DIGITAL COPYRIGHT, "FAIR ACCESS" AND THE PROBLEM OF DRM MISUSE

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ABSTRACT

The advent of the digital age and the wide diffusion of copyrighted works over the Internet have brought about a drastic challenge to the pre-existing rules and legal standards governing the exchange of information. This article points out one of the ways the development of these new technologies has altered the boundaries of copyright, specifically by enabling copyright holders to strategically expand the scope of protection through the strategic use of Digital Rights Management (hereinafter, DRM). After a brief overview of these technologies and their contribution to the development of online markets for copyrighted works, the article discusses the risks of using DRM as a means of stretching the legal protection conferred by Intellectual Property law.

As a potential solution to such problem, the article looks at the role of the courts and the approach embraced vis a vis specific cases of abuse of DRM in the copyright context. In carrying out this analysis, some considerations are made on the pro-competitive benefit that may derive from these practices, and thus the different outcome that would result from an application of a pure antitrust scrutiny to the same situation. The article then concludes recommending a two-fold approach to the assessment of the legality of such practices, where antitrust analysis and IP principles are intermingled, proposing a legal test to facilitate this complex assessment.

I. INTRODUCTION

Although the origin of the digital age dates back to the beginning of the 1980s, the most critical impact on society of this fundamental innovation has occurred in the last 15 or 20 years, resulting from the widespread availability of computers. This was not the case until manufacturers were able to take advantage of the benefits derived from innovation and development within this industry in a way that allowed them to build smaller units and offer more affordable prices, reflecting productivity and efficiency gains.¹

As a result of the increased availability of computers, and the ease of reproduction of information generated thereof, the main challenge has been furthering copyright protection in this environment. Policy-makers worldwide have repeatedly stressed the importance of creating guarantees that would make copyright owners feel willing and comfortable to make their works available on the digital platform.

In turn, the immediate reaction of copyright industries was to incorporate technological protection measures (hereinafter "TPMs") into digital works to ensure that the average user could not make unauthorized use of these works. Their reasoning was based on the assumption that in order to disable TPMs and get access to protected works, users would have to ask content providers for the "unlocking key", thereby ensuring that users would first pay and fulfill any requirement for usage of the content. However, it has been clear since the inception that this picture was not entirely realistic: several studies demonstrated that encryption and similar technologies could not guarantee complete security, and both computer-scientists and talented users were, in fact, able to circumvent these technologies in a relatively short time.²

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¹ Peter S. Menell, Envisioning Copyright Law's Digital Future, N.Y.L. SCH L. REV. 46, 63 (2002)

² See United States v. Elcom Ltd., 203 F.2d 1111, (N.D. Cal. 2002). Dmitry Sklyarov, a Russian computer scientist who developed as a practical application for his dissertation an Advanced eBook Processor ("AEBPR"), a computer program designed to circumvent Adobe's protection methods of PDF files. Dmitry was arrested and sued by the US Attorney General after he had given a presentation of his program at the DEF CON Nine

Nevertheless, this mechanism was considered sufficiently effective because the "keys" necessary to unlock digital content would generally have to be provided by copyright holders on a single user-base, and that the systematic circumvention of TPM seemed unlikely.

In the following years, however, the rise of the capabilities of digital means and the boom of information exchange afforded by the Internet increasingly eroded these assumptions. The progressive "digitalization of content" cast doubts on the effectiveness of TPMs, making evident that even the average user could easily get from the Web the tools necessary to circumvent the defensive technologies. Copyright industries then started to seek protection through an amendment to the copyright system and turned to national governments, most notably the US Congress, urging them to provide an additional shield to defend from digital infringers. This request quickly moved into the international spotlight, prompting discussions in Geneva amongst the World Trade Organization (WTO) members to draft new copyright treaties, and these efforts eventually led to the adoption of the World Intellectual Property Organization (WIPO) Copyright Treaty and the WIPO Performances and Phonograms Treaty in 1996. In the fulfillment of their obligations under these treaties, the US largely satisfied the requests of copyright holders by passing the Digital Millennium Copyright Act (hereinafter DMCA)³, in which Congress accorded some legal protection to TPMs by including some rules that made it illegal to circumvent TPMs⁴ or provide tools that facilitate the circumvention of TPMs⁵.

