the anti-circumvention provisions for these purposes are contained in the EUCD. Third, no exceptions whatsoever are recognised in relation to use of works or other subject-matter available to the public on-demand. Finally, Member States are not obliged to take measures to safeguard the exception covering reproduction for personal use in Article 5(2)(b) but they simply have the discretion to take such measures.

As concerns the extensive interpretation of exclusive rights which is an outcome of the insertion of the anti-circumvention provisions in the EUCD several observations were made. First, with regard to the making available right, it was argued that the fact that the exceptions to this right can only be exercised when a user has obtained legal access to the work point towards an extensive interpretation of this right. Second, the fact that no exceptions are recognised when works are made available on-demand also implies that this is a very broad right. Finally, the unclear scope of what constitutes an on-demand service and the constantly evolving technology in this area exacerbate the wide character of this right by constantly widening and altering its scope.

As concerns the reproduction right, this is also extensively interpreted. First, as concerns the exception for transient and incidental copying in Article 5(1) (b), it was shown that lawful use arguably includes copyright exceptions but it is unclear whether it includes an intermediate working copy used in creating a competing work. Second, as is the case with the making available right, the fact that legal access is required essentially negates the exercise of the exceptions in the case of Article 5(1)(b) in all instances where legal access has not been obtained and users may be forced to abandon all their rights in order to obtain lawful access to the work usually bound by relevant contractual terms which are enforced by DRM. Third, Article 5(2)(b) in combination with Article 6(4)(4) favours a broad interpretation of reproduction both because it does not oblige Member States to take measures in respect of a beneficiary of this exception but simply leaves it to their discretion and because it allows rightholders to adopt adequate measures regarding the number of reproductions allowed in accordance with Article 5(2)(b) and (5). Fourth, Article 5 contains a closed list of exceptions to the reproduction right and since no more exceptions can be recognised by Member States this ultimately protects the scope of the right from further erosion and supports the wide character of the right.

In addition to the above, the legal protection of DRM also led to the replacement of the notion of equitable remuneration by the notion of fair compensation. This is a negative development for the user of works since it means that the liability principle of remunerating the rightsholder in exchange for the exercise of copyright exceptions is abandoned in favour of an exclusivity principle according to which the righthoder must be compensated for the loss he entails from every use of the work, i.e. even from the lawful uses of the work. This slight change in terminology suggests that the work is a product, and not a cultural object whose dissemination is essential for the evolution and development of human civilization.

Finally, this chapter identified certain areas of overlap among the EUCD, the Software Directive and the Conditional Access Directive and certain differences in the way these Directives approach the relationship between anti-circumvention provisions and copyright infringement. In particular, it is possible to apply both the EUCD and the Software Directive anti-circumvention provisions in case a particular DRM protects human and technological access at the same time while it is possible to apply both the EUCD and the Conditional Access Directive when a DRM-protected conditional access service contains copyright content. As concerns the aforementioned differences, the EUCD prohibits circumvention even if done for non-infringing purposes, i.e. to exercise copyright exceptions, while the Software and the Conditional Access Directives do not prohibit circumvention in such instances.

In sum, at the core of this chapter lies the observation that the lawful personal use as mirrored in the copyright exceptions provided for works disseminated digitally cannot be exercised. Circumvention is not allowed even for non-infringing purposes, the mechanisms provided by the EUCD for exceptions beneficiaries is not sufficient, there is an imbalance in the rights afforded to the rightsholders by means of the anti-circumvention provisions and the respective 'rights' afforded to the users by means of the mechanism of the copyright exceptions; the legal protection of DRM by means of the present anti-circumvention provisions leads to a very broad interpretation of the exclusive rights and, as a result, to a very restrictive interpretation of the respective exceptions to these rights, and the fact that the notion of equitable remuneration has been abandoned in favour of the notion of fair compensation which implies that exercising copyright exceptions is no more a 'right' reserved to the users but instead it is something they 'buy' from rightsholders. All these indicate that a minimum of lawful personal use is not safeguarded in digital settings and, in particular, in relation to works disseminated digitally. The fact that the EU Directives in this area do not deal with this issue harmoniously exacerbates the problem.

Chapter 5. The Impact of DRM Uses to the Minimum Core of Lawful Personal Use- Users' Expectations

5.1 Introduction

Although users expect to be able to make copies for private use, e.g. for social purposes (e.g. sharing with close family or friends), make back-up copies, time-shift, excerpt from and modify copyright works, DRM can affect content portability and modification and the operation of the first sale and exhaustion doctrines. Thus, both non-transformative and transformative uses of the works and the operation of a secondary rental market may be inhibited. The problem is not that uses that were considered lawful in the past are now illegal but rather that the lawful uses of the past have not been replaced by uses that could be considered lawful in the context of the digital distribution of works. As a result, the scope of uses that are reserved to the users of works is constantly shrinking and the balance between rightsholders and the public that traditionally underlies copyright law is gradually extinguished.

5.2 Prohibition of circumvention vs. users' expectations

Arguably, the legality of circumvention differs from the legality of any given use of DRM. Although the first is always illegal under the current anti-circumvention legislation, the second can still be considered "good," "bad," or "ugly" depending on the circumstances.[110] The legality of the DRM uses, in particular, could depend on the purpose behind the introduction of the anti-circumvention provisions. As concerns the DMCA, it has been argued that the purpose of its anti-circumvention provisions is to prevent "access to a downloaded work until the person making the licensed reproduction over the Internet had paid for it, or in preventing persons from tapping into streaming media (that is, public performances of works) over the Internet without paying."[111] On the contrary, it has been argued that these provisions did not intend to

> permit copyright holders to prevent or charge for additional private performances of works from copies they no longer owned and which had been lawfully reproduced, or to prevent the lawful transfer of legally made and legally obtained copies from one person to another. It was

[110] *Mitchell* (fn 64).

[111] Ibid 19-20.

> certainly not intended to confer any antitrust or copyright misuse immunity upon copyright holders who use DRM technology in ways that have nothing to do with copyright protection.[112]

This is not arbitrary observation but, rather, it is based on the legal reason for the introduction of the DMCA anti-circumvention provisions, which is similar to the legal reason for the introduction of the EUCD anti-circumvention provisions, namely the implementation of the WIPO 1996 Treaties anti-circumvention requirements. Before referring to the particular provisions of the WIPO Treaties, it should be, therefore, noted that Mitchell's observation regarding the DMCA's anti-circumvention provisions' purposes applies to the EUCD's anti-circumvention provisions as well. In particular, Article 11 of the WCT (and similarly the respective Article 18 of the WPPT) simply obliged parties to 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 […] and that restrict acts, in respect of their works, which are not authorized by the authors concerned or permitted by law.

Thus, the WIPO Treaties did not require legal protection against circumvention of technological measures that restrict acts permitted by law.

Since Mitchell's observation, in principle, can apply in the EUCD context, it should be next shown whether his notion of 'non-infringing uses' covers the notion of lawful personal use that lies at the core of this work. This exercise is important because only if lawful personal use looks like Mitchell's idea of non-infringing uses can his analysis be useful and relevant to this work since his findings will also apply to lawful personal use. In particular, Mitchell has summarized non-infringing uses of copyright works by placing them into three categories.[113]

Firstly, there exist "limitations by exclusion", that is rightsholders have specific exclusive rights instead of a general exclusive right to control the "use of the work". Accordingly, there is a limited performance right and a limited distribution right. A limited performance right means that only the public performance of a work is prohibited and not the private performance of a work, e.g. by means of monitoring or limiting the number of times of private performances, knowing the location of those performances, or learning the identities

[112] Ibid 20.

[113] Ibid 5-13.

of the persons before whom those private performances are made.[114] Moreover, the distribution right is limited to the physical objects and to the distribution of the physical media upon which the works are reproduced. As a result, rightsholders have no general right to control all forms of dissemination and the distribution right can be exhausted giving rise to the legal doctrines of first sale and exhaustion of rights. According to these doctrines, the owner of a lawfully made copy, e.g. in a retail store or a private home by downloading it from the internet under license from the copyright owner, may sell or rent that copy without the consent of the rightsholder.[115]

Secondly, there exist "limitations by exception" which encompass the uses of copyrighted works and the rights of owners of lawfully made copies that are exempted from copyright protection due to the application of copyright exceptions and limitations, the doctrines of first sale and exhaustion of rights included.[116] Thirdly, there are "limitations by complementary law" such as limitations based on human rights or competition law. Strong intellectual property rights that may have a negative impact on human rights and give an anticompetitive advantage to companies should not be permitted.[117]

Overall, Mitchell's summary of non-infringing uses looks a lot like lawful personal use as defined in this work. In particular, copyright exceptions obviously fall under the category of "limitations by exception" while consumers' expectations can be said to fall under the "limitations by complementary law" category. The fact that Mitchell simply gave the examples of competition and human rights law means that he did so in an indicative and not in an exclusive manner.

Regarding the good, bad, and ugly uses of DRM, Mitchell makes the following observations. The good DRM uses refer to the use of DRM for the perfection of authorized reproductions, the use of DRM as a "digital ticket taker", as an "automated accountant", as an "anti-theft device" or as a "benign supervisor".[118]

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[114] Ibid 5-8.

[115] Ibid 8.

[116] Ibid 9-12.

[117] Ibid 12-13.

[118] Ibid 21-27. DRM operating as digital ticket takers limit the audience only to those who have paid the admission ticket just like the equivalent analog tactic. DRM operating as automated accountant

The bad DRM uses refer to "timing-out for public good", the pure copyright protection (when the sole purpose of DRM is to prevent unauthorized reproductions), the implementation of legitimate license terms and the use of DRM to enable new business models (new positive business models that facilitate competitive offerings-the character of the business model will dictate whether DRM used to enable these new business models is good, bad or ugly).[119] "Timing-out for public good", in particular, covers the cases of (1) the so-called "try before you buy", (2) the retention of ownership and (3) space-shifting.[120] Regarding the "pure copyright protection," it can be said that because DRM technology is generally not sufficiently sophisticated to distinguish whether reproduction is lawful each time, copy-protection technology will generally impair the ability to make lawful reproduction and for that reason it is considered 'bad'.[121] The "implementation of legitimate license terms" refers to those uses of DRM that go further than necessary to implement the copyright license by seeking agreement to (or simply enforcing) terms that may be anti-competitive or impose restrictions beyond the scope of copyright. Finally, regarding the new business models enabled by DRM, it has been argued that these models can either expand copyright, restrain trade and suppress competition in after-markets (in that case the DRM implementing the models is bad).

One of the main effects of a bad DRM use is that although it protects copyright from infringement it entails some collateral damage for the public at the same time. With regard

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inform the rights holder regarding the sublicensed reproductions of his work. In its analog mode, rights holders sell to retailers licenses to sublicense to consumers the right to reproduce the work into a copy and they must rely upon the retailers regarding how many copies were actually reproduced by the retailers' customers. As anti-theft devices, DRM protect against theft of copyrighted works and services and ensure that only people who have paid can have access to the digital products. Finally, when DRM operate as benign supervisor they facilitate lawful access and protect against infringement claims, e.g. educational institutions and libraries can use DRM for that purpose in order to be protected from infringement claims.

[119] Ibid 27-43.

[120] In 1999 the U.S. Ninth Circuit expanded the doctrine of fair use to include what is known as "space-shifting", that is making a copy of copyrighted content for different locations of devices for one's personal use. See Woodford, Chad, 'Trusted Computing or Big Brother? Putting the Rights Back in Digital Rights Management' (2004) 75 U. Colo. L. Rev. 253, 267 where it is said that "For example, making a copy of a legitimately purchased CD for one's car, as well as "ripping" that CD onto an MP3 player, are fair uses. In these examples, the consumer is merely "shifting" the bits that make up the songs to different media for her own personal use."

[121] *Mitchell* (fn 64) 38-40.

to the important characteristics of the bad DRM use of the first "timing-out for public good" case, i.e. the so-called "try before you buy", it is argued that these

> almost certainly have to be at no cost. That is, the copy would be timed out only if the buyer of the license to reproduce it refuses to pay. If payment is made for a timed out copy (or any other consideration, such as disclosure of valuable data unnecessary for the transaction or receipt of advertising), then the reproduction should be viewed as licensed and paid for, and unless refunded, the timing out would be deemed to restrain trade in the aftermarket and unlawfully expand the copyright owner's control over performances to include private ones.[122]

The second type of "timing-out for public good", i.e. the "retention of ownership" case, could be used to ensure return or its virtual equivalent of copies that are owned by the rightsholder so that copies are not commercially exploited and be used as masters for infringing reproductions (e.g. a motion picture studio allow critics to review a film before its release).[123] The second type of "timing-out for public good", i.e. the space-shifting, is generally considered lawful if the original is deleted and the user ends up with one copy.[124]

Apart from the good and the bad DRM uses there are also the ugly DRM uses which refer (1) to the copyright tying (tethering of legal copies to specific hardware or a specific user so that the market for lawful redistribution of those copies is eliminated), (2) to the so-called "limited download" or "timing out for private gain" and (3) to the elimination of competition (rightsholders condition the licensing of a reproduction or public performance on the use of specific technology among many technologies that protect copyrights from infringement equally well).[125]

One of the main effects of an ugly DRM use is the elimination of the rental business model based on the legal doctrines of the first sale and exhaustion of rights and the abolishment of the user's ability to privately enjoy digital works.[126] As concerns the ugly DRM use of

[122] Ibid 30.

[123] Ibid.

[124] Ibid 30-38.

[125] Ibid 43-61.

[126] Due to a concern, in the US, that DRM could thwart first sale by preventing users from accessing and using copies acquired through secondary markets, the Copyright Office and the Department of Commerce evaluated the effect of Section 1201 which establishes the US first sale doctrine, i.e. the US counterpart to the EU exhaustion rule, as directed by Section 104 of the DMCA. The Copyright Office argued that there is indeed a danger that tethering works to a device negatively affects the first sale doctrine. However, it was recognized that this practice was not very popular at the moment and

copyright tying, it implements restraints on secondary markets, namely on the first sale and exhaustion doctrines, and expansion of the copyright into the realm of private performances by means of agreeing to support a particular technology instead of others.[127] According to Mitchell, the right to perform the work privately is beyond the scope of the copyright and conditioning a license of the right of reproduction upon the licensee's agreement to use only the tied technology in conjunction with the reproduction and private performance of the work is unlawful.[128] Limiting availability may also be the result of remote deletion or discontinuation of service of host servers, e.g. Amazon can eliminate copies stored on your Kindle and cloud-based content can disappear.[129] Information and transaction costs also increase disproportionately in the case of digital goods purchased on a tethered device due to numerous legal and licensing agreements in comparison to the otherwise low-cost or free content.[130]

Moreover, many tethered platforms do not allow user-generated content to be exported to other devices, e.g. although Amazon's Kindle and Apple's iBooks application allow users to highlight and annotate sections of the books they purchase, they do not allow to copy or share them with user's other devices.[131] Tethered copies also diminish consumer privacy and innovation.[132] Privacy is diminished because users disclose personal information when connecting to the vendor's server to access their content. Innovation is harmed because

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it was suggested to reexamine the issue in the future if and when it becomes more popular. U.S. Library of Congress, Copyright Office, 'A Report of the Register of Copyrights Pursuant to §104 of the Digital Millennium Copyright Act' (August 2001) <http://www.copyright.gov/reports/studies/dmca/sec-104-report-vol-1.pdf> accessed 10 Jun 2009, at 75 "tethered copies" were defined as "copies that are encrypted with a key that uses a unique feature of a particular device, such as a CPU identification number, to ensure that they cannot be used on any other device. Even if a tethered copy is downloaded directly on to a removable medium […], the content cannot be accessed on any device other than the device on which it was made. Disposition of the copy becomes a useless exercise, since the recipient will always receive nothing more than a useless piece of plastic. The only way of accessing the content on another device would be to circumvent the tethering technology, which would violate section 1201."

[127] *Mitchell* (fn 64) 53.

[128] Ibid 44-50.

[129] Perzanowski, Aaron & Schultz, Jason, 'Digital Exhaustion' (2011) 58 UCLA L. Rev. 889, 905.

[130] Ibid 906.

[131] Ibid 907.

[132] Ibid 891.

many companies monitor the use of their programs or content to make sure that no unauthorized modification or innovation by users or competitors occurs.

Similarly, the "timing out for private gain" (or "limited download") ugly DRM use has as a sole purpose to prevent the continued lawful, non-infringing private performance of a work from lawful copies, when rightsowners have no exclusive right to perform their works, including stolen or pirated copies, privately.[133] Such a practice should be condemned when the purpose and effect of DRM is to eliminate lawful competition, while it could be justified when its purpose is to protect copyright or enhance dissemination. An example of an effort to eliminate lawful competition found in the analogue world would be printing books in disappearing ink so that they cannot be re-read, sold or rented.

In particular, rental of works has never meant having to pay for the freedom to enjoy your own property or let copyright owners gain control over private performances and charge bookstores for reading a book twice.[134] Mitchell argues that in a true rental business model the renter could play the work as many times as he likes and even if he fails to return the disk when due and continues to engage into private performances of the work "after the right of possession has expired" the rightsholder only has recourse for late fees (simple breach of the rental agreement) and not for copyright infringement.[135] In the context of true rental model, the private performance of a downloaded copy is allowed as well. In the case of "timing out for private gain", if one does not accept that it involves a true rental model , then rightsholders are in a worse position that they would have been in; in particular, it has been argued that "since no rental is involved [in the case of "timing-out for private gain"], there is no obligation to return anything to the copyright owner (as the copyright owner has never even owned the copy in question)."[136]

Closely related to the practice of limited downloads is the elimination of competition in the physical distribution of lawful copies, that is "in the market for used copies of […] works, including commerce by sale, rental, gift, or lending."[137] Although copyright owners have no

[133] *Mitchell* (fn 64) 50-53.

[134] Ibid 51.

[135] Ibid 53.

[136] Ibid.

[137] Ibid 54-60.

right to control private performances and even though even thieves can watch a stolen DVD without infringing the copyright, copyright owners ultimately benefit from the elimination of the lawful secondary markets (e.g. retailers and distributors of movies) by charging the owner of the lawfully made copy on a per-view basis for the private performances of the work. According to Mitchell, the rightsowner using the time-limiting technology does not care whether there will be a lower number of viewers, but instead he only wants to sell more copies at greater total net profits.[138] However, those profits can only be achieved by eliminating competition from lawful secondary circulation.

In sum, a consumer who buys e-books, e.g., on an iPad, cannot resell them via secondary markets without selling the device itself and in that case there is neither downward pressure on the price of the e-books nor an unlicensed rental market.[139] As a result, not only the use of DRM systems disrupt expectations of personal use but also what was until now considered to be customary behavior is now considered illegal.

Mitchell argues that good DRM uses should be encouraged since they operate within the copyright law principles. The bad DRM uses should be examined using traditional antitrust principles under a "rule of reason" analysis to determine whether harms outweigh the benefits.[140] The ugly DRM uses, however, should be condemned and prosecuted as illegal because they expand the scope of copyright with no countervailing public benefits.[141] Mitchell believes that the legal principles from the analogue world can apply in the digital world since rightsholders always tried to gain control over downstream uses of their works in order to protect themselves against copyright infringement and to engage in illegal

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[138] Ibid 60-61.

[139] *Perzanowski & Schultz* (fn 129) 904.

[140] *Mitchell* (fn 64) 28 where the "rule of reason analysis" in competition law is explained: "[…] if the restraint is likely to have an anti-competitive effect (and is not a "naked" restraint on trade), the court will assess whether the claimed pro-competitive benefits outweigh them, and whether the restraint is reasonably necessary to achieve the stated benefits. In the case of copyrights, we must look beyond "restraint of trade," as such and include expansion of the copyright reach beyond its statutory limits (and the counterpart, denial of rights, benefits and entitlements reserved for the public under the CR Act) among the harms against which any purported benefits must be balanced. Moreover, unlike antitrust, which looks to "pro-competitive" benefits only, the copyright analysis should included benefits that further the objectives of copyright law."

[141] Ibid.

monopolistic tactics.[142] In particular, he argues that legal principles developed in the analogue world can easily apply in the digital world and that the law has not changed much this last century during which copyright holders were trying to control downstream uses of their works "for reasons ranging from added protection against copyright infringement to bold efforts to engage in illegal price-fixing and monopolistic behaviour."[143]

5.2.1 Restriction of consumers' expectations by bad and ugly DRM uses

The European surveys that examined the digital music and digital video usage of DRM-protected works and the empirical study examining whether DRM systems can negatively affect users' personal use expectations also summarized the existing business models for online content distribution supported by DRM. These are the pay-per-use and the pay-per-download models, the subscription model, the model of content streaming and the model of content renting.[144] The fact that the particular business models are enforced by DRM, arguably, means that the use of both these business models and of DMR is closely connected can be examined and judged under the same prism. Therefore, this section will examine whether the particular use (of business models and/or of the DRM that support them) is bad or ugly and to what extent.

As concerns the DRM uses that affect consumers' expectations as defined in the studies on digital video and music usage, it can be argued that these can, generally, be categorized as bad and/or ugly. In particular, these uses concern the application of the exhaustion doctrine, the forward-and-delete technique, the ability to exercise the private copying exception and the device interoperability requirement (mainly achieved by means of reverse engineering/decompilation exceptions). In relation to DRM uses that restrict the applicability of the exhaustion doctrine in digital settings it can be said that such a DRM use can be categorized either as bad or as ugly. In particular, it could be considered as a bad DRM use if

[142] Ibid 2.

[143] Ibid.

[144] Duff, Nicole et al., INDICARE Project, EU Commission DG Information Society Ref. EDC-53042 INDICARE/28609 'Digital Video Usage and DRM-Results from a European Consumer Survey' (Berlin, 23 February 2006) <http://indicare.org> and Duff, Nicole at al., INDICARE Project, EU Commission DG Information Society Ref. EDC-53042 INDICARE/28609 'Digital Music Usage and DRM-Results from a European Consumer Survey' (Berlin, 24 May 2005) <http://indicare.org> both accessed 20 November 2008.

it falls outside of the scope of the definition of "timing-out for public good" and in particular, if it is seen as a type of space-shifting. That means that, just like space-shifting should be allowed if the original is deleted and the user ends up with one copy, a DRM use that prevents the application of the exhaustion doctrine on condition that the original is deleted and the user ends up with one copy should be considered a bad DRM use.

Similarly, a DRM use that prevents the forward-and-delete technique by users should also be considered bad in case the original copy is deleted and the user ends up with one copy. For the same reasons, both the restriction of the application of the exhaustion doctrine and of the forward-and-delete doctrine by means of DRM could also mean that the particular DRM use is bad because it falls outside the scope of the "pure copyright protection" category, i.e. the particular DRM technology cannot be considered sophisticated enough to distinguish a lawful personal use. However, a use that restricts the application of the exhaustion doctrine and the forward-and-delete technique in digital settings can also be considered an ugly DRM use to the extent it falls within the definition of a "limited download/timing-out for private gain". That means that the particular DRM use results in the creation of a pay-per use society where the users cannot engage in lawful personal uses.

As concerns the uses of DRM that result in the restriction of the users' ability to exercise the private copying exception and to enjoy device interoperability (mainly by means of the reverse engineering and the decompilation exceptions), the following can be noted. The inability to exercise the private copying exception due to a DRM use means that the particular DRM use can be either categorized as bad or as ugly. In particular, such a DRM use would infringe the requirement of "pure copyright protection" which means that it did not distinguish between lawful and unlawful personal uses. Moreover, such a DRM use could also be considered to be ugly if it is accepted to fall under the scope of the "limited download/timing-out for private gain" category. In that case, the user will not be able to engage in private copying since the particular service agreement will usually dictate that the user will not be able to have continuous access to the work. Finally, the lack of interoperability clearly constitutes an ugly DRM use since it falls both under the scope of the "copyright tying" and the "elimination of competition" categories.

As concerns the ability of DRM to negatively affect the expectations of users regarding content portability, content modification and private enjoyment of works, the findings of the

2002 study in this area are explicit;[145] DRM impose several restrictions to these expectations. For example, portability is severely restricted by DRM notwithstanding the fact that there are two alternative ways to share files.[146] Portability is restricted, first, because content license keys are stored separately from content files on a local machine and every time content is transferred to additional computers license needs to be reacquisited in order to make the file functional again. The discretion of individual content services whether to grant new licenses can prevent file portability. Second, portability is restricted to the extent that certain licenses expire and thus users must remain members of the services in order to retain use of the works or renew the service in order to avoid the deactivation of their downloads. Third, portability is restricted to the extent that licenses may expire or be revoked by content service providers earlier. Finally, portability is restricted to the extent that format-shifting is prohibited. However, format-shifting can be achieved by burning a file to CD and recopying it onto a computer, otherwise known as CD ripping (e.g. ripping songs from CD using Windows Media Player (WMP) converts them to WMP format), which is not restricted by the services examined. During conversion users can chose whether or not they would like the copy to be restricted from rendering on additional computer or be portable and DRM-free.

DRM uses that restrict portability can be either bad or ugly. They can be considered bad when they fall outside the scope of application of "timing-out for public good" (for purposes of space-shifting), i.e. when they do not allow the portability of a file at least on condition that the original copy will be deleted and the user will end up with one copy. They can also be considered ugly if they are seen through the prism of unlawful "copyright tying" which covers all the categories in which a work can operate on particular devices and cannot be accessed from a place, at a time and on a device chosen by the lawful user. The suggested alternative ways to share files is to time- or space-shift files by circumventing the DRM that tie files to a specific device and to share a subscription account. However, even these alternative ways are not without problems; in particular, circumvention of DRM is always illegal irrespective of the reason and sharing a subscription account raises questions

[145] See Mulligan, Deirde K., et al., 'How DRM-Based Content Delivery Systems Disrupt Expectations of "Personal Use"' DRM'03, October 27, 2003, Washington, DC, USA, ACM 1-58113-786-9/03/001 <http://delivery.acm.org/10.1145/950000/947391/p77mulligan.pdf?key1=947391&key2=4330113521&coll=GUIDE&dl=GUIDE&CFID=52008949&CFTOKEN=84569098> accessed 10 December 2011.

[146] Ibid 80 where the several ways in which portability is limited are discussed.

regarding its lawfulness and, in any case, does not solve the portability problem due to its rather limited scope of application, i.e. only in case of subscription services. [147]

DRM heavily restrict content modification and excerpting as well. A limitation for content modification and excerpting is not provided for in the Microsoft DRM architecture that underlies most of the services examined.[148] Thus, it was concluded that if users begin to adopt DRM-based online services as a replacement for physical media and files on peer-to-peer networks, the excerpting norm may gradually give away, that users who are serious about being able to excerpt legally from recorded works will eschew DRM-protected works, and that DRM-based services might respond to user preferences regarding excerpting in the same way that they have responded to the demand to be able to download tracks to personal computers and burn them to CDs.[149] DRM uses that restrict content modification and excerpting are bad DRM uses since they fall outside the scope of "pure copyright protection" category which means that they restrict lawful uses in addition to unlawful ones.

With regard to the changing relationship between users and copyright holders, the findings showed that there exist monitoring of user browsing habits and a complex system of policies regarding the use of information collected about users belonging to the separate entities that are involved in the services provision.[150] The first finding (monitoring of user browsing habits) can be explained because traditionally users were purchasing content by entering into transactions with distributors or other intermediaries and not with copyright holders.

[147] An examination of whether such an account sharing constitutes an illegal act of circumvention is attempted in section 5.1.2 below.

[148] *Mulligan et al.* (fn 145) 84 where it is stated that "[c]ontent encoded using Microsoft DRM is usable in ways explicitly provided by the capabilities of WMP which is charged with the rendering of all DRM encoded content. This means that files may be set to allow or deny playback, transferring to portable rendering device, copying, or burning to CD. However, all other uses including the majority of non-regulated uses are prevented by default due to limitations in WMP capabilities. In this example, because WMP does not contain features for editing music or video, Microsoft DRM encoded files can never be edited." Moreover, it is stated that "Microsoft's rights management product furnish application developers with a set of Boolean values, which may be turned on or off to permit or restrict various uses, and a set of variable counters to implement frequency limitations on exercise of those permissions. These enumerated carve-outs make it virtually impossible to emulate established personal uses. There is no context dependency or conditional prerequisite to the restrictions that might allow for considerations of factors that play into a fair use determination or that might distinguish between public and private or commercial and non-commercial use."

[149] Ibid 82.

[150] Ibid 83.

Publishers simply recorded the number of copies they were making, distributors were keeping records of customer activity usually in order to optimize inventories and supply chains or to target advertising. Therefore, neither publishers nor distributors had any "copyright-based reason to monitor […] purchaser's activities."[151] Nowadays, users enter into transactions with copyright holders directly. Copyright holders have incentives to monitor users since they derive profit directly from the licensing of their copyrights and monitoring helps enforce copyright and gain more revenues.[152]

With regard to the second finding (a complex system of policies regarding the use of information collected about users), it is argued that there are difficulties in applying privacy laws online and to new opportunities to collect information, such as browsing and collection by third parties who are not renting the works, since both the surveillance sources (e.g. content servers, service proxy software, service websites, media rendering software, etc.) and the ways that information is collected and processed by them (e.g. what data exactly a service collects, do separate monitoring companies can be found behind the services, etc.) is very complex.[153] In general, DRM uses that change the traditional relationship between users and rightsholders can be considered bad DRM uses if we consider that they fall outside the scope of "pure copyright protection" category. In other words, it could be argued that these instances the DRMs are used for purposes other than "pure copyright protection".

In sum, it could be argued that uses that heavily restrict users' expectations can be categorized as bad or ugly in one way or the other.

5.2.2 Is *Account-Sharing* a Lawful Way to gain Access to Content?

It was said previously that one could share files by sharing a subscription account ("account misuse").[154] In particular, account sharing has a similar effect to lending a copy of a recording to someone else from the time that the lender gives up his right to use the content while the

[151] Ibid.

[152] Ibid.

[153] Ibid 84.

[154] On the issue of account-sharing see generally Samartzi, Vasiliki, 'Account-sharing: a legitimate alternative to unlawful circumvention for the purposes of achieving content portability?' International Journal of Law and Information Technology 2012; doi: 10.1093/ijlit/eas023

borrower uses it.[155] Mulligan, Han and Burstein examined the legal risks for users who attempted to lend, time-shift, or space-shift by taking as an example the "account misuse" of the wife of a subscriber to a service of streaming radio who uses the account information of her husband to access the service.[156] In that case, the question is whether a court would interpret the legislation in a way that could support a claim against the wife for a violation of the "access control" provisions.

In the context of the DMCA, alleging a violation of the DMCA's "access control" provisions requires alleging that a person "circumvent a technological measure that effectively controls access to a work."[157] Effectively controlling access means that a technological system requires the "application of information, or a process or a treatment, with the authority of the copyright owner."[158] If the user name and password which can be stored in the service's client application comprise "information" within the meaning of the statute, then one could say that sending this information to the service's streaming audio server is the "application of information" that results in access to copyrighted works. In other words, sending this information to the service's streaming audio server results in circumvention of the access control measures. However, such an interpretation seems to be in contrast to recent case law.

In a recent decision, *Ground Zero Museum Workshop v. Wilson*, a former website developer allegedly altered the plaintiff's website after gaining unauthorized access to it following a dispute.[159] The plaintiff sued the developer based on various causes of action including viola-

[155] *Mulligan et al.* (fn 145) 80-81 where it is argued that there are several sources of portability restrictions: (1) content license keys are stored separately from content files on a local machine make license reacquisition necessary to regain functionality every time content is rendered on a new computer. The discretion of whether to grant new licenses belongs to content services and it acts as enforcement mechanism preventing the portability in certain cases; (2) license expiration; (3) license revocation; (4) format conversion is generally not allowed (in practice however most of these restrictions could be worked around by burning a file to CD and recopying it onto a computer, otherwise known as CD ripping. None of the services examined restricted CD ripping.) "Ripping" refers to the process of copying a music track contained on an audio CD into a computer memory as a file.

[156] Ibid 81.

[157] US Code, Title 17, S.1201 (a)(1)(A).

[158] US Code, Title 17, S.1201 (a)(3)(B).

[159] *Ground Zero Museum Workshop v. Wilson*, Civil Action No. DKC 09-3288, US District Court for the District of Maryland.

tion of the DMCA's Section 1201(a)(1)(A) anti-circumvention provision because he used the valid security code he had acquired while working with the plaintiff in order to enter to the website and make some changes after having stopped working for him. The District court, however, found no violation of the DMCA's anti-circumvention provision by the website developer and held that unauthorized (supposing that the developer's access to the website was unauthorized) use of a valid username and password combination does not violate Section 1201. The court reasoned that mere use of password technology is different than circumvention of that technology. A finding of circumvention, the court explained, requires that a defendant bypasses, removes, deactivates, decrypts, avoids or impairs the access control measure. This interpretation is in line with Section 1201 of the DMCA. In particular, Section 1201(a)(3) provides that

> (3) As used in this subsection (A) to "circumvent a technological measure" means to descramble a scrambled work, to decrypt an encrypted work, or otherwise to avoid, bypass, remove, deactivate, or impair a technological measure, without the authority of the copyright owner; and (B) a technological measure "effectively controls access to a work" if the measure, in the ordinary course of its operation, requires the application of information, or a process or a treatment, with the authority of the copyright owner, to gain access to the work.

In the course of the discussion, the District Court referred to several similar cases.[160] In particular, it was said that several district courts in other circuits concluded that using a password or security code to access a copyrighted work without authorization does not infringe the anti-circumvention legislation of the DMCA. The conclusions reached by these courts apply to the case in hand since the plaintiff did not suggest at any time that the defendant accessed the website using a password that was not issued by the plaintiff.[161]

The same analysis may apply in the context of the EUCD. Article 6(3) of the EUCD provides that technological measures cover "[…] any technology, device or component that, in the

[160] *Egilman v. Keller & Heckman*, LLP, 401 F.Supp.2d 105, 112 (D.D.C. 2005); *I.M.S. Inquiry Mgmt. Sys. v. Berkshire Info. Sys.*, 307 F.Supp. 2d 521, 532-533 (S.D.N.Y. 2004); *R.C. Olmstead, Inc. v. CU Interface*, LLC, 657 F.Supp.2d 878, 889 (N.D. Ohio 2009). In *I.M.S. Inquiry Management Systems*, the defendant had used a password intentionally issued by plaintiff to a third party in order to access plaintiff's protected website without authorization. The court explained that the defendant had not violated the statute since he had not circumvented any technological measure and that mere use of a technological measure was not prohibited by the DMCA. It was also explained that the act of circumvention consists of descrambling, decrypting, avoiding, bypassing, removing, deactivating or impairing a technological measure. Moreover, in *Egilman*, the court concluded that entering a valid username and password without authorization does not constitute circumvention under the DMCA.

[161] *Ground Zero Museum Workshop v. Wilson* (fn 159) 19-20.

normal course of its operation, is designed to prevent or restrict […]" unauthorized uses of the work. Not all technological measures are the subject of legal protection but only the effective ones. According to Article 6(3) of the EUCD, technological measure is deemed

> "effective" where the 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.

Therefore, in the context of the EUCD, access controls refer to encryption, scrambling or other transformation of the work. It could be concluded, by analogy, that to circumvent an access-control means to descramble a scrambled work, to decrypt an encrypted work, or to undo the transformation of a transformed work. Simple use of a technological measure in the form of an access control by means of entering a valid user name and password without authorization does not constitute circumvention under the EUCD either.

5.3 DRM Circumvention for Interoperability Purposes

5.3.1 The Software Directive and the EUCD on Mandatory Interoperability and the US Reverse Engineering of DRM Paradigm

Technology platforms and computer systems are often protected by DRM. All parts of the computer system must operate seamlessly with each other and software systems must be able to play, store and otherwise process content files irrespectively of whether they are DRM-protected or not. If a technology platform/computer system is protected by a DRM system, then reverse engineering of the platform will presuppose reverse engineering of the DRM. DRM mechanisms are essentially software and as such they could fall under the mandatory interoperability provisions of the Software Directive themselves.[162] Since reverse engineering of the DRM may violate the anti-circumvention provisions it is obvious that protecting technology platforms with DRM components may alter the balance between rightsholders and users. As more and more content is being played through computer

[162] Samuelson, Pamela & Scotchmer, Suzanne, 'The Law and Economics of Reverse Engineering' (2002) 111 Yale L. J. 1575, 1630 where it is said that "[a]lthough the DMCA rules are not explicitly cast as restrictions on reverse engineering, that is their essential nature. Just as it is impossible to reverse-engineer object code without decompiling or disassembling it, it is impossible to reverse-engineer a technical protection measure without circumventing it. Someone who reverse-engineers a technical protection measure will also generally need a tool in order to perform such reverse-engineering activities, so by outlawing the making of circumvention technologies, the law indirectly restricts reverse engineering." This analysis applies directly to the EUCD and the European context as well.

systems, the technical interoperability of DRM systems becomes more and more crucial as well and the relationship between anti-circumvention provisions and reverse engineering activities becomes essential.

Before examining the relationship between the EUCD and the Software Directive regarding mandatory interoperability and the application of the actual legal provisions, it is important to answer the question to which components of the computer system the mandatory interoperability provisions in the Software Directive and in the EUCD apply. Next, it must be clarified that it is important with exactly which computer system components interoperability is sought. In other words, the starting point of the examination is the minimum requirement provided by the two Directives regarding mandatory interoperability.

Välimäki and Oksanen argue that the interoperability provision of the Software Directive applies to all computer system components, an important observation in itself given that nowadays the content that is being played through computer systems increases rapidly.[163] For example, they argue that a DVD player software is a component in a computer system. In the light of Recital 23 of the Software Directive, the crucial question is with what kind of component the player software interoperates with in order to play DVD disks. They conclude that if the player software interoperates with the actual movie content on the DVD, which is not part of a "computer system," then the interoperability provision may not apply. However, if the player software interoperates with the DRM system required to decode the disc contents, then the interoperability provision would apply since a DRM system is a component in a modern computer system.[164] Having clarified that, arguably, it is only the possible interoperability with the DRM system that encodes the disc's content and not the interoperability with the actual copyrighted content of the disc that can be under examination under the light of the two Directives, the next section will examine the applicability of the actual legal provisions.

Generally, the distinction in the application of the anti-circumvention provisions of the EUCD and of the Software Directive can be problematic since it is unclear whether the anti-

[163] Välimäki, Mikko & Oksanen, Ville, 'DRM Interoperability and Intellectual Property in Europe' (2006) 11(26) EIPR 562, who state that although, unfortunately, there is so far no case law regarding this question, some analogy could be derived from United States' case law.

[164] Ibid.

circumvention scheme established in Article 6 EUCD applies to DRM on computer programs in addition to Article 7(1) of the Software Directive. Hopefully, this issue will be solved by the CJEU following a question referred to it for a preliminary ruling by the Tribunale di Milano-Italy in the *Nintendo and Others* case.[165] In that case, Nintendo argued that the DRM it uses to protect its video game consoles (portable and fixed) were circumvented by means of products enabling users to play illegal copies of Nintendo video games on Nintendo consoles.

In particular, in the case at hand, the products used in circumvention essentially either contained software emitting a signal that 'deactivated' Nintendo's DRM or inserted and installed software on the consoles in order to 'deactivate' Nintendo's DRM as well. In this context, the Italian Court asked whether Article 6 of the EUCD in the light of Recital 48 of the EUCD applies in the case of the DRM used by Nintendo on its consoles to prevent illegal copies of Nintendo video games and video games by third party developers to be played on Nintendo consoles.[166] According to Välimäki and Oksanen's analysis above, the EUCD does not apply in this case since the actual copyright works, i.e. video games, are not involved and since the interoperability concerns only pieces of software (i.e. software in the form of DRM and software circumventing DRM); accordingly, only the Software Directive applies. However, an explicit answer to this issue will come from the CJEU whose opinion therefore is highly anticipated.

Since the Italian Court examined the issue in the context of the EUCD anti-circumvention provisions the second question it referred to the CJEU for a preliminary ruling should not come as a surprise; in particular, it asked whether the possible other lawful uses of the product used for DRM circumvention, in the case at hand the compatible device, could acquit its user from circumvention liability charges. The court further specified the referred

[165] Case C-355/12, OJ C 295 from 29.09.2012, p.23.

[166] Recital 48 provides that "[s]uch legal protection should be provided in respect of technological measures that effectively restrict acts not authorized by the rightholders of nay copyright, rights related to copyright or the sui generis right in databases without, however, preventing the normal operation of electronic equipment and its technological development. Such legal protection implies no obligation to design devices, products, components or services to correspond to technological measures, so long as such device, product, component or service does not otherwise fall under the prohibition of Article 6. Such legal protection should respect proportionality and should not prohibit those devices or activities which have a commercially significant purpose or use other than to circumvent the technical protection. In particular, this protection should not hinder research into cryptography."

question by asking whether Article 6 of the EUCD in the light of Recital 48 of the EUCD may be interpreted to require national courts to consider the potential other commercially important purposes or uses of the product used for circumvention, namely the compatible device, and to adopt quantitative and qualitative criteria regarding the definition of these uses. Alternatively, the Court asks whether Article 6, in the light of Recital 48 of the EUCD, requires national courts to adopt criteria favouring the particular intended use of the product in which the protected content is inserted as attributed by the rightsholder. It can be argued that the investigation of the potential commercial purposes or uses of the compatible product, apart from circumvention, show that the Italian Court tends to accept that the EUCD, in principle at least, applies in the case of DRM applied to software. However, this is an open issue until the CJEU delivers its opinion.

An issue of concern when negotiating the adoption of the Software Directive was the interoperability between items of hardware or software.[167] In terms of the drafting history of the Software Directive, the issue of interoperability was already reality in the software markets when the Directive was drafted so it was easy to see the practical benefits of a pro-interoperability decision. In the end, the scope of the interoperability provision ended up being broad. According to Recital 10 of the Software Directive, interoperability is the functional interconnection and interaction between elements of software and hardware by means of parts of the computer program which are called 'interfaces'.[168] Moreover, Recital 15 refers to the need for interoperability as a limitation to the exclusive rights of the rightsholders[169], while Recital 16 safeguards interoperability from potential contractual

[167] Council Directive (EC) 2009/24/EC of 23 April 2009 on the legal protection of computer programs (replacing Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs) [2009] OJ L 111/16.

[168] Recital 10 stipulates that "[t]he function of a computer program is to communicate and work together with other components of a computer system and with users and, for this purpose, a logical and, where appropriate, physical interconnection and interaction is required to permit all elements of software and hardware to work with other software and hardware and with users in all the ways in which they are intended to function. The parts of the program which provide for such interconnection and interaction between elements of software and hardware are generally known as 'interfaces'. This functional interconnection and interaction is generally known as 'interoperability'; such interoperability can be defined as the ability to exchange information and mutually to use the information which has been exchanged."