The US legislation presents a notable difference when compared to the EU Copyright Directive, passed in 2001 to implement the same treaties: the distinction between access-control and copy-control measures. This distinction was considered appropriate as a complement to the sanction for copying that was already established by section 501 of the Copyright Act. The DMCA, introducing a prohibition against the circumvention of access-control measures in addition to the prohibition of traditional copyright against unauthorized reproduction, provided copyright holders with sort of "new" property right applicable in the cyberspace.

Obviously, this scheme of enhanced copyright protection came with adverse consequences on what end users could undertake as legitimate activities. The major drawback of these rules was that they seemed to allow content vendors to enforce the relevant provisions at will, thereby stretching the limits of copyright and reach outside its original scope. Thus, notwithstanding the declared objective of the statute to merely fend off digital infringers, the "shield" provided by Congress proved a weapon in the hands of copyright owners. As a consequence, even though the acronym "DRM" stands for "digital rights management" systems, many scholars to started referring to it as Digital Restriction Management, precisely as the law allowed copyright holders to restrict users' abilities to pursue activities that would constitute perfectly legitimate uses under the copyright statute.

First, in Section I, this paper will briefly review the rationale of copyright law and the role historically played by courts in shaping its scope. It stresses the importance of maintaining the balance between copyright owners' rights and fair access to works.

Next, Section II will describe how letting content providers use DRM as an offensive weapon rather than a

conference in Las Vegas, Nevada.

³ Digital Millennium Copyright Act, 17 U.S.C. §§ 1201-1205 (2003).

⁴ DMCA § 1201(a)(1)(A)

⁵ DMCA § 1201(a)(2)

⁶ 17 U.S.C. § 501(a).

⁷ DMCA §§1201-1205.

⁸ DRM is meant here as equivalent of TPMs, but a clear note distinguishing between the two is in order. DRM is a more extensive category, to which TPMs belong. Generally, however, DRM includes functionalities that are beyond the mere protection against unauthorized access, such as tracing licenses, processing payments, counting frequency of uses and the like.

⁹ See Dan L. Burk and Julie E. Cohen, Fair Use Infra-Structure for Rights Management Systems, 15 HARV. J.L. & TECH. 41, 48 (2001) (stating that a generally accepted definition is "secure packaging and delivery software designed to prevent purchasers and third parties from making unauthorized use of digital works.")

¹⁰ See, e.g., Pamela Samuelson, *DRM [and, or, vs.] the law*, 4 COMM. ACM 46, 42 (2003); Barbara Fox and Brian La Macchia, *Encouraging Recognition of Fair Uses in DRM Systems*, COMM. ACM 46, 61 (2003).

defensive shield may have an adverse effect on the public. To that end, it will demonstrate how enforcing certain types of DRM restrictions directly conflicts with the goals that copyright legislation were intended to achieve and could be harmful to innovation and creativity, undermining the purpose of copyright law.

In Section III, the paper will describe the reaction of courts in some concrete examples of DRM issues, examining what role is left for fair use in the digital environment and the extent to which it can be reconciled with the "fair access" doctrine recently developed by the Federal Circuit.

Then, in Section IV, the inquiry will move into examining possible alternatives to the "fair use" and "fair access" doctrines that may be considered to avoid an overstretching of the rights conferred by section 106 of the Copyright Act. This part will briefly touch on (1) the suitability of a presumption to avoid imposing liability by default on those who circumvent measures which are obviously put only to make a product incompatible with a complementary product offered by competitors, (2) the possibility to enhance legal certainty and consumer benefit by detailing some privileged uses within the meaning of "fair use" and complementing this with a proactive consumer protection law, and (3) the viability of a technical solution through the implementation of a right expression language which attempts to incorporate the notion of fair use into DRM.