[169] Recital 15 provides that "[t]he unauthorized reproduction, translation, adaptation or transformation of the form of the code in which a copy of a computer program has been made available constitutes an infringement of the exclusive rights of the author. Nevertheless, circumstances may exist when such a reproduction of the code and translation of its form are indispensable to obtain the necessary information to achieve the interoperability of an independently

overridability.[170] The Software Directive contains a decompilation for interoperability provision in Article 6 and, in particular, in Article 6(1).[171] Moreover, Article 5(3) of the Software Directive and Recital 14 of the same Directive provide for the ability to reverse-engineer a computer program as we have seen in Part I of this study as well. Article 8(2) safeguards the application of these provisions against contractual overriding.

Recital 23 of the Software Directive suggests that the interoperability provision covers not only interfaces towards other "pure" software components but also interfaces towards any system component from other manufacturers that should "work together" with the software component.[172] Since software components can in many places be replaced by hardware components, an opposite interpretation would imply a significant reduction in the scope of the interoperability provision.[173]

Moreover, the protection of DRM applied to software concerns only trafficking and not circumvention and, according to the Software Directive, the lawful user is allowed to

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created program with other programs. It has therefore to be considered that, in these limited circumstances only, performance of the acts of reproduction and translation by or on behalf of a person having a right to use a copy of the program is legitimate and compatible with fair practice and must therefore be deemed not to require the authorization of the rightholder. An objective of this exception is to make it possible to connect all components of a computer system, including those of different manufacturers, so that they can work together. Such an exception to the author's exclusive rights may not be used in a way which prejudices the legitimate interests of the rightholder or which conflicts with a normal exploitation of the program."

[170] Recital 16 provides that "[p]rotection of computer programs under copyright laws should be without prejudice to the application, in appropriate cases, of other forms of protection. However, any contractual provisions contrary to the provisions of this Directive laid down in respect of decompilation of to the exceptions provided for by this Directive with regard to the making of a back-up copy or to observation, study or testing of the functioning of a program should be null and void."

[171] Article 6(1) stipulates that "[t]he authorization of the rightholder shall not be required where reproduction of the code and translation of its form within the meaning of points (a) and (b) of Article 4(1) are indispensable to obtain the information necessary to achieve the interoperability of an independently created computer program with other programs, provided that the following conditions are met: (a) those acts are performed by the licensee or by another person having a right to use a copy of a program, or on their behalf by a person authorized to do so; (b) the information necessary to achieve interoperability has not previously been readily available to the persons referred to in point (a); and (c) those acts are confined to the parts of the original program which are necessary in order to achieve interoperability." See also Part I, Chapter 3, Section 2.2 of this work.

[172] Recital 23 of the Software Directive provides that "[w]hereas an objective of this exception is to make it possible to connect all components of a computer system, including those of different manufacturers, so that they can work together".

[173] *Välimäki & Oksanen* (fn 163) 564.

circumvent a DRM applied in software in order to engage into lawful activities. On the contrary, although Article 7(1)(c) of the Software Directive allows circumvention where the means of circumvention are used only in order to carry out acts that do not require authorization on the ground of a copyright exception, under the EUCD, the circumvention of a DRM is in every case prohibited.

During the national implementation process of the EUCD there was some controversy on whether the reverse engineering provisions could be applied to DRM systems since DRM systems are software themselves. While Danish policy makers explained that the EUCD does not need a DRM interoperability provision since such an interoperability provision is already implemented through the Software Directive, Finnish policy makers put forward an implementation proposal stating that the interoperability exception for software required an explicit amendment to make it clear that EUCD anti-circumvention provisions would not apply to DRM systems which in such a case could be reverse engineered under the conditions stipulated in the Software Directive.[174]

However, the EUCD is not totally silent regarding its impact to the mandatory interoperability provisions of the Software Directive. In particular, Recital 48 provides that circumvention prohibitions "should not hinder research into cryptography" and that DRM systems should not prevent "the normal operation of electronic equipment and its technological development."[175] Moreover, Recital 50 of the EUCD explicitly states that

[174] See also Recital 50 of the EUCD which states that the anti-circumvention provision "[…] should neither inhibit nor prevent the development or use of any means of circumventing a technological measure that is necessary to enable acts to be undertaken in accordance with the terms of Article 6 of Directive 91/250/EEC. Articles 5 and 6 of that Directive exclusively determine exception to the exclusive rights applicable to computer programs." See also the chapters for Denmark and Finland in Brown, Ian (ed), 'Implementing the European Union Copyright Directive' Foundation for Information Policy Research, 2003, <http://www.fipr.org/copyright/guide/eucd-guide.pdf> accessed 20 April 2009. See also Westkamp, Guido, Queen Mary Intellectual Property Research Institute, Centre for Commercial Law Studies, Queen Mary, University of London (2007), 'Study on the Implementation and Effect in Member States' Laws of Directive 2001/29/EC on the harmonisation of certain aspects of copyright and related rights in the information society, Final Report, Part II, The implementation of Directive 2001/29/EC in the Member States' European Commission DG Internal Market Study Contract No. ETD/2005/IM/D1/91 <http://ec.europa.eu/internal_market/copyright/studies/studies_en.htm> accessed 10 March 2009, at 61 where it is said that "Finland likewise exempted acts falling within the exceptions of Article 5(3) and 6 of the Computer Program Directive and thereby allows circumvention for purposes of reverse engineering of protected computer programs."

[175] Recital 48 stipulates that "[s]uch legal protection should be provided in respect of technological measures that effectively restrict acts not authorised by the rightholders of any copyright, rights related to copyright or the sui generis right in databases without, however, preventing the normal

> [s]uch a harmonised legal protection does not affect the specific provisions on protection provided for by Directive 91/250/EEC. In particular, it should not apply to the protection of technological measures used in connection with computer programs, which is exclusively addressed in that Directive. It should neither inhibit nor prevent the development or use of any means of circumventing a technological measure that is necessary to enable acts to be undertaken in accordance with the terms of Article 5(3) or Article 6 of Directive 91/250/EEC. Articles 5 and 6 of that Directive exclusively determine exceptions to the exclusive rights applicable to computer programs.

In addition, Recital 54 of the EUCD modestly recognises the interoperability issue by stating that

> [i]n an increasingly networked environment, differences between technological measures could lead to an incompatibility of systems within the Community. Compatibility and interoperability of the different systems should be encouraged. It would be highly desirable to encourage the development of global systems.

Finally, regarding the anti-circumvention provisions of the EUCD established in Article 6, no clear exemption for interoperability is granted. Probably the main reason why the EUCD's approach to interoperability wasn't more proactive was that in 2001, when the EUCD was finally accepted, there weren't yet any markets for DRM and thus DRM interoperability was not an important issue.

Article 6(1) provides that adequate legal protection shall be provided by Member States "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." In other words, Article 6(1) bans the use of circumvention (or, in the case at hand, compatible) players of devices by the user who knows or has reasonable reasons to know that he is pursuing the circumvention of the technical measures, namely the use of the circumventing/compatible player or device. What Article 6(1) bans actually is the use of compatible players or devices that are used in order to make unauthorized use of the works, in that case to play the work on a device that has not been authorized by the rightsholder. This conclusion is compatible with our starting point that decompilation for the purposes of interoperability must be allowed only when "technological access" (e.g. when

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operation of electronic equipment and its technological development. Such legal protection implies no obligation to design devices, products, components or services to correspond to technological measures, so long as such device, product, component or service does not otherwise fall under the prohibition of Article 6. Such legal protection should respect proportionality and should not prohibit those devices or activities which have a commercially significant purpose or use other than to circumvent the technical protection. In particular, this protection should not hinder research into cryptography."

the player software interoperates with the DRM systems required to decode its components) is sought for and not in the case of "human-access" (e.g., when the player software interoperates with the actual copyrighted work).

A similar conclusion can be reached in relation to the Software Directive for two reasons; first, the decompilation for interoperability purposes exception applies only to software which is licensed to the user and in the case of the DRM technologies there is no express license. However, one could argue that there may be evidence that there is an implied license that would justify decompilation by the user of the DRM-protected work for interoperability reasons.[176] Secondly, the decompilation provision is addressed to persons who develop new software and want this new software to be interoperable with the one they disassembly and not to the simple user. Arguably, the decompilation for interoperability purposes provision is addressed to software developers who want to ensure that their software will be used in conjunction with existing software.[177] The same conclusion can be reached if the implementation of the decompilation provision of the Software Directive (Article 6) is taken into consideration.

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[176] See Seshadri, Raghu, 'Bringing the Digital Divide: How the Implied License Doctrine Could Narrow the Copynorm-Copyright Gap' (2007) 11 UCLA J.L.&Tech. 1. This writer discusses implied licenses as mechanisms of reconciling mechanistic copyright law with modern social norms. The writer argues that architecture and copynorms tell consumers one thing while the copyright law tells them something else. This is problematic because it undermines the basic purpose of copyright to promote the progress of science; Sieman, John S., 'Using the Implied License to Inject Common Sense into Digital Copyright' (2007) 85 N.C. L. Rev. 885 (accepting an analogy between the implied license doctrine and "common sense"); Orit Fischman, Afori, 'Implied License: An Emerging New Standard in Copyright Law' (2009) 25 Santa Clara Computer & High Tech. L. J. 275. This author argues that the implied license doctrine he suggests can operate as an open standard norms in copyright law; See also Reed, Chris, 'Controlling World Wide Web Links: Property Rights, Access Rights and Unfair Competition' (Fall 1998) 6(1) Indiana Journal of Global Legal Studies 167, 194 where it is noted that "[…] a license to copy or otherwise use a work can be implied from the circumstances in which the owner made the work available to the alleged licensee."

[177] See Bently, Lionel & Sherman, Brad, *Intellectual Property Law* (2nd edn OUP 2004) 230 where it is noted that "[o]ne of the problems facing creators of computer program us that they have to ensure that their creations can be used in conjunction with existing products and processes. In the same way in which a manufacturer of spare parts for cars needs to ensure that their products are the appropriate size and shape, so too producers of computer programs and devices used in conjunction with existing programs need to ensure that their products comply with the existing standards. While some of this information will be generic and widely available, some of it may be hidden in the program. For a producer to ensure that their creations are compatible (or inter-operable) with existing systems, they need to have access to the information that is hidden in the program. Some developers (most famously IBM) publish such information to encourage others to construct further application programs or add-on devices, whereas others license the information. In some circumstances, the only way in which the relevant information can be obtained is by decompiling or reverse engineering the program. […] After considerable debate it was decided to include a defence for decompilation in the Software Directive."

In particular, Article 6 of the Software Directive was implemented in the United Kingdom by means of Section 50B of the CDPA. Section 50B provides that it is not an infringement of copyright for a lawful user of a copy of a computer program to decompile it provided that

> (a) it is necessary to decompile the program to obtain the information necessary to create an independent program which can be operated with the program decompiled, or with another program; and (b) the information obtained is not used for any purpose other than the permitted objective.

It is argued that this provision eschews "entirely the concocted term, "interoperability", it defines the "permitted objective" of decompilation as: obtaining the information necessary to create an independent program which can be operated with the program decompiled or with another program."[178] Moreover, it is argued that

> [t]he sole permitted purpose is to create an independent interoperable program; so (1) the information obtained must not be used for any other purpose; in particular (2) it must not be used in a program which infringes that decompiled; nor (3) must it be supplied to any other person for a different purpose.[179]

With regard to whether the user of a work can take advantage of the reverse engineering exception, it can be noticed that users cannot be based on this exception in order to circumvent DRMs for interoperability purposes. In particular, Article 5(3) of the Software Directive is very clear in allowing reverse engineering by a person having a right to use a copy of a computer program only in order to "observe, study or test the program in order to determine the ideas and principles" that underlie the program and for no other reason. Moreover, this observation should take place only while carrying out acts that the lawful user of the program is entitled to do such as loading, displaying, running, transmitting, or storing the program. In the case of a DRM-protected work, the user will not be usually entitled/licensed to do such acts with regard to the the DRM system required to decode the disc contents.

However, a similar negative conclusion cannot be reached with regard to trafficking in circumventing, that is compatible, players or devices. Although Article 6(2) of the EUCD bans the circumvention of DRM if the circumventing (or in this case compatible) players or devices

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[178] Cormish, William & Llewelyn, David, *Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights* (Sweet & Maxwell 2007) 819-820.

[179] Ibid 820.

> (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

one who wants to produce and market a music player compatible with files encoded in certain proprietary DRM standard can claim that with certain architectural and marketing decisions the compatible player would not fall in the EUCD's definition of a circumvention device.[180] First, if DRM compatibility would not be explicitly marketed, except as necessary information to consumers about the technical features of the player, requirement (a) could be guaranteed. Second, if the compatible player would also play a number of other file formats or have some extra functionally than simply playing the file requirements (b) and (c) could be guaranteed as well.[181] Arguably, the same could be true in the case of the Software Directive as well. In particular, Article 7(c) provides that "any act of putting into circulation, or the possession for commercial purposes of, any means the sole intended purpose of which is to facilitate the unauthorised removal or circumvention of any technical device which may have been applied to protect a computer program" should not be allowed. However, if one could prove that the particular "means" put into circulation have not as their sole purpose the circumvention but have other lawful purposes as well, then one could probably not be liable under the anti-trafficking provision of the Software Directive.

In sum, the conclusion is reached that although trafficking in circumventing devices may be lawful under certain circumstances, use of such devices by a user in order to watch movies or hear music that were not meant by the rightsholder to be playable on such devices constitutes an unlawful act. Thus, arguably, the Software Directive and the EUCD have a similar approach regarding circumvention of a DRM software for interoperability purposes by the user. This is paradoxical to the extent that the Software Directive does not prohibit circumvention of DRM applied to software by the user in order to engage in non infringing acts. It seems that circumvention for interoperability purposes is not considered to be a lawful activity. This is problematic since the user of a copyright work may want to use this work on several suitable devices he may have access to and, thus, satisfy his expectations of device interoperability.

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[180] *Välimäki & Oksanen* (fn 163) 562-568.

[181] *Välimäki & Oksanen* (fn 163).

5.3.2 The relationship between copyright in DRM systems and competition law

Users of DRM-protected copyright works benefit from a healthy competition in the market in many ways. For example, competition in the market for used copies of works means that a competitive secondary market exists where users can locate works they want to enjoy by means of sale, rental, or lending. Moreover, competition in the market of music or video players and in the market for DRM solution means that copyright tying will be avoided and that interoperability will be promoted. As a result, the users of copyright works will be free to enjoy them without being restricted to the use of particular devices. A healthy competition in the market of music and video players and also in the market of DRM solutions will be very beneficial for users of works. The latter will benefit from innovative products that meet their needs better than products that do not evolve and remain unsophisticated due to a lack of competition between incumbents that leads to a lack in innovation and creation of new and better products.

Unfortunately, however, DRMs applied to works may have a negative impact to competition. For example, the competition in the market for used copies of works and in the physical distribution of lawful copies, such as commerce by sale, rental, gift or lending, is disturbed in the case of works distributed online via DRM to the extent that lawful secondary markets are eliminated. Moreover, there is always the danger of copyright tying where the buyer of a product is made to purchase a second/tied product from the supplier of a first/tying product. In this case, the supplier of the tying product uses his market power to induce the buyer to buy the tied product from him, that is to buy the two products together. For example, Apple was sued for abuse of dominant position for tying the iPod to iTunes, meaning that the buyer of music from iTunes could only hear this music on an iPod and music downloaded from music stores other than the iTunes could not play on an iPod.[182] Closely linked to the above example of tying is the issue of refusal to supply where the

[182] For example, in 2004, in France, VirginMega, a French online music provider, alleged that by using the FairPlay DRM Apple abuses its dominant position and forecloses competition in the online music market. Competition is foreclosed since music downloaded from VirginMega music store cannot play on iPods and because music downloaded from iTunes cannot play on music players other than the iPod. VirginMega required that Apple is obliged to license the FairPlay technology to her but the court denied since it was not convinced that Apple engaged in an abuse of dominant position. See Décision n° 04-D-54 du 9 novembre 2004 relative à des pratiques mises en oeuvre par la société Apple Computer, Inc. dans les secteurs du téléchargement de musique sur Internet et des baladeurs numériques, Conseil de La Concurrence (2004), <http://www.autoritedelaconcurrence.fr/pdf/avis/04d54.pdf> accessed 10 March 2009.

dominant firm may impose unlawful limitations to the interoperability of his products with competing products to the detriment of the consumer. For example a consumer may not be able to play songs he bought from the internet on every digital music player he owns.

It is true that music stores do not own any of the copyrights that their DRM system protects. However, the legal status that DRM has acquired means that the rights of music distributors have against the circumvention of their DRM system are as powerful in the online environment as the IPRs they are designed to protect. In particular, in any downloaded song, there are two sets of rights attached, namely, first, the copyright in the song itself, belonging to the copyright owner of the song and, secondly, the rights in the DRM itself.

The rights in the DRM itself are two-fold as well. In the case of DRM applied to music, companies can exclude their competitors based both on their copyright in the DRM software by refusing to license the particular DRM format to others and on the legal protection given to the DRM Itself that prevents anyone else form reverse-engineering the software. In other words, there are (a) DRMs implemented by way of software which will be protected as literary works under copyright law, which will only allow the owner of that right to object to copying, distribution or even adaptation of that software; (b) the right to the function of the DRM itself that prevents it from being removed, disabled, bypassed, and also outlaws any device manufactured or distributed primarily for the bypassing of the DRM system (Article 6(1) of the EUCD).[183]

To the extent that DRMs are implemented by way of software and are protected as literary works under copyright the same principles that have evolved concerning the interrelationship between intellectual property laws and competition law apply. The current state of the interface between DRM systems and competition was explored in an article by Magnani and Montagnani.[184] These writers assessed whether the current state of the interface between DRM systems and competition enriches the intellectual property versus competition debate with new interpretive instruments. They argued that "[i]ndeed, digital technology widens the traditional exploitation of IPRs, thereby requiring new principles to

[183] For this analysis see Kirk, Ewan, 'Apple's iTunes digital rights management: "Fairplay" under the essential facilities doctrine' (2006) 11(5) Comms. L. 161, 162.

[184] Magnani, Paola & Montagnani, Maria Lilla, 'Digital rights management systems and competition: what developments within the much debated interface between intellectual property and competition law?' (2008) 39(1) IIC 83.

be adopted in the analysis of the interface between intellectual property and competition."[185] Thus, digital technology not only affects copyright law and demands the adoption of new principles in the interface between copyright exceptions and anti-circumvention provisions, but also affects the analysis of the interface between intellectual property and competition.

DRM can protect and distribute both cultural content (e.g. movies, music) and functional (e.g. software, databases which are also protected by copyright). When used outside the entertainment sector for the protection of functional works embodied in physical goods DRMs can distort competition by restraining interoperability between compatible goods. When adopted within the entertainment sector for protection of cultural digital works DRMs can distort competition by operating as product markets and versioning tools/exclusion tools. Although their function as versioning tools can lead to pro-competitive results by increasing the number of business models that enable rightsholders to implement it can also result in an enhanced IPR protection and to an alteration of the balance between the private and the public interest that underpins traditional copyright law. In other words, when DRMs act as versioning and exclusion tools, their function is twofold and consists of (a) strengthening exclusive rights and (b) enabling more flexibility in marketing strategies. In this context, the need for strengthening IPRs is questionable and the new balance struck between public and private interest is questionable.

DRMs implemented outside the entertainment sector and within the context of compatible goods can alter both the entry and the presence of a company in the market. The choice to enable protection and distribution via DRMs of functional content, e.g. copyrightable or not software built into hardware platforms, is debatable because they may become mere anticompetitive tools. In this case the use of DRMs has the direct effect of preventing competition from entering the accessory market or of driving them outside. The use of DRMs can also have the indirect effect of enabling maintenance of the position gained in the primary market whenever networks effects are triggered by the establishment of a critical mass of platform users. DRMs may also become mere anticompetitive tools when they are used to protect digital contents, either functional or cultural, which are not copyrightable or whose copyright has expired, in which case the competition restriction is likely to take place

[185] Ibid 105.

within a single market.[186] In sum, the adoption of DRM systems to distribute digital content and to protect functional works raises criticism as to the policy underpinning the anti-circumvention provisions.[187]

The cases where there is an impact of DRM systems on competition can be divided in two main categories, that is (1) when DRM systems function as exclusion and versioning tools (DRMs define markets)[188] and when DRM constitute IPR protected subject matter themselves (DRMs as market products),[189] and (2) when DRM are implemented in order to protect hardware and software platforms and to regulate interoperability between complementary goods.[190] Generally, when DRMs are used outside the entertainment industry for the protection of functional works, as opposed to cultural works, they change from versioning tools into tools limiting interoperability.

Accordingly, two lines of case law have been developed, that is (1) the cases which examine whether the use of DRM creates or can create specific relevant markets such as the market of DRM technologies as well as the market of copyrighted works distributed online via DRM.

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[186] *Magnani & Montagnani* (fn 184).

[187] Ibid 103.

[188] See *Magnani & Montagnani* (fn 184). According to these writers, if the specific types and uses of DRM solutions would create new relevant markets or would fragment the traditional markets while implementing rightholders' marketing strategy then DRM perform the function of exclusion and versioning tools. DRM do not contribute to change the offer and demand conditions of a product, e.g. when a DRM system is used only to count the number of subjects who accessed the work. When DRM operate as versioning or exclusion tools, the following new competition law principles emerge: (1) greater control is achieved over the way in which consumers access works; (2) since the use of DRM systems identifies specific product markets the question is whether it is better to identify those latter markets with reference to protected content or with reference to equipment comprising a DRM system. The Commission appears to adopt both criteria; (3) there are certain specific characteristics of the market of copyrighted contents in which DRM technologies are used, such as price discrimination and creation of barriers to entry that distort competition. DRM, are both a means to confer exclusivity to copyrighted works thus bring them closer to private goods, and to supply the consumer with a number of specific utilities (that can be linked to the right of listening or modifying, reproducing, etc.) in addition to the physical carrier.

[189] Ibid 89. DRM can be both final solutions and single components for the final solutions and their introduction generates new relevant innovative and dynamic markets. A proprietary DRM system cannot be produced, used or marketed without holding a licence on every single element forming the final system since usually such components are patent or copyright subject matters. No principles new to the competition law analysis emerge with regard to technology markets whose DRM elements constitute market products. Competition in the market of the IPRs on single components must be preserved in order to keep the market of final solutions open.

[190] Ibid 83.

Although the latter is different from the market of the same works distributed via physical goods it is likely to present similar concerns from a competition law perspective;[191] and (2) the cases which examine the adoption of DRM technologies which can generate anticompetitive effects by controlling interoperability among compatible devices and thus creating or strengthening barriers to entry.[192]

5.3.2.1 Market Definition in DRM and Works distributed Online via DRM Markets

The Commission has examined several times the market of DRM technologies and the market of copyrighted works distributed online via DRM. In *Sony/Philips/Intertrust*, Sony and Philips acquired joint control of Intertrust Technologies Corporation, a company developing patented DRM technologies and related services enabling rightsholders to offer their contents in digital version while monitoring their uses, limiting and tracking access to the protected contents, or counting the number of copies allowed.[193] In other words, the merger concerned ownership and licensing of IPRs relevant to the DRM technology. In this case, the presence of DRM systems lead to the identification of four distinct markets, namely (1) the market of IPRs related to DRM solutions, (2) the market of DRM systems as distinct from the market of the component licensing, (3) the market for distribution of digital content via DRM systems, (4) the market related to appliances, components and devices which can be equipped with DRM technologies.[194] In the end, it was accepted that the parties involved were not active in the same relevant markets and therefore the merger was authorized.

In *Sony/BMG*, the role of DRM systems in defining or fragmenting the market is further detailed in relation to the market of digital contents distributed via DRM systems.[195] In Sony/BMG the merger consisted of the joint venture between BMG which was a content rightsholder operating in the phonogram market, and Sony which was a content rightsholder operating in the phonogram and the electronics market and was also distributing music online. However, the joint venture companies operating under the name Sony BMG was only active in the discovery and the development of artists phase and the subsequent

[191] Ibid 84.

[192] Ibid 84-85.

[193] Case No COMP/M.3042 (2002) *Sony/Philips/Intertrust*.

[194] Ibid 2 §11.

[195] *Sony/BMG* (Case No COMP/M.3333) Commission Decision of 19 July 2004 OJ L62/30, 9.3.2005.

marketing and sale of recorded music, not the music publishing, manufacturing, licensing and distribution of contents online, therefore it was deemed not to limit competition in the involved relevant markets.

What was important about the Sony/BMG case was that the Commission held there was a separate market of online music distribution as distinct from the market of distribution of digital content via DRM systems. In particular, the Commission referred to previous decisions that accepted that there is an emerging but separate market for the online delivery of music[196] and also expressly stated that the market investigation in the Sony/BMG case "has confirmed that online music is not part of the general market for recorded music as there are significant differences between the distribution of recorded music via physical carrier and its online sale."[197] Viewing the online music market as separate from the market of music distributed on physical carriers is justified by the Commission on the consideration that the use of DRM systems in the online music market affords greater control to the rightsholders over the way in which consumers access music. For example, although it is not possible to control the way a music CD is used, it is possible to impose rules regarding the transfer, enjoyment and downloading of online music distributed by means of DRM.[198] Moreover, it was elaborated further that "in online music, two different markets must be distinguished: (1) the wholesale market for licenses for online music and (2) the retail market for distribution of online music" and this distinction applies both in relation to the relevant product market and in relation to the relevant geographic market.[199]

In the *Microsoft IV* case, the CFI confirmed that only media players are able to offer specific functions (such as the use of video and audio digital contents) via mere internet access.[200]

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[196] The Commission at §22, 7 of the *Sony/BMG* decision referred to *Vivendi/Canal+/Seagram* (Case No COMP/M.2050) Commission Decision of 13 October 2000; *AOL/Time Warner* (Case No COMP/M.1845) Commission decision of 11.10.2000, OJ L268, 9.10.2001, 28; *Sony/Time Warner/CDNow* (Case No COMP/JV.25) Commission decision of 21 December 1999, OJ C 116/4, 26.4.2000.

[197] *Sony/BMG* (fn 195) 7 §22.

[198] *Magnani & Montagnani* (fn 184) 90.

[199] *Sony/BMG* (fn 195) 8 (§24).

[200] Commission of the European Communities v Microsoft (Case No. COMP/C37.792) Commission Decision 24 March 2004, OJ L 32/23, 6.2.2007. The CFI upheld the Commission's decision regarding the abuses in Case T-201/04 *Microsoft v Commission of the European Communities* [2007] *ECR II-03601*.

Microsoft wanted to preclude the work group server operating systems of Microsoft's competitors from interoperating with Windows domain architecture on an equal footing with Windows operating systems. As a result, Microsoft's competitors were not able to compete in the market. Moreover, Microsoft bundled Windows Media Player to the Windows Operating System and was, thus, accused for abusive tying that lead to a weakening of competition. Microsoft was found liable for abuse of dominant position according to Article 82 of the EC Treaty (now replaced by Article 102 of the Treaty on the Functioning of the European Union) both with regard to the refusal to provide the required information which would enable compatibility between its own operating system and work group servers and the integration of the last version of its media player (WMP) within its operating system.

In their *Microsoft* decisions and in relation to the WMP, both the Commission and the CFI stressed that, on the demand side, the presence of DRM systems permitted the use of digital contents and, therefore, represented an essential component of the new version of the Windows Media Player (WMP) which, thanks to this technology, was capable of offering functions that competitors had not yet developed. Similarly, it was deemed that, on the offer side, development of a media player would always involve the development or the purchase of a DRM system. Since this operation requires remarkable investments and costs for developers, it could represent a barrier to entry in the media player market, further strengthened by the presence of network effects.

It is argued that distribution of works via DRM can create new markets or fragment traditional markets by altering offer and demand and by implementing the complete marketing strategy of the rightsholders.[201] When this happens DRM operate as exclusion and versioning tools. DRM-protected content is linked to a pre-defined group of functions regarding the right of listening or modifying, reproducing, translating in other languages, saving for a determined period of time, distributing, etc. In that way, DRM confer exclusivity and competitive features to copyrighted works and bring them closer to private goods. The problem with DRM systems is that they don't seem to play the same role that physical carriers do. Although they supply the consumer with a number of specific utilities in addition to the physical carrier they take away from the user several abilities to interact with the

[201] *Magnani & Montagnani* (fn 184) 89.

work which were traditionally freely reserved to him by means of the copyright exceptions.[202]

DRM legislation does not seem to have struck the correct balance to the extent it favours sometimes the abolishment of copyright exceptions, something that does not happen when works are distributed by means of physical carriers. However, it must be noted that such imbalance is not an issue when DRM are used for other reasons apart from creating or fragmenting markets, e.g. in the case DRM are used in order to count the number of times a work has been reproduced or the number of persons who accessed the work.[203] Therefore, the question is how to preserve the copyright balance when works are distributed online via DRM.

The competition law analysis when DRM act as exclusion and versioning tools is complex since the supply and demand structure of traditional product markets changes when DRM systems are adopted. The important question is whether markets should be identified with reference to protected content or with reference to equipment comprising a DRM system. It is argued that market should be identified with reference to protected content (criterion of the content for which DRM systems are used) "since taking appliances into consideration could lead to excessive market fragmentation due to the pace of technological evolution" (criterion of the appliance market).[204] However, both criteria are adopted, depending on the cases analysed, since the characteristics of the various relevant markets (that have been identified either with reference to protected content or with reference to equipment comprising DRM) are not necessary for the Commission's decisions and therefore are not examined. For example, in the *Microsoft IV* decision, DRM distinguished the media player product from the operating system product market (criterion of the appliance market).[205]

We see that markets are identified either with reference to protected content or with reference to equipment comprising a DRM system. However, another criterion that should be taken into consideration and form part of the market definition analysis is the existence and the ability to exercise copyright exceptions within the identified market notwithstanding

[202] Ibid 88 (footnotes omitted).

[203] Ibid 89 (footnotes omitted).

[204] Ibid 90-91.

[205] Ibid.

the fact that the characteristics of the several relevant markets are not examined by the Commission. Although it is said that the characteristics of the various relevant markets are not necessary for the Commission's decisions and are not examined by the Commission, we believe that the ability to exercise copyright exceptions within an identified market or the lack of such an ability can be used as a tool to define markets since copyright exceptions safeguard competition and since copyright exceptions can also be based on competition law.

Markets are defined in order to see whether there is an abuse of competition within them or not. If a market is defined in such a way that copyright exceptions cannot be exercised then competition law is by definition not working properly within that market. For example, in markets that are identified with reference to equipment comprising a DRM, e.g. DRM enabling tethering copies to devices, as a result of which copyright exceptions cannot be exercised, e.g. enjoy a private performance of the movie on a different device the lawful acquirer of the copy owns, we notice that the first sale doctrine is natively affected and competition in the physical distribution of lawful used copies by sale, rental, gift, or lending is limited and secondary markets are suppressed. Therefore, markets where the exercise of copyright exceptions is not allowed because of the use of DRM (in particular, of an ugly DRM) should be considered anti-competitive.

When DRM are examined as market products themselves, they can either be examined as final solutions or as single components of the final solutions. The exclusive rights on both the technological components (patent or copyright subject matters) forming the final solution and the same final solution are important since proprietary DRM system cannot be produced, used or marketed without holding a license on every single element of the final solution, which is also the subject of exclusive rights.[206] The introduction of DRM implies the development of new relevant technology markets whether it is the market for the DRM as a final solution or the markets of DRM as components of the final solution. In both instances the relevant technology market is the market for intellectual property rights licences and their substitutes and no new principles are inserted regarding competition law analysis other than those typical of technology or innovation markets. At the same time, the definition and

[206] Ibid 89.

assessment criteria of technology markets as introduced within the European Union by the Guidelines for Horizontal Co-operation apply.[207]

5.3.2.2 DRM Impact to Device Interoperability

From an economic standpoint, DRMs create barriers to entry and staying in the market as do IPRs. Thus, the problem with DRMs, just like with IPRs, could be that they limit the creation of substitutes. When we overcome the boundaries either of the IPR or the DRM specific subject matters competition may be distorted. When the adoption of DRMs has the sole effect of limiting interoperability between complementary goods, then barriers to entry can be developed that are either (1) "structural", when they can affect the identification of the relevant market, or (2) "strategic", when they can affect the determination of the market power connected to the relevant market. While in the entertainment sector (in relation to cultural goods) it is more likely to find structural barriers to entry, outside the entertainment sector (in relation to functional goods) it is more likely to find strategic ones.[208] The creation by means of DRM systems of barriers to entry in the primary market can happen when diversification of content offered is enabled and when the exclusive rights on content are strengthened.[209] In fact, DRMs can pose tangible barriers to entry being composed both by "technology" and "rules" as opposed to IPRs which are intangible barriers to entry based only on "rules." DRMs raise barriers to entry similar to IPRs when they are adopted to protect and distribute cultural and functional content.

The European case law in *Sony/BMG*[210] and in *Microsoft IV*[211] is important as regards interoperability in the entertainment sector and the distribution of cultural content.

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[207] Ibid 90; See also Commission (EC), 'Guidelines on the applicability of Art. 81 of the EC Treaty to horizontal cooperation agreements' (Notice) [*06/01/2001*] *OJ C 003*, *2-30*.

[208] *Magnani & Montagnani* (fn 184) 93-94.

[209] Ibid 99-100.

[210] *Sony/BMG* (fn 195) analyses the existence of Sony's dominant position in the online music distribution market in order to authorise its merger with BMG. Here, the possibility that Sony could use its own DRM system to offer music in formats not readable through equipment that adopted competitive DRMs was considered.

[211] The Commission in Microsoft IV argued that DRM systems both differentiated the media player market from that of the operating systems and strengthened barriers to entry in the operating system market due to the integration of WMP in the operating system. The fact that WMP adopted a proprietary DRM would limit competition in operating systems due to the network effects in the

Regarding interoperability in the context of distribution of functional content, namely content for which one cannot positively argue that falls within the entertainment sector, the United States decisions in *Chamberlain v. Skylink*, *Lexmark*, and *Storage Tek*[212] are important. In these two legal proceedings for copyright infringement, it was argued that neither technological measures nor legal protection of technological measures should be regarded as tools to expand market power to secondary markets and that the anti-circumvention provisions must not create new IPRs. Neither the DMCA nor the EUCD are suited to prevent the limitation by DRM of compatibility with non-proprietary accessories as it was shown in the US cases concerning DRM-protected functional content. Instead, the actions for copyright infringement which the US courts in those cases managed to reject on the grounds of harm to competition by anti-competitive use of both DRMs and the DMCA provisions were made possible by the DMCA itself. According to a proper interpretation of the DMCA's anti-circumvention provisions, they are not meant to limit interoperability but rather to protect copyrighted material. As a result, the DRM circumvention does not constitute copyright infringement, but the unlawful uses of a protected work accessed via circumventing the DRM do.[213]

The EC Commission expressed its opinion regarding interoperability and balance between the private and the public interest in its Communication to the Council and to the European Parliament of April 2004 on management of copyright and related rights in the Internal Market.[214] The Commission acknowledged both the important purposes enabled by DRM

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hardware and software platforms market. In that case, exogenous barriers turned into strategic barriers.

[212] *Storage Technology Corp. v. Custom Hardware Eng'g & Consulting, Inc.*, 421 F.3d 1307 (Fed. Cir.2005). Here, the Court of Appeal stated that the defendant was free to correct Storage tek's software in order to render its use available by legal purchasers. Storage tek produced memory boards for data storage. Customer Hardware Engineering (CHE) offered reset and maintenance service of data storage systems and it was claimed that it was infringing Storage tek's copyright in the system software and bypassing its TPMs. Although the lower court's decision was in favour of the plaintiff, the Court of Appeal was of the opinion that enabling the reproduction of the copyrighted software for repair or maintenance purposes was fair use and that CHE did not breach the DMCA provisions. Moreover, a link between access and content should be inferable from the fact that the circumvention of TPMs permits the infringement of the copyright and the court deemed that no link was present between access and protection in that case.

[213] *Magnani & Montagnani* (fn 184) 101.

[214] Commission (EC), 'Management of Copyright and Related Rights in the Internal Market' (Communication) COM(2004)0261 final, 19 April 2004.

technologies and the risk of DRM systems and trusted platforms to replace copyright law and distort copyright balance.[215] The Commission identified two main policy goals that DRM technology should pursue for the preservation of copyright balance, namely the enforcement of copyright exceptions and the establishment of a global and interoperable DRM infrastructure which supports open standards of communication and encoding.[216] Regarding the enforcement of copyright exceptions, the Commission addressed this issue in respect of both the scope of protection of the copyrighted work and its time-limited duration. Moreover, as a result of the monitoring activity established in the context of Article 12 of the EUCD, which requires the Commission constantly to monitor whether free uses of the work are being adversely affected by DRM technology,[217] the Commission could propose the adoption of legislative reforms which compel the providers and users of DRM technology to design and apply this technology in conformity with copyright exceptions.[218]

In sum, it is noticed that the American decisions link copyright infringement to circumvention of technological measures. This is a positive development for the user of

[215] Ibid §1.2.5 where it was said that "DRM systems are not in themselves an alternative to copyright policy in setting the parameters either in respect of copyright protection or the exceptions and limitations that are traditionally applied by the legislature." Moreover, in §1.2.5 it is stated that "[i]n terms of technology that is applied to DRM systems, Directive 2001/29/EC acknowledges that technological developments will facilitate the distribution of protected content, notably on networks. However, it also recognizes that differences between technological measures could lead to an incompatibility of systems within the Community."

[216] Ibid 11 (§1.2.5) is stated that "[w]hile the choice of the appropriate business model remains for the rightholders and commercial users to make and the use of DRM systems and services remain voluntary and market-driven, the establishment of a global and interoperable technical infrastructure on DRM systems based on consensus among the stakeholders appears to be a necessary corollary to the existing legal framework and a prerequisite for the effective distribution and access to protected content in the Internal Market."

[217] Article 12 provides that "[n]ot later than 22 December 2004 and every three years thereafter, the Commission shall submit to the European Parliament, the Council and the Economic and Social Committee a report on the application of this Directive, […]".

[218] *Communication on the Management of Copyright* (fn 214) 10 (§1.2.5) where it is stated that "[t]he Directive requires Member States to arrive at a coherent application of the exceptions. The extent to which this has been achieved in relation to the application of the requirement for fair compensation will be assessed when reviewing implementing legislation. Any such review will include, in particular, the criteria which Member States refer to or will refer to in order to take such application or non-application of technological measures into consideration when determining remuneration schemes in the context of the exception for private copying. The Commission has a specific mandate to do so within the context of the Contact Committee established under Article 12." Moreover, it is stated that "[…] the Commission is also under a duty to examine within the context of the Article 12 Contact Committee, whether acts permitted by law are being adversely affected by the use of effective technological measures (so called "technological lock-up")".

copyright works since it indicates that the device interoperability can be safeguarded in case technological measures are applied to functional works.

5.4 Conclusion

In sum, lawful personal use has two prongs. The first part of this right includes the ability to exercise copyright exceptions that are provided by law in digital settings. This ability can be further analysed in the ability to circumvent for non-infringing purposes, in the ability to take advantage of an efficient EUCD mechanism that guaranties the exercise of digital copyright exceptions to their beneficiaries, to the ability to enjoy a balanced digital copyright law regime and interpretation of exclusive rights and exceptions to those rights, and, finally, to the ability to consider copyright exceptions as part of the public's part of the copyright bargain instead of a product the public has to buy from rightsholders.

This chapter concerned the second prong of lawful personal use. This prong includes the ability to exercise certain consumers' expectations. These include the ability to enjoy the application of the exhaustion doctrine in digital settings (e.g. to lend digital goods), the ability to forward-and-delete digital goods, the ability to exercise the private copying exception, the ability to modify and excerpt content, the ability to enjoy a limited relationship with rightsholders based on expectations set in other media and the ability to enjoy device interoperability. Each expectation was examined separately and the conclusion was that DRM uses which negatively affect the realization of these expectations can be either bad or ugly. This means that the particular DRM uses should not be allowed.

In relation to device interoperability, both the EUCD and the Software Directive were examined. In particular, the object of the examination was the possible interoperability with the DRM system that encodes the disc's content instead of the interoperability with the actual copyrighted content of the disc. It was, generally, concluded that both Directives seem to suggest that the user should not use compatible devices for interoperability purposes when this is not allowed by the rightsholder. Article 6(1) of the EUCD, in particular, bans the use of compatible players or devices that are used in order to make unauthorized use of the works.

The Software Directive seems to forbid the use of compatible devices for interoperability purposes when this is not allowed by the rightsholder as well. This is so since, first, the decompilation for interoperability purposes exception applies only to software which is

licensed to the user and in the case of the DRM technologies there is no express license.[219] Second, and perhaps most important, the decompilation provision is addressed to persons who develop new software and want it to be interoperable with the software they disassembly and not to the simple user. The approach of two Directives seems to be similar regarding trafficking in circumventing devices, i.e. compatible devices, as well since both provide that trafficking is in principle illegal but not if the particular device has other purposes which are lawful apart from circumvention.

Apart from the observations regarding interoperability, other observations regarding the relationship between the EUCD and the Software Directive were made in this chapter as well. In particular, it was examined whether the anti-circumvention scheme established in Article 6 EUCD applies to DRM on computer programs simultaneously and in addition to Article 7(1) of the Software Directive and it was concluded that the answer is unclear. A referral regarding this issue, among other issues, is made to the CJEU by an Italian Court and the CJEU's opinion is awaited with great interest. Until then, a possible answer could be the one provided by Välimäki and Oksanen. These writers argue that the EUCD only applies when a different copyright work is involved and not when interoperability concerns only pieces of software (i.e. software in the form of DRM and software circumventing DRM), in which case only the Software Directive applies.

Finally, this chapter examined the relationship between DRM and competition. This examination was deemed important in the context of discussing interoperability since these two issues are very closely connected. The reason for this connection is that the lack of interoperability usually negatively affects competition. Another reason for this examination is that the distortion of competition has almost always negative impact to the user since it results in a lack of innovation and high prices for the products. There are several ways in which DRM interact with competition since rightsowners can exclude their competitors based both on their copyright in the DRM software by refusing to license the particular DRM format to others and on the legal protection given to the DRM Itself that prevents anyone else form reverse-engineering the software.