Finally, in Section V, some remarks will caution that every possible solution should factor in also the benefit afforded by the development of new technologies. After a brief introduction to the discussion of the contrast between IP and antitrust laws, the paper will observe (1) why DRM misuse should be dealt with through copyright law instead of using a pure antitrust approach, (2) how DRM misuse could end up being protected by relying solely on the IP rules, and (3) how to reconcile both kinds of concerns by embracing a three-pronged test.

SECTION II. RATIONALE AND PURPOSE OF COPYRIGHT

The basic rationale for copyright protection is to provide creators with the proper incentive to foster their investment of time and efforts with the prospect of recouping it at a later stage.

The need for an incentive lies in the "public good" nature like invention and creative works, which are non-excludable, meaning that, by nature, there is no way of preventing others from getting the good and non-rival. The value of the work for the end user is independent from the general availability of that work to others, since its exploitation does not corrode limited resources.

Given these two characteristics, one expects the market for intellectual works to suffer from the typical problems of the market for public goods, such as an underproduction of creative works, from the existing free riding problem. ¹² In the absence of some regulation, such market would inevitably face a failure: once a single copy of a work is sold, that same copy could be easily shared with the public or passed on to other individuals. As a result, some form of regulation is desired to internalize the negative externalities associated with free riding and bring the market towards competitive conditions. ¹³

This is the economic reasoning underlying the framers' choice to include within the United States Constitution the following statement, granting Congress the power to enact copyright legislation protecting copyright owners: "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." As noted elsewhere, the inclusion of this statement in the constitution uncovers the economic base of copyright legislation in the US, and makes it essentially different from that of other countries. The rationale of conferring upon Congress such power resides in the trust and belief

¹² See Wendy J. Gordon, *Intellectual Property*, in THE OXFORD HANDBOOK OF LEGAL STUDIES, 617-646 (Peter Cane and Mark Tushnet ed., Oxford University Press 2003), also available at SSRN: http://ssrn.com/abstract=413001. See generally Mark A. Lemley, *Property*, *Intellectual Property and Free Riding*, 83 TEXAS L. REV. 1031 (2005)

¹¹ 17 U.S.C. § 106.

Lemley, *supra* note 9.

¹⁴ U.S. Const. art. 1, § 8. See Dallon, W. Craig, Original Intent and the Copyright Clause: Eldred v. Ashcroft Gets it Right, 50 ST LOUIS U. L.J. 307 (2006).

¹⁵ See Pamela Samuelson, Economic and Constitutional Influences on Copyright Law in the United States", 23 EUR.

that it would enact an optimal legislation, aiming at the achievement of a proper equilibrium which satisfies both the interests that copyright law is intended to protect: (1) the "intermediate", short-term interest of incentivizing creators by granting exclusive right, and (2) the "ultimate", long-term interest of promoting progress. The terms "intermediate" and "ultimate" are used here to emphasize how the former is just a compromise that copyright law has to achieve, allowing artists to recover their costs, in order to stimulate innovation and thus best serve the latter interest of promoting progress. This tension required Congress to forge a carefully crafted statute, and it has prompted courts to interpret it according to its objective, which clearly gives preference to the "ultimate" interest of promoting progress. *That* is the ultimate purpose of copyright law. This objective is not pursued through the provision of limitations to the literal phrasing of section 106 of the Copyright Act, which would otherwise entitle the copyright owner to an overarching protection. Its key role is also apparent from the existence of a requirement of fixation. For example, a work must be in a recorded or material form as a necessary condition for the enjoyment of copyright protection. This fixation requirement can be seen as a guarantee that the work is embodied into a communicative form, which ensures that the public, absent extraordinary circumstances, will get access to the work by the elapsing of the accorded protection. ¹⁶

This view is in contrast with what copyright owners mistakenly tend to assert: that their exclusive right is the equivalent of a legal monopoly, which should accordingly entitle them to shape legal protection through the rules embedded in the contracts that users agree upon.¹⁷ Such opposite interpretation of the copyright statute is consequence of a misconception about the function of copyright; and although it might find some support in the literature, it shows a misunderstanding of the basic rationale of copyright law, which endangers the furtherance of the social function that we have attributed to it.