DRM can protect and distribute both cultural content (e.g. movies, music) and functional (e.g. software, databases which are also protected by copyright) in which case they act as versioning/exclusion tools. When DRMs act as versioning and exclusion tools, their function

[219] However, arguably, there may be an implied licence.

is twofold and consists of (a) strengthening exclusive rights and (b) enabling more flexibility in marketing strategies. In both cases, the copyright balance is affected and access to works is restricted. The competition law analysis when DRM act as exclusion and versioning tools is complex since the supply and demand structure of traditional product markets changes when DRM systems are adopted and is unclear whether markets should be identified with reference to protected content or with reference to equipment comprising a DRM system. When used outside the entertainment sector for the protection of functional works embodied in physical goods DRMs can distort competition by restraining interoperability between compatible goods.

DRM can also be seen as product markets themselves and not in relation to the products they protect and distribute in which case they can either be examined as final solutions or as single components of the final solutions, without, however, presenting an interest from a competition law perspective. It DRM holders-incumbent companies infringe competition law in relation to the DRM they hold, then this will have a negative impact to the user's available options since a distortion in competition always harms the consumers of goods in addition to the competitors. Finally, the fact that device interoperability proceedings were treated under copyright law instead of US antitrust law, i.e. the US law corresponding to EC competition law, shows that competition cannot be used as a justification to unlawfully expand one's exclusive rights to the detriment of users of copyright works.

In sum, lawful personal use includes, first, the ability to enforce copyright exceptions against DRM and, second, the ability to enjoy the application of the exhaustion doctrine (e.g. to lend digital goods) in relation to works distributed digitally, the ability to forward-and-delete digital goods distributed online, the ability to exercise the private copying exception in the case of works distributed digitally, the ability to modify and excerpt content distributed digitally, the ability to enjoy a limited relationship with rightsholders based on expectations set in other media and the ability to circumvent in order to achieve device interoperability. Arguably, these acts should be preserved from erosion in the context of works distributed digitally since this is required by the philosophical underpinnings of copyright law and the relationship between copyright law and consumer protection law.

Part III. Towards a European Solution

Chapter 6. A Right to Circumvent

6.1 Introduction

The previous chapters showed that the application of DRM may have negative impact on the recognition and operation of a minimum of lawful personal use in respect of works distributed digitally. The following discussion will examine a proposed solution to this problem. A starting point to the examination will be the reasons why lawful personal use cannot currently be enforced against DRM and which are, in particular, the limitations and shortcomings of the notion of lawful personal use. The examination of the special characteristics of this notion is necessary in order to be able to propose a workable solution. In particular, this chapter will focus on these aspects of lawful personal use that inhibit its enforcement against DRM and against anti-circumvention provisions.

Next, this chapter will examine certain proposed solutions regarding the problems users face when works are DRM-protected. In particular, the examination will involve whether these solutions can be applicable in the case of lawful personal use as well given that they were proposed to deal with the protection of pure copyright exceptions. It will be suggested that the most preferable solution would be to introduce a user's right to circumvent in Member States' legislation in order to exercise the minimum of lawful personal use since it is the only solution that deals successfully with the shortcomings and limitations of lawful personal use. The particular solution also provides a harmonizing result that can operate across the Directives that regulate DRM systems. Harmonization in this area is very important since, arguably, in order to have a balanced digital copyright law the legislator should cater for both the legal protection of DRM and the simultaneous enforcement of copyright exceptions. Overall, the solution proposed in this Part aims at the preservation of lawful personal use against erosion by DRM.

A right to circumvent could be legally based on the existence of a nexus between copyright infringement and anti-circumvention legislation which can be further analysed into the existence of a nexus between infringement and traditional copyright exceptions and infringement and exceptions to the anti-circumvention provisions. As concerns users' expectations, it is believed that, since they are linked both to copyright exceptions and to exceptions to the anti-circumvention provisions the right to circumvent could also be legally based on the existence of a nexus between copyright infringement and these exceptions.

The answer to the question whether there is indeed such a nexus will depend on the interpretation of the WIPO Copyright Treaty of 1996, the Software Directive, the Database Directive and the EUCD.

6.2 Preservation of a Minimum of Lawful Use in the Case of DRM-protected Works

6.2.1 Limitations of lawful personal use

Several reasons exist why the application of DRM to works may prevent the exercise of lawful personal uses. First, both digital copyright exceptions and exceptions to anti-circumvention provisions have not been classified as enforceable rights of the public; instead, they are considered as non-enforceable interests of the public. For example, Efroni argued that neither copyright law nor free speech or human rights law provide a solid legal basis for the existence of a right of a user based on copyright exceptions that could counterbalance copyright's exclusivity.[1]

The most important characteristic of a right is that it is "compulsory", that is it can be enforced. Therefore, an exception of a compulsive character could possibly be characterised a "right". In particular, some exceptions provided for by the Software Directive and the Database Directive resemble "rights" since they are compulsory, i.e. they cannot be overridden by contract. Similarly, the enforcement of certain exceptions against the use of technological measures according to Article 6(4) of the EUCD in certain Member States that decided that the enforcement is possible before a judicial (and not administrative) authority is also compulsory and the particular exceptions are given the status of a right. On the contrary, Westkamp argues that the restrictions that are agreed in the context of mediation or arbitration procedures chosen by Member States in the context of implementation of Article 6(4) of the EUCD or the restrictions imposed on use when rightsholders have the discretion to decide the extent to which users of works can engage in permitted uses may indicate that the exceptions are not enforceable.[2] This discussion is not relevant in relation

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[1] Efroni, Zohar, *Access-right: the future of digital copyright law* (OUP 2011) 154-161, 198-199 where he summarises his findings.

[2] Westkamp, Guido, Queen Mary Intellectual Property Research Institute, Centre for Commercial Law Studies, Queen Mary, University of London (2007), 'Study on the Implementation and Effect in Member States' Laws of Directive 2001/29/EC on the harmonisation of certain aspects of copyright

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 since the enforcement of exceptions in that case is forbidden in the first place.

Second, copyright exceptions simply provide a defence to copyright infringement and circumventing DRM is not considered copyright infringement. If it is accepted that circumventing DRM is in any case prohibited, then the anti-circumvention exceptions do not provide a defence to circumvention either.[3] Therefore, the enforcement of the EU copyright exceptions cannot be used as a defence to an anti-circumvention charge but only as a defence to a copyright infringement charge.[4]

Third, the rightsholders are not positively obliged to allow users of the works to benefit from the exceptions to the anti-circumvention provisions. An obligation to grant access to works depends on the legal status of limitations under national law and on the specific procedural solution for resolving disputes between rightsholders and beneficiaries according to the implementation of Article 6(4) of the EUCD. In particular, Member States have opted for five different approaches when implementing Article 6(4). These approaches include access to courts, specific administrative proceedings resulting in an administrative order that can be challenged before courts, arbitration proceedings resulting in an award that can also be

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and related rights in the information society, Final Report, Part II, The implementation of Directive 2001/29/EC in the Member States' European Commission DG Internal Market Study Contract No. ETD/2005/IM/D1/91 <http://ec.europa.eu/internal_market/copyright/studies/studies_en.htm> accessed 10 March 2009, at p.70 where it is also mentioned that a solution to this problem could be either to declare contracts which exclude permitted uses and the obligation under Article 6(4) to provide beneficiaries with the means to use the work void or to find a solution in the context of general contract law and unfair contract terms provisions.

[3] See Part II, Chapter 4, Section 4.2 above. In particular, while in the US only the copy controls are directly linked to copyright infringement and can be circumvented in order to exercise copyright exceptions, as opposed to access controls, in the EU, there is no right to circumvent either copy or access controls for whatever reason.

[4] This was confirmed by the court in the famous DeCSS case (*Universal Studios v. Reimerdes*, 111 F. Supp. 2d 294, 324 (S.D.N.Y. 2000)). In that case the defendants argued that creating and posting the DeCSS fell under the fair use exemption. The court agreed with the industry in that fair use was no defense to an anti-circumvention charge and broadly interpreted 'access right.' It was said, in particular, that "The policy concerns raised by defendants were considered by Congress. Having considered them, Congress crafted a statute that, so far as the applicability of the fair use defense to Section 1201(a) claims is concerned is crystal clear. In such circumstances, courts may not undo what Congress has so plainly done by "construing" the words of the statute to accomplish a result that Congress rejected."

challenged before courts, mediation and similar dispute resolution mechanisms and, finally, lack of implementation of any provisions concerning Article 6(4) of the EUCD at all.[5] Contrary to the complex approach described, there is no uncertainty in relation to content made available on-demand since in that case no exceptions to the anti-circumvention provisions are recognised under Article 6(4)(4). All Member States which have implemented this Article seem to give precedence to contractual rules applying to such transactions and to accept that the scope of licenses in relation to works acquired through electronic delivery systems extend to technological measures applied to works.[6]

Apart from the relationship between the copyright exceptions of the EUCD and Article 6 of the EUCD, the relationship between the limitations to the exclusive rights provided for in the Database Directive and Article 6(1) of the EUCD is also unclear. The reason is that no Member State, apart from Spain, has expressly excluded these limitations from Article 6(1) by taking advantage of the procedure established in Article 6(4).[7] In particular, exceptions to the database right can either concern exceptions to copyright or exceptions to the *sui generis* right, depending on whether a database is viewed as the subject matter of copyright or *sui generis* right. As concerns the former category of exceptions, it is likely that the research exceptions that have been made enforceable against technological measures will also encompass the research exemption under the Database Directive.[8] With regard to the exceptions to the *sui generis* database right, the answer will vary among Member States depending on what is provided with regard to the exceptions to this right. However, overall, the rightsholders are not obliged to allow the users to benefit from the exceptions contained in the Databases Directive.

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[5] *Westkamp* (fn 2) 68-69.

[6] Ibid 70-71. However, arguably, the issue of the enforcement of copyright exceptions in the case of online (interactive) services is still open since the proper interpretation of Article 6(4)(4) remains unclear. Westkamp, in pp.70-71, argues that the individual licenses cannot extend to technological protection measures applied to works acquired in such way and he is of the view that copyright exceptions are applicable against technological protection measures in such a case. In other words, in the case of a work downloaded from an interactive service, the scope of Article 6(4)(4) only extends to the services as such and the beneficiary is able to request the removal of any technological protection measures applied to the copy downloaded. Regarding the mandatory exceptions contained in Article 15 of the Database Directive in favour of the lawful user of a database protected under either copyright or the *sui generis* right, the same individual licensing rules under Article 6(4)(4) of the EUCD apply and, accordingly, the same observations.

[7] Ibid 71.

[8] Ibid.

Similarly to copyright exceptions, users' expectations are considered as non-enforceable interests instead of rights, they can simply be raised as a defence to copyright infringement and not as a defence to a circumvention charge, rightsholders are not obliged to act in accordance with them and they cannot be enforced against DRM either. The reason is that users' reasonable expectations are based on several consumer protection provisions which do not give users enforceable interests. The reasonable expectations test is subject to judicial interpretation and for the time being there is still very little conclusive case law about the question of whether consumers have a right to expect to be able to resell a product, to expect that a product is interoperable, and to be able to make private copies of information products or services.[9] With regard to the interoperability requirement, courts have already decided that the ability to use a CD in every machine is a reasonable expectation and an essential characteristic of the product.[10]

However, regarding the existence of a clear right to make a private copy in copyright law, the situation is more complex since the laws on private copying in the Member States still vary enormously. In particular, while most European countries permit some measure of private copying, the United Kingdom and Ireland considers copying for personal uses generally a copyright infringement. Moreover, it was already seen that, unfortunately, the

[9] Helberger, Natali & Hugenholtz, Bernt P. 'No place like home for making a private copy: Private Copying in European Copyright Law and Consumer Law', *Berkeley Technology Law Journal*, Vol. 22, Issue 3 (Summer 2007), 1061, 1085.

[10] See CA Versailles, 1ère chamber-1ère section, 30 septembre 2004, *Association Consomation Logement Cadre de Vie "CLCV" c/ EMI France*, available online at http://www.juriscom.net accessed 10 May 2010. Moreover, in the US, it has been argued that consumers have the right to expect that works they purchase will not be restricted. See J. Thomas Rosch, Commissioner, Federal Trade Commission, 'A Different Perspective on DRM" at the Copyright, Digital Rights Management Technologies, and Consumer Protection Symposium, Berkeley, California March 9, 2007, available at <http://www.ftc.gov/speeches/rosch/Rosch-Berkeley-DRM%20Speech-Mar9-2007.pdf> at pp.3-4 where it is said that "[u]nless otherwise advised, […] consumers have the right to expect that their CDs come without copying limitations, and to expect that the music on those CDs will play on any device. This position is not without precedent. Several years ago, when personal digital assistants were being touted as wireless communications devices, the Commission brought actions against the manufacturers of several handheld computers. We alleged the companies failed adequately to disclose that the devices could not actually access the Internet wirelessly, unless the consumer also purchased additional equipment and services. Likewise, with DRM, any material limitations of use rights (including, but not limited to, technological limitations such as an inability to use the media on another platform) must be clearly and conspicuously disclosed before a sale of those media is made." The writer refers to *In re Microsoft Corp.*, Docket No. C-4010 (issued May 17, 2001) (consent order) (available at http://www.ftc.gov/os/caselist/c4010.htm), to In *re Hewlett-Packard Co.*, Docket No. C-4009 (issued May 17, 2001) (consent order) (available at http://www.ftc.gov/os/caselist/c4009.htm) and to *In re Palm, Inc.*, Docket No. C-4044 (issued April 17, 2002) (consent order) (available at http://www.ftc.gov/os/caselist/0023332/index.htm).

Consumer Rights Directive which harmonises the area of consumer rights in relation to consumer contracts did not extend to digital content the right to expect quality in products that is in conformity with consumers' reasonable expectations.[11] Thus, the reasonableness of the expectation of an information requirement regarding the functionality and interoperability of the digital content supplied online and the right of withdrawal reserved to the user cannot automatically be extended to mean that a right to expect quality in digital content that is in conformity with consumers' reasonable expectations cannot be restricted or abrogated by contract.[12] Only, the Proposal for a Regulation on a Common European Sales Law (CESL) seems to provide a positive answer to this issue.[13] In particular, Article 99 of the CESL provides that

> [i]n order to conform with the contract, the […] digital content must: (a) be of the quantity, quality and description required by the contract; (b) be contained or packaged in the manner required by the contract; and (c) be supplied along with any accessories, installation instructions or other instructions required by the contract.

Moreover, Article 99(4) provides that in a consumer sales contract the parties may not to the detriment of the consumers exclude the application of the Article 100 on the criteria for conformity of digital content, Article 102 on third party rights or claims and Article 103 on limitation on conformity of digital content, unless at the time of the conclusion of the contract the consumer knew of the specific condition of the digital content and accepted it as being in conformity with the contract when concluding it, and this not a provision whose application the parties may exclude, or derogate from or vary its effects. However, CESL has not yet been adopted and for the time being it only constitutes a proposal. What is more, CESL is a voluntary regime, which only applies if chosen by the contracting parties. Therefore, until, it is formally adopted and is given a binding character, the enforcement of consumers' reasonable expectations as defined in and by means of consumer law in a harmonised way will not be possible.

[11] See Part I, Chapter 3, section 3.3.

[12] See Part I, Chapter 3, section 3.3.

[13] Commission (EC), Proposal for a Regulation of the European Parliament and of the Council on a Common European Sales Law, Brussels, 11.10.2011, COM(2011) 635 final. For this discussion, see Chapter 3, section 3.3.

6.2.2 Proposed solutions

Since the interests of copyright exceptions beneficiaries are best served when no technological protection applies, the solution could either be to abolish anti-circumvention laws altogether or to abolish technological measures that operate against copyright exceptions.[14] Given that a suggestion to abolish anti-circumvention laws altogether would be both unrealistic and unwanted because anti-circumvention laws combat piracy to a great extent, it would be desirable to maintain both legal protection of DRM and exercise of lawful personal use.

The solutions proposed so far concern the enforcement of copyright exceptions against DRM. First, there is the broader neoconservative approach to this issue and, second, there is the narrower issue of the interplay between traditional copyright exemptions and anti-circumvention regulation discussed in the context of a revision of copyright exceptions (such a revision is also proposed in the broader context of the neoconservative approach). Although the particular solutions were proposed in relation to copyright exceptions only, for the purposes of this work, they will be checked against lawful personal use.

Overall, the neoconservative approach includes the proposed restrictive reading of exclusive rights (i.e., of the digital reproduction right and making available right),[15] the revision of copyright exceptions (by following a balanced interpretation of the three-step test or an approach that links fair use to anti-circumvention legislation and at the same time tries to preserve the ability to exercise traditional fair use against anti-circumvention prohibitions)[16] the use of nonproprietary models such as the free software model and the creative commons model,[17] the introduction of fair use principles into the DRM technology itself,[18]

[14] *Efroni* (fn 1) 425.

[15] Ibid 216-224, 260-263.

[16] Ibid 419-426.

[17] Ibid 426-437.

[18] See, for example, Burk, Dan L. & Cohen, Julie E., 'Fair use infrastructure for rights management systems' (Fall 2001) 15 Harv. J. L. & Tech. 41; Armstrong, Timothy K., 'Digital Rights Management and the Process of Fair Use' [2006] 20 Harv. J. L. & Tech. 49; Lipton, Jacqueline D., 'Solving the digital piracy puzzle: disaggregating fair use from the DMCA's anti-device provisions' (Fall 2005) (19)1 Harv. J. L. & Tech. 112; Steftik, Mark, 'Shifting the Possible: How Digital Property Rights Challenge Us to Rethink Digital Publishing' (1997) 12 Berkeley Tech. L. J. 137.

the use of liability rules instead of property rules,[19] the introduction of copyright formalities, the upgrading of users' privileges and rights of access[20] and the introduction of an access right and exceptions to this right.[21]

The problem with these proposals is that they do not deal with the reasons why lawful personal use cannot be enforced against DRM. First, they address neither the issue of the legal nature of copyright exceptions (i.e., being merely non-enforceable interests instead of enforceable rights) nor the issue of the legal nature and enforceability of consumers' expectations (i.e., they are not yet safeguarded as far as digital products are concerned). Second, they do not deal with the fact that circumvention is not considered copyright infringement but instead is a *sui generis* type of liability and that, accordingly, neither copyright exceptions nor consumers' expectations can provide a defence to circumvention. Third, these proposals do not positively oblige rightsholders to allow the users of the works benefit from the exceptions to the anti-circumvention provisions (or to act in accordance to their reasonable expectations). Overall, they are strictly focused on copyright law and they do not take into consideration the reasonable expectations of the users of works delivered digitally at all. Last but not least, the aforementioned solutions do not offer a harmonizing solution to the issue of the relationship of the anti-circumvention provisions and the copyright exceptions that could operate across the several Directives addressing this relationship.

In the context of revising the copyright exceptions, more specific suggestions have been made to address the troubled interplay between copyright exceptions and anti-circumvention provisions in particular. In this context, it has been argued that the interplay between traditional copyright exceptions and anti-circumvention provisions could be

[19] For example see *Efroni* (fn 1) 449-464; Lemley, Mark A. & Weiser, Phil, 'Should Property or Liability Rules Govern Information?' (2007) 85 Tex. L. Rev. 783; Kur, Annette & Schovsbo, Jens, 'Expropriation or Fair Game for All? – The Gradual Dismantling of the IP Exclusivity Paradigm' in Kur, Annette (ed), *Intellectual Property Rights in a fair world trade system-Proposals for reform of TRIPs* (Max-Planck-Institute for Intellectual Property, Competition and Tax Law, Munich, Germany, Edward Elgar 2011); Netanel, Neil W., 'Impose a Noncommercial Use levy to allow free Peer-to-Peer file sharing' (Fall 2003) 17(1) Harv. J.L. & Tech. 1.

[20] *Efroni* (fn 1) 464-475; Lessig, Lawrence, *Free Culture: How big media use technology and the law to lock down culture and control creativity* (Penguin Press 2004); Litman, Jessica, 'Sharing and Stealing' (2004) 27 Hastings Comm. & Ent. L. J. 1, 16; Sprigman, Christopher, 'Reform(aliz)ing Copyright' (2004) 57 Stan. L. Rev. 485, 546-547, discussing the possibility to reintroduce formalities.

[21] This solution is proposed in *Efroni* (fn 1) 507-514.

addressed in four different ways.[22] Firstly, a legal privilege to "self-help circumvention" may be granted to beneficiaries of copyright exceptions under certain circumstances that can either be explicitly stated in the law or be implied in the law by not covering certain types of DRM in the first place.[23] Secondly, the solution adopted in Article 6(4) of the EUCD provides that a designated third party may compel rightsholders to provide necessary means in order to facilitate privileges under certain terms or having itself the technical and legal capability to facilitate exceptions. This solution applies in case self-help circumvention is illegal and has been described by Akester as "access to complaints portals", as we shall see below.[24] Thirdly, a solution would involve the operation of an administrative agency that would operate under a statutory mandate in order to facilitate the exercise of existing copyright exceptions by allowing circumvention in certain circumstances.

With regard to this third solution, it must be noted that is referred to by Akester as "access to works portals".[25] In particular, Akester proposed a solution that could be workable in the context of the EUCD, namely an amendment to Article 6(4) that would set out a procedure to facilitate access and exercise of privileged exceptions involving a DRM deposit system where non-protected versions of the work or decryption keys would be deposited to allow access to the work under specific conditions.[26] With regard to incentives that would

[22] Ibid 425-426.

[23] Ibid 425, fn 83 where the example of the DMCA's implied privilege of users to circumvent technological measures in the case of copy-controls (rights-controls) is given.

[24] Akester, Patricia, 'Technological accommodation of conflicts between freedom of expression and DRM: the first empirical assessment' 5 May 2009 <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1469412> accessed at 25 July2009, at p.110.

[25] Ibid. This solution is similar to the one adopted by the DMCA 1998. In particular, in the US, Congress has set out safe harbour provisions regarding DRM and a triennial review is conducted by the Register's Office in order to ensure that the users have the ability to engage in non-infringing uses of the works. S.1201(a)(1)(C)-(D) of the US Copyright Act. Section 1201(a)(1)(C) of the DMCA aims at the preservation of fair use by stipulating that the Librarian of Congress determines every three years in rulemaking "whether persons who are users of a copyrighted work are, or are likely to be […] adversely affected by the [anti-circumvention] prohibition in their ability to make non-infringing uses under this title of a particular class of copyrighted works." An important difference between EU and US copyright law to which, among other, this system of triennial reviews is based is that the EU copyright law enumerates specifically designated copyright exceptions while its US equivalent recognises a broad exception of fair use.

[26] *Akester* (fn 24) 110. See also Akester, Patricia, 'The impact of digital rights management on freedom of expression-the first empirical assessment' (2010) 41(1) IIC 31 for a short discussion of the findings of the report.

guarantee the effectiveness of the system, in particular, Akester proposes that, first, owners of works that have not deposited with the relevant deposit agency means of accessing those works should be denied the protection afforded under Article 6 of the EUCD and, second, that in cases where a beneficiary cannot take advantage of an exception, and no means have been deposited with the relevant authority the beneficiary should be allowed to circumvent in order to exercise this exception.[27]

The recognition of a right to circumvent, arguably, could be offered to the deposit agency as well since the principle to which this proposal is based, according to which "where the means to enable beneficiaries of privileged exceptions to benefit from them are not deposited, the protection of privileged exceptions will prevail over the protection of DRM", is also applicable in case a right to circumvent is recognized to the deposit agency.[28] In the context of this proposal, Akester also proposed to add to Article 6(4) of the EUCD that

> where access to works by beneficiaries of privileged exceptions is not facilitated (by means of depositing a non-protected version of the work or a decryption key), the protection of privileged exceptions prevails over the protection of DRM, *even where works are supplied online on agreed contractual terms*.[29]

Finally, it has been suggested the troubled interplay between copyright exceptions and anti-circumvention provisions could be effectively addressed by recognizing broader exceptions to circumvention for any lawful use and with respect to all anti-circumvention bans.[30]

Arguably, the solutions involving access to complaints portals, access to works portals and recognition of exceptions to circumvention for any lawful use and with respect to all anti-circumvention bans are not workable for several reasons. Access to complaints portals has been described by Akester as a problematic solution since although Article 6(4) of the EUCD urges content owners to accommodate privileged exceptions by the adoption of voluntary measures, which indeed have emerged in the publishing field, the evidence shows that

[27] Ibid 115.

[28] Ibid 122.

[29] *Akester* (fn 24) 122 (author's emphasis).

[30] *Efroni* (fn 1) 426.

problems identified by the British Library and film lecturers, students and researchers have not been addressed by voluntary measures.[31]

Just like access to complaints portals, access to works portals does not solve the problem either as clearly illustrated by Lipton.[32] The main problem with this proposal is that although it caters for access to works it does not deal with the issue of trafficking. In particular, the fact that the anti-trafficking provisions continue to apply at the same time that access to works is permitted essentially limits to a great extent the ability to access the works. The reason is that when access to the means for circumvention is prohibited ultimately only technological savvy users and not average users benefit from provisions regulating access to works portals.[33] Moreover, there is the danger that the particular procedure is rather slow, given that technological developments in information technologies are very rapid. In addition it may not address the needs of each individual user on a case-by-case basis since this proposed solution does not take under consideration all possible lawful uses but it operates based on categories of works since by definition what is important is the access to portals of works and not the kind of uses the users want or entitled to engage in.[34] In this context, there is also the danger that the administrative decision-makers are influenced by copyright holders' interests and exempt only a limited number of certain categories of limited importance in order to preserve innovation in particular copyright industries.[35]

Finally, recognising broader exceptions to circumvention for any lawful use and with respect to all anti-circumvention bans is not without problems either. In particular, the problem is of such initiatives is that they operate under a quite narrow official mandate in order to be workable.[36] Effroni argues that, instead of recognising broad exceptions for any lawful use and with respect to all anti-circumvention bans, it would be preferable to institute an

[31] *Akester* (fn 24) 106.

[32] *Lipton* (fn 18).

[33] Ibid 135.

[34] Ibid.

[35] Ibid 135-136.

[36] *Efroni* (fn 1) 419.

administrative process that proclaims periodical exceptions to anti-circumvention bans according to changing conditions and following users' requests.[37]

6.2.3 A right to circumvent

Arguably, a workable solution could be to link the act of circumvention to copyright infringement directly and, therefore, allow the user of the work to circumvent technological measures in order to engage in exempted activities and lawful acts when interacting with works. This solution resembles the proposal for the recognition of a legal privilege to "self-help circumvention" that may be granted to beneficiaries of copyright exceptions under certain circumstances that can either be explicitly stated in the law or be implied in the law by not covering certain types of DRM in the first place mentioned above. The only difference is that the proposed right to circumvent would cover all instances of lawful personal use and not only the copyright exceptions. Since anti-circumvention legislation, both in terms of the anti-circumvention protection and the exceptions to this anti-circumvention protection, provides a *sui generis* protection to the rightsholders, a "right" or "privilege" to circumvent could provide a *sui generis* protection to the users as well.

Such a solution is preferable because users will be able to engage in lawful personal and because it will not prevent the notion of lawful personal use to develop further in accordance to developments in copyright law, consumers' expectations and consumer protection law. Moreover, such a solution could be workable across all European Directives that include anti-circumvention provisions with the aim to harmonise the minimum of lawful personal use in EU. This proposal addresses the needs of each individual user and of all possible lawful personal uses that could be ascertained on a case-by-case basis. Finally, it is not a time-consuming process.

Linking circumvention to copyright infringement directly will also entail linking the act of circumvention to infringement of consumers' expectations. This is so if it is accepted that non-infringing purposes include, apart from copyright exceptions, acts in accordance with consumers' reasonable expectations as well. This can be accepted since copyright exceptions and consumers' reasonable expectations are closely linked, as shown in Chapter 3 of this study. If this is accepted, then allowing circumvention for non-infringing purposes will also include circumvention in order to engage in certain acts in accordance to consumers'

[37] Ibid.

expectations and, thus, linking the act of circumvention to copyright infringement directly will indirectly safeguard the enforcement of reasonable consumer expectations.

The proposal for the recognition of a right of self-help circumvention is based by Akester on the fact that Article 11 of the WCT allows the recognition of such a right since only anti-circumvention measures preventing acts forbidden by law require legal protection. According to Akester, since protection to anti-circumvention measures may become dependent on the observation of a formality and since it is not necessary to deny all protection to anti-circumvention measures preventing acts permitted by law, an exemption from the prohibition against circumvention in the form of a right to circumvent could be offered in cases where no means for the exercise of an exception have been deposited with the relevant deposit agency and there is no alternative way to for the exercise of the exception.[38]

A right to circumvent would not be complete if it does not apply in the cases of works that are supplied online under agreed contractual terms once the user has acquired lawfully initial access to the work and aims to engage in continuing non-commercial lawful personal use of the work. Therefore, this right is based on and further develops Akester's proposal for the introduction of a fair use defence to circumvention in order to engage in lawful personal use "*even where works are supplied online on agreed contractual terms*" since this is also allowed under the WCT anti-circumvention provisions that apply only in the case that circumvention would lead to copyright infringement.[39]

The proposed solution does not affect the nature of copyright exceptions and can operate irrespectively of whether they are seen as rights or as mere interests. The exercise of a right to circumvent will be equivalent to the ability of beneficiaries of copyright exceptions to engage in exempted acts in respect of works that are not DRM-protected. In other words, the user who wants to engage in lawful personal use will have a right to circumvent but this will not define whether the proposed use is actually lawful. This is a different question that this work does not aim to solve. If the rightsholder believe that the particular activity to which the user engages after circumvention does not constitute a type of lawful personal

[38] *Akester* (fn 24) 121.

[39] *Akester* (fn 24) 122.

use, then he can take the user to courts. In other words, one should not be allowed to circumvent for purposes other than to engage in lawful personal uses.

6.3 Linking Anti-Circumvention Provisions to Copyright Infringement

6.3.1 The Paradigm of the WCT and the Software Directive

A starting point to the discussion whether there is a link between anti-circumvention provisions and copyright infringement could be the examination of Article 11 of the WIPO Copyright Treaty. This Article obliges Contracting Parties to legally protect rightsholders against circumvention of technological measures that are "used by authors in connection with the exercise of their rights" under the WIPO Copyright Treaty and the Berne Convention and "that restrict acts […] which are not authorized by the authors concerned or permitted by law." The phrase "in connection with the exercise of their rights" implies the existence of a link between anti-circumvention protection and copyright protection. The technological measure must be deployed by a copyright holder, and its use should show a connection to a rightsholder's attempts to benefit from rights secured under the Berne Convention and the WIPO Copyright Treaty. To benefit from anti-circumvention protections, rightsholders hence must fulfill two conditions cumulatively, namely they must hold the copyrights in the works technologically restricted by the technological measures and they must use technological measures as a means to "exercise" those copyrights.

Regarding non-infringing access-conducts that are blocked by technological measures, it is argued that since the WIPO Copyright Treaty and the Berne Convention do not cover access-conducts as such the non-infringing access-conducts should be allowed in which cases the user should be able to circumvent.[40] In particular, it is argued that "[n]either Berne nor the WCT provide rights-holders with an exclusive right to prevent access-conducts *per se*, and therefore, Article 11 cannot relate to such right."[41] On the contrary, circumvention of technological measures is unlawful under Article 11 of the WCT in the case of infringing access-conducts because the "in-connection requisite" is satisfied.[42]

[40] *Efroni* (fn 1) 306. On "access-conducts" see Part I, Chapter 2, Section 2.5.1.

[41] Ibid.

[42] Ibid 306-307.

Ricketson and Ginsburg expressly state the Article 11 of the WCT requires that there is a nexus between copyright infringement and the anti-circumvention provisions.[43] Moreover, Reinbothe and Von Lewinski argue that "[t]he link contained in Article 11 WCT between the protection of technological measures against circumvention and limitations of and exceptions to the rights is, therefore, rather strong."[44] Similarly, Ficsor argues that "no obligation exists in Article 11 of the Treaty to provide 'adequate legal protection and effective legal remedies' against acts of circumvention which concern acts permitted by law."[45] It is also argued that

> where a user circumvents a technological measure in order to make a copy for private purposes or educational purposes permitted under the relevant national law without the rightholders authorization, the WCT and WPPT do not require Contracting Parties to provide for legal remedies against circumvention; they clearly establish a link between copyright or neighbouring rights protection and the protection against circumvention.[46]

Moreover, it is argued that the extent of the coverage of access controls by the anti-circumvention laws is a matter for the Member States to decide. The minimum, however, that is demanded by the WCT is that access controls are protected against circumvention when there is a clear link between the infringement of the anti-circumvention provisions and

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[43] Ricketson, Sam & Ginsburg, Jane C., *International Copyright and Neighbouring Rights: The Berne Convention and Beyond* (OUP 2006) 977-978 assert that "[n]ot all acts of circumvention are violations of article 11; member states incur no obligation to prohibit circumventions that allow the user to exploit a work in the public domain, or to engage in an act authorized by the right holder, or, more importantly, that allow the user to engage in a non-infringing act, such as accessing a work in the public domain, or copying for purposes endorsed by Article 10 and 10^{bis}. Article 11 delegates to member states' laws the determination of permissible acts, but these must remain consonant with the scope of exceptions and limitations allowed under article 10 of the WCT and articles 9(2), 10, 10^{bis}, 11^{bis}, and 13 of the Berne Convention. […] The challenge for national laws, then, is to determine how to regulate the creation and dissemination of circumvention devices without effectively cutting off the fair uses that at least some devices, in the right hands, would permit […] ultimately it will be seen that there is little in the WCT text or Berne itself that will provide guidance to national legislators and policymakers."

[44] Reinbothe, Jörg & von Lewinski, Silke, *The WIPO Treaties 1996* (Butterworths LexisNexis, UK, 2002), at 146 where they also explain that "[u]nder Article 11 WCT, the obligation of Contracting Parties to protect technological measures against circumvention only extends to those measures which are used to control unauthorized acts. Article 11 WCT contains no obligation to protect technological measures in areas where the use has been authorized by consent of 'the authors concerned', or where limitations of or exceptions to the rights exist under domestic law and have thus 'permitted by law' the use of the protected works." (emphasis of the author)

[45] Ficsor, Mihάly, *The Law of Copyright and the Internet* (Oxford University Press 2002), at 548.

[46] von Lewinski, Silke, *International Copyright Law and Policy* (OUP 2008), at 548.

copyright infringement. Therefore, an argument *a contario* would be that circumvention should be allowed when there is no link between infringement of the anti-circumvention provisions and copyright infringement.[47]

The Software Directive, in particular, links infringement of the anti-circumvention provisions to copyright infringement by protecting only trafficking in DRM applied to software and not their circumvention and by stipulating that contractual provisions against the decompilation exception, the back-up exception and the reverse-engineering exception shall be null and void. Moreover, the Software Directive explicitly refers to the exceptions to exclusive rights as "rights". Justifications for the introduction of exceptions to the restricted acts can be found in the Explanatory Memorandum to the original proposal for the Software Directive Part II Article 5(1) which expressly refers to the exceptions to exclusive rights as "rights" by stating that

> [w]here a program is sold to the public, it is normal that certain *rights* to use the property thus acquired should apply. These *rights* should of necessity include the *right* to use the program without further express authorization from the rightholder. It should not be necessary to obtain the rightholder's authorization in order to lend the program to a third party or to use it on a given piece of apparatus or in a given location. Similarly the acts of loading, viewing, running, transmission or storage should be taken as not requiring express authorization of the rightholder provided that, particularly in the case of transmission and storage, they are only carried out for the purposes of using the program and do not result in a second permanent replication of the program […].[48]

[47] *Efroni* (fn 1) 307-308 where he argues that "[g]enerally, both analytically and practically, it appears extremely difficult to articulate a legal norm that would achieve a neat separation between the protection function of access controls and the prevention of copyright-implicating acts. Hence, the dilemma seems to boil down to an all-or-nothing resolution: whether or not access-control TPMs shall principally be covered by anticircumvention law. To inject some flexibility into the in-connection clause, it is impotent to view it as a policy instrument. The pragmatic approach to Article 11 interpretation does not try to draw a bright-line rule determining a priori whether access-control TPMs are covered. Instead, it shall be a matter of national laws to determine the meaning of the phrase "in connection with the exercise of [] rights." Domestic laws should be at liberty to articulate the requisite nexus between TPMs circumvention and copyright infringement while bringing general copyright policy into account. Accordingly, to such policy considerations, access-control TPMs that show clear, direct, and unequivocal connection to the prevention of infringement will likely be covered by the domestic norm. Either way, Article 11 cannot be said to *demand* more than this, as far as technological *access control* is concerned. But the pragmatic-policy approach to the interpretation of Article 11's "in connection" clause to access-control TPMs unfortunately does not resolve the problem-it merely postpones it to the later stage of national implementation and application" (emphasis of the author).

[48] Commission (EC), 'Proposal for a Council Directive on the legal protection of computer programs' (Explanatory Memorandum) COM(88)816 final-SYN 183, 12 April 1989, at 11-12 (emphasis of the writer).

Article 4 of the Software Directive gives wide powers to the rightsholders to control the acts of reproduction, adaptation and distribution, but these powers should not in fairness be used to circumscribe the normal enjoyment of property by a person who legally acquires a program by purchase. If program producers wish to ensure the greater degree of control over the reproduction, adaptation and distribution of their programs which the system of licenses permits, the would-be purchaser of a program should be required to read and sign a legally binding license agreement at the point of sale.[49]

6.3.2 The Paradigm of the Database Directive

Regarding whether there is a nexus between infringement of copyright and *sui generis* right in a database and anti-circumvention legislation, the starting point of the examination could be the example of a student who wishes to reproduce an article from a law journal on an online database that is password protected. In the context of the particular example, the student unlawfully obtains and uses the password in order to access the database and reproduce the article. In that case, although the student has infringed the anti-circumvention provision by unlawfully using the password, it is unclear whether he breached the copyright and the *sui generis* right in the database and whether the exception for private use could provide a defence to the act of circumvention.

It was mentioned earlier that Article 6 of the Database Directive provides that certain acts are allowed without the rightsholders' authorisation "in respect of the expression of the database which is protectable by copyright", that is an electronic or non-electronic database that is protectable by copyright.[50] Article 6 has two problems from a user's perspective. First, it provides that "reproduction for private purposes" should only be allowed in the case of non-electronic databases. Second, its scope of application is limited given that the scope of protection afforded to databases by means of copyright only concerns "the selection or

[49] Ibid where it is also stated that "[a]s regards the Anglo-Saxon law concept of 'fair-dealing' by which reproduction of insubstantial parts of literary works is permitted in certain circumstances, it is believed that in respect of licensed programs, which constitutes the most common method of commercialization at present, the parties are free to negotiate exceptions to the author's exclusive right to control insubstantial reproduction of the program if circumstances warrant such a derogation. In the case of programs which are sold or made available by means other than a written license agreement signed by both parties, the provisions which exist in the copyright laws of Member States in relation to exceptions to the exclusive rights of the author of a literary work should continue to apply in the case of computer programs. […] This is a necessary compromise between the interests of suppliers and consumers of computer programs."

[50] See Part I, Chapter 3, Section 3.2.3.

arrangement of [the database's] contents" and does not extend to its contents (Article 3 of the Database Directive). Therefore, accordingly, the exceptions to the copyright in the database concern only the selection or arrangement of its contents and not its contents *per se*. As a result, by reproducing a particular article the student has not infringed copyright in (the selection or arrangement of the contents of) the database and he cannot benefit from the reproduction for private use exception. In this context, since the student has not infringed copyright in the database and since he cannot benefit from the copyright exceptions in the first place, the existence of a link between copyright infringement and circumvention cannot be investigated.

With regard to the *sui generis* database right, it grants rightsholders an exclusive right of reutilisation and an exclusive right of extraction of the contents of the database. The right of reutilisation allows a database maker to prevent anyone making available to the public all or a substantial part of the contents of a database by the distribution of copies, by renting, by online or other forms of transmission while the right of extraction allows a database maker to prevent the taking and reproduction of the contents of the database including the downloading and printing of contents or the loading and running of electronic or online databases (including online screen displays which result in a temporary transfer of the whole or a substantial part of the database contents). Exceptions to the *sui generis* right can be found in Article 9 of the Database Directive which provides that Member States may allow a lawful user of a database extract or re-utilize a substantial part of its contents in the case (a) of extraction for private purposes of the contents of a non-electronic database, (b) of extraction for the purposes of illustration for teaching or scientific research, as long as the source is indicated and to the extent justified by the non-commercial purpose to be achieved, (c) of extraction and/or re-utilization for the purposes of public security or an administrative or judicial procedure.

Since extraction for private purposes is only allowed with regard to non-electronic databases, that is only by photocopying, the student in our example cannot the beneficiary of such an exception exactly because the database concerned is electronic. What is more, the student cannot be the beneficiary of such an exception since he is not a "lawful user" of the database to whom the exceptions to the *sui generis* database right are reserved; on the contrary, he is an "unlawful user" since he unlawfully obtained and used the password to access the database. Similarly, since the student/user is not the beneficiary of an exception

in relation to its use of an electronic database in the first place it is not possible to examine whether there is a link between infringement and circumvention in such a case.

If the student in the particular example was a lawful user of the database, then a link between the *sui generis* database right infringement and the circumvention provisions would probably have existed since it is only the lawful user who can be the beneficiary of exceptions to the *sui generis* right. In particular, the lawful user may perform restricted acts that are necessary to access the database or for the normal use of the database. Member States have the option to provide for limitations to copyright protection in the case of reproduction of a non-electronic database for private purposes, for the sole purpose of illustration for teaching or scientific research, for purposes of public security and for purposes of an administrative or judicial procedure. The role of the lawful user acquires greater significance within the framework of the *sui generis* database right since, first, the exceptions to this right can only be exercised by him and, second, Article 8 establishes his so-called "rights and obligations".

However, the example of an unlawful user was chosen in this section in order to highlight the problems created for the Database Directive. One of these problems is exactly the fact that although the Database Directive prohibits all activities of unlawful users it does not define the notions of "lawful user" or "unlawful user".[51] Both because the definition of these notions differs among Member States and because, arguably, prohibiting every activity by unlawful users is inappropriate, it can be argued that the Database Directive is not very helpful in preserving a minimum of lawful personal use in digital settings.

6.3.3 The Paradigm of the EUCD

In the context of examining the approach of the EUCD regarding the existence of a link between copyright infringement and anti-circumvention provisions the example of the student who wishes to reproduce an article from a law journal on an online database could

[51] Dutfield, Graham M. & Suthersanen, Uma, 'The innovation dilemma: intellectual property and the historical legacy of cumulative creativity' (2004) 4 IPQ 379, 415 where it is argued that "[…] there are no *general* exceptions in relation to usage of the database by unlawful users, leading to the rather interesting proposition that the rights holder may be able to prohibit virtually *all* activities by such users. This surprising state of affairs whereby the exclusions leave very little scope for unlawful users is further heightened by the fact that the Directive is silent as to the meaning of "lawful user". The absence of any definition has led to differing notions of this hypothetical person in Member States' laws and to many debates." (footnotes omitted).

provide a useful starting point as well.[52] Given that the student unlawfully obtains and uses the password (i.e. circumvents), accesses the database and reproduces the work the question is whether the private copying exception established in Article 5(2)(b) of the EUCD applies given that he breached copyright in the law article by reproducing it and also whether this exception can provide a defence to a circumvention charge.[53]

In an effort to answer the first question let's assume that the conditions provided for in Article 5(2)(b) are satisfied, i.e. that the particular Member State of the student has implemented a private copy exception, that the rightsholders receive "fair compensation"[54] and that the receipt of fair compensation by the rightsholders has taken into account the application or non-application of technological measures to the work concerned. Arguably, "[t]he private use defence is worded vaguely enough to make it conditional that should there be a technological lock on the work, some sort of compensation should be payable."[55] In addition, the concept of "fair compensation" has not been defined properly in the Recitals of the EUCD and is unclear whether it means that there is a need to always pay for a use ("may or may not mean that *all* usages must be paid for").[56] Indicatively, Recital 35 provides that

> [w]hen determining the form, detailed arrangements and possible level of such fair compensation, account should be taken of the particular circumstances of each case. When evaluating these circumstances, a valuable criterion would be the possible harm to the rightholders resulting from the act in question. In cases where rightholders have already received payment in some other form, for instance as part of a licence fee, no specific or separate payment may be due. The level of fair compensation should take full account of the degree of use of technological protection measures referred to in this Directive. In certain situations where the prejudice to the rightholder would be minimal, no obligation for payment may arise.

Thus, since it is unclear, according to Article 5(2)(b), whether compensation should be payable in the context of the private copying exception, it could be argued that the student

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[52] The example can be found in *Dutfield & Suthersanen* (fn 51) 401-402.

[53] Ibid 401.

[54] Ibid.

[55] Ibid.

[56] Ibid.

who reproduced a work for free could possibly take advantage of the private copying exception in the particular instance on condition that the righsholders have received payment in the form of a license fee (payable by the original account holder) or the prejudice to the rightsholders is minimal.

In an effort to answer the second question, Article 5(2)(b) does not seem to be helpful and reference to Article 6 of the EUCD seems necessary. Technological measures are defined in Article 6(3) of the EUCD as "any technology, device or component that, in the normal course of its operation, is designed to prevent or restrict acts, in respect of works or other subject-matter, which are not authorised by the rightholder […]". The problem with this provision is that, even though "acts which are not authorized by the rightholder" should not be restricted by technological protection, the "in-connection" to the exercise of copyrights (or an equivalent) wording found in Article 11 of the WCT is missing and Member States can interpret this Article the way they want. On the general issue whether copyright exceptions can be used as defences to acts of circumvention, Bechtold suggests that indeed the EUCD requires that there is a nexus between protection of DRM and copyright infringement.[57] In particular, he argues that Article 6 only protects technological measures that prevent or restrict acts that fall within the rightsholder's power to authorize and not acts that are neither protected by copyright law nor by any neighbouring right or the *sui generis* database right. He also states that even if the rightsholder has not authorized an activity, Article 6 does not forbid the circumvention of a technological measure if it protects against acts that do not fall within the rightsholder's power to authorize and are neither protected by copyright.[58]

Moreover, it is argued that in the case of technological measures that protect, at the same time, acts that are covered by copyright and acts that are not ('dual use' cases), Article 6 probably applies as long as the technological measure is not misused primarily for the purpose to substitute the absence of copyright protection by technological protection.[59] For

[57] Bechtold, Stefan in Dreier, Thomas & Hugenholtz, Bernt T. (eds.), *Concise European Copyright Law*, Concise IP Series vol. 2 (Alphen aan den Rijn: Kluwer Law International 2006).

[58] Ibid 387 where the writer gives the example of a work that has fallen into the public domain because the term of copyright protection has expired, in which case any technological measure preventing the reproduction of the work does not benefit from the protection of Article 6 of the EUCD.

[59] Ibid.

example, regarding the application of Article 6 of the EUCD to the circumvention of region coding technologies used in DVD players, on the one hand it could be argued that the region coding technology prevents an act not authorized by the rightsholders, that its circumvention is not allowed and that the commercial import of DVDs from the US to the EU violates Article 4 of the EUCD (distribution right) since the rightsholders' original distribution of the DVD within the US has not exhausted the rightsholders' right of distribution within the EU.[60] On the other hand, it can be argued that the import of a work by a private person for private purposes does not constitute an act that is relevant from a copyright perspective and, thus, private persons do not violate Article 4 of the EUCD when they purchase their DVDs in the US and bring them to the EU.[61] In that case, according to Bechtold, private persons would have been allowed to circumvent region coding technologies for their personal use.

The examination of the legal nature and the object of protection of Article 6(1) can also be helpful in ascertaining whether there is a nexus between copyright infringement and circumvention. Although protection against circumvention is considered usually to be ancillary since in the Basic Proposal for a Treaty on Copyright the Bureau of the WIPO wrote that "the obligations established in the proposed Article 13 [of the WCT] are more akin to public law obligations directed at Contracting Parties than to provisions granting "intellectual property rights"",[62] the position of the EUCD on this issue is unclear mainly because it leaves the issue of the nature of a protection granted under Article 6(1) entirely to Member States.[63] Most Member States consider that the circumvention of technological measures for private use constitutes a criminal offence or a civil tort since Articles 6 of the EUCD resemble the criminal provisions related to the repression of computer fraud.[64] In this context, some Member States have confirmed that the protection against circumvention of technological measures does not constitute a new intellectual right and, accordingly,

[60] Ibid.

[61] Ibid.

[62] Basic Proposal for the Substantive Provisions of the WCT, CRNR/CD/4, 30 August 1996 <http://www.wipo.int/edocs/mdocs/diplconf/en/crnr_dc/crnr_dc_4.pdf> accessed 5 March 2011, at 57.

[63] For this discussion see *Westkamp* (fn 2) 51.

[64] *Westkamp* (fn 2) 51. The same applies for Article 7 of the EUCD.

circumvention does not constitute copyright infringement, and some have confirmed the opposite.[65]

In particular, Westkamp states that

> [a]s to the scope of Article 6(1), there are initial differences as regards its legal nature. The options open under Article 6(1) were either to grant the right to prohibit the circumvention of technological protection measures as an exclusive right annexed to the economic rights in copyright law, or alternatively as a positive right based upon civil tort law and/or criminal law. Finally, some Member States have opted to transpose Article 6(1) entirely outside the scope of a positive right but merely grant permission to the right holder to apply technological measures. […] Member States have taken very different approaches in relation to categorizing acts of circumvention. These range from giving the use of technological protection measures the status of a quasi-exclusive right emanating from authorship to merely permitting right holders to apply them.[66]

Arguably, the fact that most Member States have implemented Article 6(1) in the part of their legislation dealing with sanctions for copyright infringement illustrates the tendency to apply Article 6(1) only to acts that are not allowed under copyright law.[67] Since most Member States accept that the act of circumvention only constitutes an offence if it results to or at least facilitates copyright infringement, circumventions with the aim to view, read or listen to a work (e.g., circumvention in cases of regional encodings on DVD's), rip tracks from a CD into mp3 format or allow a work to be played on different mp3 players are lawful under Article 6(1) in which cases a general right of self-help is implied.[68]

In the United Kingdom, in particular, *Sony v Ball* case showed that the protection against circumvention is also linked to copyright infringement.[69] In this case, a technology called "mod-chip" disabled the code reader applied to the Sony Playstation game console by Sony so that the console would play games either from different geographical zones or from other manufacturers or games copied from purchased console-compatible games. The High Court of Justice asserted that such a technology was an effective circumvention control

[65] For the different approaches taken by Member States see *Westkamp* (fn 2).

[66] Ibid 51.

[67] Ibid 54.

[68] Ibid 57.

[69] *Kabusbiki Kaisha Sony Computer Entertainment Inc. v Gaynor David Ball and others* [2004] EWHC 1738 (Ch).

mechanism under Section 296 of the CDPA. Although the provisions applied govern the prohibition on circumvention protected software, it has been argued that the decision is likewise applicable to the new provision under Section 296ZA of the CDPA.[70] Although playing a game as a result of using circumvention technology would, in most jurisdictions, not amount to an infringement of any exclusive right, the court held that playing a game as a result of using circumvention technology amounted to reproduction due to the temporary duplication in the console RAM memory and, thus, to copyright infringement. Next, and most importantly, the court held that the circumvention was unlawful since it would lead to copyright infringement.[71]

Another United Kingdom decision which relates to the interface between circumvention and copyright infringement is the *Sony v Owens* decision.[72] In that case, Sony made computer game consoles known as Playstation II and Owens imported a computer chip which bypassed the process which otherwise ensured that only authorized copies of discs could be used in the machine and which also ensured that discs purchased in one region could not be played in another. Sony sought summary judgment of a claim for infringement of its rights under Section 296 of the CDPA. Owens argued that the particular Section was inapplicable since the chip could be used legitimately, for example to make backup copies of discs or play a disc from another licensed region. Sony argued that even if this was so Owens was still liable given that most uses of the chip involved copyright infringement.

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[70] *Westkamp* (fn 2) 57.

[71] Ibid 57-58. Moreover, in *Sony v Ball* (fn 69) §15 it is stated that "[t]he silicon RAM chip is an article. When it contains the copy data, it is also an article. The fact that it did not contain the copy before and will not contain the copy later does not alter its physical characteristics while it does contain a copy. It is always an article but it is only an infringing article for a short time. There is nothing in the legislation which suggests that an object containing a copy of a copyright work, even if only ephemerally, is for that reason to be treated as not an article. On the contrary, the definition in s 27 points to the instant of making of the copy as crucial to the determination of whether or not it is an infringing article. An article becomes an infringing article because of the manner in which it is made. Whether it is an infringing article within the meaning of the legislation must be determined by reference to that moment. It matters not whether it remains in that state, since retention as a copy is no part of the definition in the section." Moreover, in §17 of the decision we read that "[j]ust as a transient act of copying amounts to infringement, so an article which transiently contains a copy is an infringing copy for the purpose of this legislation. Taken together, these two subsections appear to suggest that even making a transient copy of a work can constitute making a reproduction "in a material form." Thus RAM containing a copy of Sony's copyright work is a reproduction in material form."

[72] *Sony Computer Entertainment Inc. v Owens* [2002] EWHC 45.

Regarding the suggestion of the existence of a general nexus with copyright infringement, it could be argued that this was suggested to the extent the Court did not accept as an appropriate defence the fact that the chip enabled the console to play software from another region since copyright is inherently territorial and if a disc is for a specific area only then it is not licensed for use elsewhere. Moreover, it was accepted that it was not necessary to make backup copies since the only license was to use the disc purchased. Overall, the fact that the court accepted that the facts showed that most likely the usage made of the chip would result in copyright infringement shows that the court linked circumvention to copyright infringement.[73]

As with the private copying exception, the approaches of Member States differ with regard to software interoperability exception and research purposes exception and their relation to circumvention.[74] The most striking example is France that tried to introduce a mandatory interoperability and encryption research exemption and thus link copyright infringement to anti-circumvention provisions but in the end administrative proceedings to solve disputes were chosen.[75] In particular, in France, Apple has been accused of locking consumers in

[73] Ibid §19, 23, 24.

[74] *Westkamp* (fn 2) 51, 61 notes that the most striking differences with regard to whether a link between infringement and circumvention and with regard to the protection provided under Article 6 exist in the case of software. Regarding the relationship between Article 6(1) and software exceptions, in particular, Westkamp notes that there are Member States that have exempted exceptions concerning the right to make backup copies, to observe and study computer programs and to allow decompilation of a lawful user of a work (e.g. Hungary, Finland, and Lithuania). Similarly, there are other Member States for which similar conclusions can be reached by interpreting Article 6(3) in the sense that technological protection measures are not, in the normal course of operation, applied with the purpose of restricting research, although they have not expressly excluded research activities from Article 6(1) (e.g. Germany).

[75] Loi n° 2006-961 du 1 août 2006 relative au droit d'auteur et aux droits voisins dans la société de l' information (DADVSI), NOR: MCCX0300082L Version consolidée au 14 juin 2009 <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000266350> accessed 20 May 2010. The French interoperability provision proposed in March 2006 provided that one can request interoperability information from a DRM provider and a court can order the provider to release it, that only information transmission charges can be applied and no royalties for use can be charged and that a DRM provider cannot prevent the publication of the source code of an interoperable computer program. However, in May 2006, the French senate amended the interoperability provision from requiring interoperability into only giving the authorities a possibility to enforce interoperability case-by-case. In particular, a Regulatory Authority for Technical Measures ("ARMT") was created in order to deal with interoperability requests that has the power to impose fines of up to 5% of the global turnover if its decisions are not followed and whose mission is to assess the balance between work protection by DRM and lawful use, in particular as regards interoperability. A DRM provider can however escape interoperability requests if all rightsholders agree in that he keeps the format secret and non-compatible, or if there is a security risk that the DRM could be then unusable because it

using iPods by not allowing iPods to interoperate with other protected music formats like the ones of Microsoft (WMA DRM). Consumers used to buy songs in Apple's online music store iTunes but songs could only be played by iPod players, which could only play protected music from the iTunes store via its FairPlay DRM system or non-protected music (MP3). Thus, a Windows Media Player could not play iTunes music without circumvention and an iPod could not play Sony's ATRAC music standard.[76] The draft of the French law implementing the EUCD included an interoperability requirement for DRM that introduced an obligation to give users "essential documentation" (DRM source codes) to ensure interoperability. The interoperability provision was broader than Article 6 of the Software Directive, which does not mandate the release of interoperability information and does not guarantee royalty-free release terms and a right to publish interoperability information in source code form.

With regard to Article 6(2) and the prohibition on commercial dealings in circumvention devices, Westkamp states that it is unclear whether the provision covers only devices that facilitate copyright infringement or whether it covers any technology that facilitates the circumvention of technological measures and that there is, similarly, no express provision regarding the legal nature of Article 6(2) in any national implementation of the EUCD.[77] What is also interesting in Article 6(2) is that sometimes it may contrast to the exercise of recognized copyright exceptions.[78] Arguably, an *a contrario* argument may be that Article 6(1) should never contrast to the exercise of existing copyright exceptions since if this was allowed under the EUCD the approach of the Member States would have been the same as

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would be generally circumvented. Moreover, licensing terms and interoperability information must be non-discriminatory and may have reasonable royalties. Finally, the regulatory authority decides whether the DRM provider can prevent open source implementations.

[76] Stross, Randall, 'Digital Domain: Want an iPhone? Beware the iHandcuffs' New York Times January 14, 2007, <http://www.nytimes.com/2007/01/14/business/yourmoney/14digi.html> accessed 27 November 2008.

[77] *Westkamp* (fn 2) 61-62.

[78] Ibid 62, 63 where it is stated that, for example, in Ireland, although the Act does not prohibit the private active circumvention and the person who circumvents incurs civil liability, the facilitation of acts of circumvention is penalized and the person who assists in the act of circumvention even privately incurs criminal liability. Similarly, in Poland, criminal liability may be incurred even for the distribution of circumvention devices (including virtually all technologies that may circumvent every protection technology) in private circle while "the intention (*mens rea*) merely pertains to the act of distributing etc, [and] an intention to circumvent in order to infringe must arguably be proven under Article 6(1) as implemented".

the one adopted for Article 6(2) (possibility to contrast to the exercise of copyright exceptions).

The nexus between copyright infringement and anti-circumvention provisions may also be examined in connection to the relation between the copyright limitations and technological measures as established in Article 6(4)(1) of the EUCD. In particular, Member States have implemented Article 6(4)(1) in considerably different ways; although all Member States foresee the possibility of voluntary measures to be taken by rightsholders applying technological measures in order to secure access and use of works by certain beneficiaries, these voluntary measures may involve removing technological measures or may involve the conclusion of agreements between rightsholders and beneficiaries which will restrict beneficiaries depending both on the status given in national laws to limitations and on the respective legal nature of technological measures.[79] Another question in the case of Member States which do not provide detailing procedures for beneficiaries is whether beneficiaries can immediately enforce copyright limitations before courts or whether the application of technological measures will simply prohibit exempted uses since in such Member States it is unclear what are the rights of rightsholders and of beneficiaries (the only answer can be found in the nature of exceptions in each national copyright law).[80]

Moreover, the fact that some Member States provide for a positive obligation of right holders to grant access to works indicates that exceptions beneficiaries may have a "right" to "fully enjoy" the exceptions to copyright and this information can be helpful in positively answering the question whether a nexus between copyright infringement and anti-circumvention provisions exists.[81] The existence of a self-help right to circumvent in the case of non-compliance of a rightsholder with an order that is the practice in the Scandinavian countries also provide an argument in favour of the existence of a "right" of the exceptions beneficiaries to "fully enjoy" the exceptions.[82]

[79] Ibid 66.

[80] Ibid. For example, Cyprus has implemented Article 6(4) while Article 6(1) was not transposed and Austria, Czech Republic and Poland have not implemented Article 6(4).

[81] Ibid where the examples of Latvia and Lithuania are given.

[82] Ibid 66-67.

Conclusively, the answer to the question whether the private use defence is available for the act of circumvention and whether a nexus exists between copyright infringement and anti-circumvention provisions is not clear but it depends on how each Member State interprets the EUCD. However, it cannot be contested that the EUCD in principle does not reject the existence of a link between copyright exceptions and circumvention.

6.3.4 Self-Help Circumvention under the EUCD

Article 6 stipulates that rightsholders shall take "voluntary measures" and Member States shall take "appropriate measures" to accommodate copyright exceptions. Copyright exceptions could be placed into three categories according to what is their relation to the requirement of "appropriate measures" taken either of rightsholders (in the form of "voluntary measures") or by Member States to accommodate copyright exceptions. First, there exist copyright exceptions which Member States are obliged to facilitate by taking "appropriate measures" under the conditions of Article 6(4)(1). Second, there is a non-compulsory exception for private copying provided for in Article 6(4)(2). Third, there are all the exceptions that are provided in national laws that are not mentioned in Article 6(4), in which cases Member States are not allowed to take "appropriate measures" in the absence of agreement. Here also falls the only obligatory exception found in the EUCD for temporary reproductions established in Article 5(1) of the EUCD. Most importantly, there are no exceptions provided for use of works offered over the internet according to Article 6(4)(4) in which case the "appropriate measures" scheme is overridden.

According to Article 6(4)(3), both technological measures that are applied "voluntarily" by rightsholders and technological measures that are applied in accordance with the "appropriate measures" taken by Member States to secure exceptions and limitations shall enjoy the protection granted in Article 6(1) against circumvention.[83] In other words, self-help circumvention of "measures" taken to accommodate copyright exceptions is prohibited.

However, it is a different question whether self-help circumvention of technological measures applied to works for the purposes of exercising copyright exceptions can be part of these voluntary or appropriate measures taken by rightsholders or Member States. In other

[83] Article 6(4)(3) provides that "[t]he technological measures applied voluntarily by rightholders, including those applied in implementation of voluntary agreements, and technological measures applied in implementation of the measures taken by Member States, shall enjoy the legal protection provided for in paragraph 1."

words, can rightsholders "voluntarily" engage into contractual agreements with beneficiaries of copyright exceptions that would provide that the latter would be able to circumvent technological measures in order to exercise these exceptions? And, could Member States, in the absence of voluntary measures taken by rightsholders, take appropriate measures to accommodate copyright exceptions which include the ability of the beneficiary of an exception to engage in self-help circumvention? Apparently, nothing precludes such an option.[84]

Such an option is not even precluded by the fact that the Directive favours contractual arrangements as part of "voluntary measures" taken by rightsholders to accommodate copyright exceptions instead of the instrument of "appropriate measures" taken by Member States for the same reason.[85] This can be inferred not only from the Article 6(4)(1) and the phrase "in the absence of voluntary measures taken by rightholders" and the Article 6(4)(2) and the phrase "unless reproduction for private use has already been made possible by rightsholders to the extent necessary to benefit from the exception or limitation concerned", but also by looking at Recitals 51 and 52 of the EUCD.[86] In particular, Recital 51 stipulates that

> Member States should promote voluntary measures taken by rightholders, including the conclusion and implementation of agreements between rightholders and other parties concerned, to accommodate achieving the objectives of certain exceptions or limitations provided for in national law in accordance with this Directive. In the absence of such voluntary measures or agreements within a reasonable period of time, Member States should take appropriate measures to ensure that righholders provide beneficiaries of such exceptions or limitations with appropriate means of benefiting from them, by modifying an implemented technological measure or by other means.

[84] Samartzi, Vasiliki, 'Account-sharing: a legitimate alternative to unlawful circumvention for the purposes of achieving content portability?' International Journal of Law and Information Technology (2012) doi: 10.1093/ijlit/eas023, first published online 18 December 2012.

[85] On the contrary, *Efroni* (fn 1) 373 argued the opposite by stating that "[t]he Directive precludes legalization of self-help acts of actual circumvention committed by exceptions beneficiaries as part of domestic "appropriate measures" taken to accommodate copyright exceptions. In this respect, the Directive clearly favors contractual arrangements to facilitate enjoyment from copyright privileges over compelling rights-holders to enable such privileges via the instrument of "appropriate measures."" However, the fact that contractual agreements are preferred by Member States over "appropriate measures" taken by them does not mean that self-help circumvention is precluded as part of such measures.

[86] *Efroni* (fn 1) 373.

Arguably, the phrase "other means" can also refer to acts of self-help circumvention by beneficiaries of exceptions.

Moreover, Recital 52 stipulates that Member States should promote the use of voluntary measures when implementing the private copying exception that would achieve the objectives of such an exception. In case such voluntary measures to accommodate reproduction for private use have not been taken within reasonable time, "Member States may take measures to enable beneficiaries of the exception or limitation concerned to benefit from it." Recital 52 also provides that agreements between rightholders and other parties concerned and other voluntary measures taken by rightholders, as well as measures taken by Member States, do not prevent rightholders from applying technological measures in accordance with Article 5(2)(b) which shall enjoy legal protection against abuse, i.e. will be legally protected against circumvention.

However, it must be noted that, obviously, the above discussion applies only in the case of the three categories of exceptions mentioned above and not in the case of "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" (Article 6(4)(4)). In other words, no measures shall be taken in the case of works distributed over the internet to accommodate copyright exceptions, self-help circumvention included. Building further on a proposal made by Akester, it could be argued that self-help circumvention should be allowed also in the case of works distributed over the internet. In particular, Akester proposed to amend Article 6(4) of the EUCD by adding the following:

> where access to works by beneficiaries of privileged exceptions is not facilitated (by means of depositing a non-protected version of the work or a decryption key), the protection of privileged exceptions prevails over the protection of DRM, *even where works are supplied online on agreed contractual terms*.[87]

In other words, a provision should be inserted to the EUCD that provides strong protection against unauthorized *initial* acquisition of a copy of a protected work, but which allows for circumvention in order to engage in fair uses, once the copy has been lawfully acquired *"even where works are supplied online on agreed contractual terms."* If this proposal is accepted then it would be easy to recognize that the beneficiary of an exception is allowed

[87] *Akester* (fn 24) 122 (author's emphasis). See also Samartzi, Vasiliki, 'Optimal vs Sub-optimal Use of DRM-protected Works' (2011) 33(8) EIPR 517–27.

to engage in self-help circumvention even in the case of works delivered digitally. In sum, it could be argued that self-help circumvention by exception beneficiaries as a means to accommodate copyright exceptions could be allowed under the EUCD.

6.4 Conclusion

At the beginning of this chapter, the limitations and shortcomings of the notion of lawful personal use were examined. These are its non-enforceable character, the fact that it merely provides a defence to copyright infringement and not a defence to an act of circumvention and the fact that rightsholders are not positively obliged to allow users benefit from the exceptions to anti-circumvention provisions. Given these shortcomings, several proposals were made by legal scholars in the context of a neoconservative approach regarding the issue of the negative impact to users of DRM applied to works. These proposals are tested briefly against lawful personal use while the specific proposal concerning a revision of copyright exceptions is discussed more extensively. The reason that the proposal for a revision of the copyright exceptions is given more consideration is that it encompasses the narrower proposal/solution of the introduction of a right to circumvent for purposes of lawful personal use.

Next, it is suggested that the preferred solution is the introduction of a *sui generis* right to circumvent that will counterbalance the extensive legal protection afforded to rightsholders by means of the anti-circumvention provisions. In this context, it is suggested that the introduction of such a right to circumvent can be legally based/justified on the existence of a direct link between the act of circumvention and a finding of copyright infringement. Regarding the existence of such a link, it is suggested that it is recognised both by the WCT and the Software Directive. In the context of the Database Directive, the person circumventing cannot claim to be the beneficiary of the exception for private use neither in relation to copyright nor in relation to the *sui generis* database right but for different reasons in each case. Accordingly, there seems to be no possibility to link infringement of the copyright or the *sui generis* right to anti-circumvention legislation in the case of the private-copying exception.

As concerns the EUCD, Article 5(2)(b) and Recital 35 are worded so broadly that the scope of the private copying exception and, similarly, the possibility to enforce the particular exception against DRM is not entirely clear. Moreover, although the EUCD is not explicitly

positive regarding the existence of a link, the tendency in Member States implementing it is to recognize the existence of such a link by applying Article 6(1) only to acts that are not allowed under copyright law. Article 6(3) is also problematic because it does not explicitly require the existence of a nexus between copyright infringement and anti-circumvention provisions. Bectold suggests an interpretation of the EUCD according to which there is a link between copyright infringement and anti-circumvention provisions.

The approaches of Member States regarding the legal nature and the object of protection of Article 6(1) can also be useful in ascertaining the existence of a nexus between copyright infringement and anti-circumvention legislation. Article 6(2) on trafficking has also an unclear legal nature and it may even sometimes contrast to the exercise of recognised copyright exceptions. Finally, the existence of a nexus may also be ascertained by looking at what "appropriate measures" have been taken by Member States and by looking at what is the scope and content of the "voluntary measures" taken by rightsholders in the context of implementing Article 6(4)(1). Overall, the EUCD does not reject the existence of a link between copyright infringement and anti-circumvention provisions and it allows Member States to make their own decisions.

As concerns whether the EUCD permits circumvention in some instances, the answer is positive. In particular, although circumvention of DRM applied to works is prohibited, it is suggested that righthsholders, in the context of Article 6(4)(2), can voluntarily engage into contractual agreements with beneficiaries of copyright exceptions that would provide that the latter would be able to circumvent technological measures in order to exercise these exceptions. Similarly, the appropriate measures taken by Member States can include the recognition of a right to circumvent for the beneficiaries of the copyright exceptions. In other words, acts of self-help circumvention are permitted only as part of voluntary agreements between rightsholders and beneficiaries of exceptions or in the context of "appropriate measures" taken by Member States to accommodate the needs of copyright exceptions beneficiaries in the context of Article 6(4)(2). Finally, a right to engage in acts of self-help circumvention can also be recognised in the context of Article 6(4)(4) on condition that exceptions to the making available right (which is established in the particular Article) have been previously recognised.

Chapter 7. Conclusive Remarks and Recommendations

The recognition of a right to circumvent DRMs in order to engage in lawful acts is proposed as a solution which would harmonise the law regarding the relationship between the exercise of lawful personal uses and technological measures and would secure the enforcement of the minimum of lawful personal use against DRM in the digital environment. Notably, both the unbalanced provisions of the EUCD and the adoption of different solutions by the EUCD, the Software Directive, the Database Directive and, indirectly, the Conditional Access Directive, inhibits the achievement of the much desired harmonization in the area of copyright exceptions which lies behind the introduction of the EUCD and prevent the enforcement of lawful personal use.[88]

This right has two prongs. Firstly, it would recognize that the copyright exceptions and the exceptions to circumvention are enforceable rights, not privileges, since they safeguard access to works which is a right in itself. This prong of the right would result in a transformation of the nature of the exceptions. Rather than being merely negative as defences to copyright infringement and, thus, susceptible to gradual erosion they will become positive rights which need to be balanced against the rights of the copyright owners. Similarly, the exceptions to the anti-circumvention provisions will also acquire an elevated and mandatory status which will also have to be balanced against the anti-circumvention protection.

Additionally, the users' expectations regarding private use should become enforceable as well. This is not an easy task since only if they are "reasonable" they can be enforced against DRM.[89] The problem is that the copyright exceptions play a normative role in consumer law and it is unclear to what extent they support the existence of an element of reasonableness

[88] Since one of the aims of the EUCD is to harmonise the copyright exceptions and limitations it can be implied that when this harmonisation is inhibited by other pieces of legislation as well, in addition to the EUCD, then this is an undesirable outcome because it contrasts, among others, to the aims of the EUCD. See Recital 31 of the EUCD which provides that "[…] In order to ensure the proper functioning of the internal market, such exceptions and limitations [to certain restricted acts] should be defined more *harmoniously*. The degree of their *harmonisation* should be based on their impact on the smooth functioning of the internal market."

[89] See the discussion on Directive on Consumer Rights and on the potential extension of product conformity goods to digital products above in Part III, Chapter 6, Section 6.2.

regarding users' expectations as they were defined in this work.[90] Speculatively, it could be argued that two potential lines of reasoning of the courts are possible regarding the reasonableness of users' expectations of personal use.[91] First, courts could conclude that because the scope of copyright exceptions in the digital era is unclear consumers' expectations are not reasonable. Alternatively, courts could conclude that it is the lawmaker and not the private parties to an agreement who concludes on the interpretation of the copyright exceptions and consumers' expectations to personal use should be considered reasonable, at least until the lawmaker decides the opposite.

Since under the proposed solution both traditional copyright exceptions and exceptions to circumvention become positive rights, and since they are balanced against the traditional exclusive rights and the right to the anti-circumvention protection, there is no need to differentiate between them anymore. Until now, the main reason for this differentiation was that some exceptions were linked to human rights and they had an elevated status which made it necessary to protect them against the application of the technological measures as well and not only against traditional copyright infringement; on the contrary, some other exceptions were not linked to human rights and were only protected against acts of traditional copyright infringement.[92] Now, under the proposed solution all exceptions will fall under the unifying term of "lawful personal use". Whatever does not fall under this term, i.e. copyright exceptions for purposes other than lawful personal use and the respective exceptions to anti-circumvention provisions, i.e. the ones currently enumerated in Article 6(4)(1), will continue to operate against technological measures like they do today. The only difference will be that if the beneficiaries are not facilitated by means of voluntary agreements taken by rightholders and, alternatively, by means of appropriate measures taken by Member States, then they will have a right to engage in acts of self-help circumvention, i.e. a right to circumvent for the purposes of exercising the specific exceptions.

[90] *Helberger & Hugenholtz* (fn 9) 1087 where they discuss, in particular, the normative role that the the private copying exception plays in the context of consumer law.

[91] This discussion applies the conclusions reached by *Helberger & Hugenholtz* (fn 9) 1087-1088 in relation to the private copying exception to a more general context.

[92] *Akester* (fn 24).

Secondly, the right to circumvent will recognise that there is a nexus between copyright infringement and infringement of the anti-circumvention provisions. The recognition of such a nexus will result in treating both the traditional copyright exceptions and the exceptions to anti-circumvention provisions the same in terms of enforcement since, in both instances, the sole reason behind their enforcement will be the absence of copyright infringement and the need of the beneficiary of an exception to engage in a lawful use of a digital copyrighted work. The right to circumvent can thus be exercised only in cases where there is no copyright infringement. However, although a nexus can be considered to be present in the case of the several legal instruments examined, the existence of a nexus between infringement of the copyright to a database or of the *sui generis* database right to anti-circumvention legislation could not be proved in the chosen example of an unlawful user of the database. Finally, the issue of the requisite nexus should not be considered relevant in the case of private uses of works based on users' expectations since by definition private uses do not traditionally infringe copyright and ought not to infringe digital copyright even if reproduction is involved.

Since the user of a work must be able to circumvent in all instances that fall within the scope of the minimum of lawful personal use, the proposed solution will have the equivalent result to the dissociation of digital copyright law from the regulation of copying/reproduction that operates as an access-gate, i.e. digital works need to be reproduced in order to be accessed, focusing instead on the regulation of the use of the work. The fact that copying/reproduction is now ubiquitous and pre-requisite of many lawful activities means that its placement at the centre of copyright law regulation is not any more a workable solution. Traditional copyright does not regulate access and thus anti-circumvention legislation should not regulate access by pretending that it regulates acts of reproduction either. Such a tactic results in placing significant limitations to the users of copyright works and to the restriction and, to some instances, elimination of a minimum of lawful personal use as was shown in Part II of this work.

A workable solution instead seems to be the making of the "use" of a work the regulatory object of digital copyright and the recognition of categories of infringing and lawful uses of copyright works. The EUCD, as it stands with the obstacles described in this work in relation to the enforcement of lawful personal uses against DRM gives rightsholders the opportunity to regulate use of their works. The fact that DRM permit price differentiation should not

come with the price of abolishing lawful personal uses. On the contrary, an environment should be created where price-differential is possible and users can pay for what they use but without sacrificing copyright exceptions.

Centering digital copyright law around the notion of "use" does not mean that the new and innovative business models that are based on access-controls shall be extinguished. New business models could continue to develop by taking into consideration the need of the user to have access according to lawful personal use and providing continuing access on reasonable price to lawful users. In particular, a pricing model should determine the price upon which lawful users of the work can have continued access to the work in order to maintain the copyright balance among rightsholders and users. Such a model would also be permissible under the third step of the three-step test of the Berne Convention 1896 which allows for the exercise of exceptions on provision of remuneration. Such a model could possibly accompany the right to circumvent so that rightsholders are remunerated to an extent.

Although it is not the purpose of this work to determine a workable pricing model in the context of online business models, it can be mentioned that the aforementioned remuneration should probably be low, because rights owners achieve higher income through use of DRM and also because the beneficiary of an exception should not be charged excessively to exercise it. In the case, for example, of the analogue private copy exception, Member States that have opted for the imposition of levies to analogue means used for such reproduction have kept prices to a minimum so that, arguably, every member of the public is in a position to engage in private copying.[93]

It has been argued that anti-circumvention legislations do not help in the establishment of a low remuneration pricing model for DRM-protected works. In particular, it has been proven that when setting their prices content providers take account of the potential for circumvention and that there is a possibility that anti-circumvention provisions do not give them any incentive to moderate their prices or to employ effective technical measures.[94] In

[93] Kretschmer, Martin, 'Private Copying and Fair Compensation: An Empirical Study of copyright levies in Europe' A Report for the UK Intellectual Property Office (October 2011) <http://www.cippm.org.uk/pdfs/copyright-levy-kretschmer.pdf> accessed 10 September 2012.

[94] Samuelson, Pamela & Scotchmer, Suzanne, 'The Law and Economics of Reverse Engineering' (2002) 111 Yale L. J. 1575, 1640.

other words, when under an anti-circumvention regime a circumventor incurs criminal liability in any case of circumvention the use of any trivial technological protection measure may suffice to deter circumvention and, as a result, rightsholders may choose to use unsophisticated, ineffective and cheaper technological protection measures.[95] Overall, copyrighted content susceptible to technical protection is likely to be more expensive under an anti-circumvention regime than without anti-circumvention legislation.[96]

Given the aforementioned observations, Samuelson and Scotchmer make a proposal that among others would help reduce the price of content distributed via DRM after the introduction of anti-circumvention laws. Such a proposal can also be viewed from the prism and analysed in the context of the introduction of an effective pricing model for continued access on reasonable and reduced prices for the purposes of engaging in lawful uses of DRM-protect works. In particular, they suggest that, from an economic standpoint, it would be desirable to maintain an anti-circumvention prohibition on public distribution of tools designed to circumvent technological measures that protect against copyright infringement. However, it would be undesirable to exempt individual acts of circumvention and private tool-making associated to such circumventions.[97] Thus, they support the recognition of a right to circumvent and to engage in tool-making for the purposes of circumvention in order to engage in lawful uses.[98] According to Samuelson and Scotchmer, their proposed solution will help enforce copyrights, reduce the price of content because of the threat of circumvention and infringement and motivate rightsholders to choose technological measures that protect their works effectively.[99]

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[95] Ibid where it is noted that "[t]hus, the stringent penalties under the DMCA for individual acts of circumvention could have the odd consequence of *reducing* reliance on technical protection measures, as compared to the situation before the DMCA was enacted and as compared to the narrower rule we propose."

[96] Ibid. where it was noted that in the US pre-anti-circumvention DMCA 1998 provisions the price of content was lower than post-anti-circumvention DMCA 1998 provisions.

[97] Ibid 1637-1638.

[98] Ibid. where it is noted that the original White Paper proposal did not recommend legislation to outlaw acts of circumvention, but only to outlaw the manufacture and distribution of circumvention tools in an effort to achieve the intended benefits for copyright owners, reduce harms to fair uses and offer incentives for innovation in technological measures

[99] Ibid 1640.

Most users have neither the inclination nor the ability to circumvent a technical protection measure because it is a costly and difficult procedure and they would only circumvent if the cost of circumventing is less than the price of buying a legitimate copy.[100] This raises the difficult question whether third parties should be permitted to make and distribute tools which assist users to circumvent DRM, and thus enforce the new right which they would possess. Since this is an issue that falls outside the limited scope of this work this question cannot be answered here.[101] As a result, no change is proposed that would affect the trafficking in devices that circumvent DRM provision of Article 6(2) and the provision of Article 8(3) of the EUCD[102], namely to the two European legal instruments that regulate the issue of the provision by third parties of tools to enable circumvention. However, this discussion can be part of future research. The fact that this work identifies the content of lawful personal use and the scope of a right to circumvent can provide the basis for a future analysis of a question regarding the impact of non-infringing uses on indirect liability and the cases in which could third parties be permitted to make and distribute tools that assist users to circumvent DRM. However, it is suggested that the acts of private tool-making associated with acts of circumvention for the purposes of lawful personal use should be permitted.

Most importantly, a right to circumvent in order to engage in lawful uses should also apply in cases where works are distributed online upon agreed contractual terms (Article 6(4)(4) of the EUCD) since this type of delivery operates mainly by means of TPM. However, for this part of the proposal to apply it is necessary that first the legislator recognises that copyright exceptions, exceptions to anti-circumvention provisions and, ultimately, lawful personal uses also "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 form a place and at a time individually chosen by them" (Article 6(4)(4) of the EUCD).

[100] *Samuelson and Scotchmer* (fn 94) 1640.

[101] For introductory information on this issue see Mazziotti, Giuseppe, *EU Digital Copyright Law and the End-User* (Springer-Verlag Berlin Heidelberg 2008) 158-162.

[102] Article 8(3) of the EUCD provides that Member States "shall ensure that rightholders are in a position to apply for an injunction against intermediaries whose services are used by a third party to infringe copyright or a related right".

Conclusively, Article 6(4)(1) of the EUCD will be modified to reflect the impact of the recognition of a right to circumvent for purposes of lawful personal use on the European legal landscape. In particular, it will state that

> [n]otwithstanding the legal protection provided for in paragraph 1, *where access to works for purposes of lawful personal use and exercising the exceptions found in Article 5(2)(a), (2)(c), (2)(d), (2)(e), (3)(a), (3)(b) or (3)(e) is not facilitated by means of voluntary agreements taken by rightholders and, alternatively, by means of appropriate measures taken by Member States, the protection of lawful personal use and of the aforementioned exceptions prevails over the protection of DRM by means of permitting circumvention.* In the case of Article 5(2)(b), rightsholders shall not be prevented from adopting adequate measures regarding the number of reproductions of their works made by lawful users of their works to the extent it does not deprive lawful users of their ability to engage in lawful personal uses of the works. Member States shall decide on a case-by-case basis and until European harmonisation measures are adopted in this area whether and at what rate the rightsholders will receive an equitable remuneration for the use of their works for purposes of lawful personal use.

Article 6(4)(2) as it stands will be deleted. It will be replaced by a provision regulating trafficking in circumvention tools associated to circumvention for lawful personal use and other copyright exceptions purposes. The main purpose of the "new" Article 6(4)(2) will be to stipulate that private tool-making associated to acts of circumvention that are considered legal according to the "new" Article 6(4)(1) is lawful.

> [n]otwithstanding the legal protection provided for in paragraph 2 [i.e. Article 6(2)], where the manufacture, import, distribution, sale, rental advertisement for sale or rental, or possession 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 that is permitted in accordance to the paragraph 1 of this Article [i.e. Article 6(4)(1)] shall be allowed*.

As concerns Article 6(4)(4), it will be amended to provide that

> [t]he provisions of the first subparagraph *shall apply equally 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.*

Further research is needed to identify the ways in which a right to circumvent for interoperability purposes could be introduced to the EUCD and to the Software Directive and the ways in which a right to circumvent for the purposes of the exercise of personal use could be introduced to the Databases Directive. In any case, this is not a change that can be

reflected in the provisions of the EUCD but it may be reflected on a Recital explaining the relationship between the EUCD and the Software Directive and the EUCD and the Database Directive respectively. For example, Recital 20 provides that

> This Directive is based on principles and rules already laid down in the Directives currently in force in this area, in particular Directives 91/250/EEC(5) [i.e. the Software Directive] [...]and 96/9/EC(9) [i.e. the Database Directive], and it develops those principles and rules and places them in the context of the information society. The provisions of this Directive should be without prejudice to the provisions of those Directives, unless otherwise provided in this Directive.

Moreover, Recital 50 provides that

> Such a harmonised legal protection does not affect the specific provisions on protection provided for by Directive 91/250/EEC. In particular, it should not apply to the protection of technological measures used in connection with computer programs, which is exclusively addressed in that Directive. It should neither inhibit nor prevent the development or use of any means of circumventing a technological measure that is necessary to enable acts to be undertaken in accordance with the terms of Article 5(3) or Article 6 of Directive 91/250/EEC. Articles 5 and 6 of that Directive exclusively determine exceptions to the exclusive rights applicable to computer programs.

These Recitals could possibly change in order to stipulate that the provisions of the EUCD in relation to DRM circumvention for purposes of lawful personal use prevail over and amend the respective provisions of the Software Directive and the Database Directive with the aim to create a harmonising environment and a level playing field for the European user of digital copyright works.

In sum, the final shape of the proposed solution would be to recognise a right to circumvent in order to engage in lawful uses and also to engage in private-tool making associated to such circumvention. Such a solution will achieve the dual purpose of preserving the minimum of lawful activities when interacting with digital works and reducing the price of DRM-protected content as a first step towards the development of a pricing model used to preserve lawful uses of DRM-protected works. Thus, both lawful uses and emerging online business models will be preserved against erosion. Given that maintaining a balance between lawful uses and exclusive rights is the aim of copyright law, the proposed solution operates in the broader context of achieving and maintaining a copyright balance with regard to the digital environment and that it can be taken into consideration in any future changes to copyright law to adapt it to the digital world.

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