A. Copyright And New Technologies

The interaction between copyright and technology represents one of the greatest challenges for regulators because the latter is constantly evolving, the former needs to adapt to the latter's constant evolution. Fortunately, the interpreter can count on a long-standing body of judicial precedents that can be used as an inspiration when faced with such challenge. The gist of these judicial precedents could be synthesized in two short statements made by the US Supreme Court in *Twentieth Century Music Corp. v. Aiken*, the first stating that "[t]he sole interest of the United States and the primary object in conferring the monopoly [...] lie in the general benefits derived by the public from the labors of authors." The Court, on that occasion, dealt with the application of the Copyright Act to an unprecedented situation, not explicitly covered or regulated by the letter of the statute. The question was whether the use of a radio station broadcast of musical works in the respondent's restaurant infringed petitioner's exclusive right to perform copyrighted works in public. The final judgment, while reversing the appellate court's finding of an infringement, made clear that the scope of the Copyright Act should not be limited to its literal meaning, as this would burden the legislation with the risk of becoming outdated. The Court turned to the legislative history and to the core objective of copyright law, holding that "[w]hen technological change has rendered its literal terms ambiguous, the Copyright Act must be construed in light of this basic purpose."

INTELL. PROP. REV. 409 (2001)

¹⁶ Sony Corp. of America v Universal City Studios Inc., 464 U.S. 417, 429 (1984), stating that users have the *public right* of access to the copyrighted works once the copyright term is expired; *see* Zohran Efroni, *A Momentary Lapse of Reason: Digital Copyright, the DMCA and a Dose of Common Sense*. 28 COLUM. J.L. & ARTS. 249 (2005).

¹⁷ This is, for example, what Microsoft was claiming when the company was prosecuted by the Department of Justice for the tie-in of Microsoft Windows and Internet Explorer as well as the discriminatory use of licenses. *See infra* Section 2.2.

¹⁸ Twentieth Century Music Corp. v. Aiken, 422 U.S. 151, 156 (1975) (quoting Fox Film Corp. v. Doyal, 286 U.S. 123, 127 (1932)).

¹⁹ *Id.*, at 395-96 (quoting Fortnightly Corp. v. United Artists, 392 U.S. 390 (1968) ("[O]ur inquiry cannot be limited to ordinary meaning and legislative history, for this is a statute that was drafted long before the development of the electronic phenomena with which we deal here. In 1909 radio itself was in its infancy, and television had not been invented. We must read the statutory language of 60 years ago in the light of drastic technological change.")).

These two sentences, taken together, represent a masterful suggestion for all the courts struggling with the tension between copyright and technology. It is submitted here that such reasoning should be used in every situation where courts are struggling with the application of the existing law to new technologies. It should be hardly determinative whether a particular legal rule has been codified or whether it is against the generally accepted interpretation. Rather, whenever the reach of the rule is unclear or controversial, the task for courts ought to be to clarify the issue by looking at the very basic purpose of the law at issue.

This article takes DRM as an example of new technology and the DMCA as a statute that needs to be interpreted in line with the above-mentioned principles. Its purpose is to show the need for the definition of a legal doctrine in this context, so as to allow a realignment of the two conflicting forces of copyright limitations and technological protection measures: the former defining some privileged uses that the statute is not intended to prevent and the latter being able to offer a protection that overrides those limitations, thus operating independently from both the letter and the spirit of the statute. Incidentally, these attempts to strike the appropriate balance are the *leit motif* behind the development of the judicial doctrine of fair use. Similarly, both Congress and the judiciary intervened to identify specific limitations to the rights conferred by section 106 of the Copyright Act. Both kinds of interventions were necessary not because the original statute had been poorly drafted, but rather because the state of science had improved, and the terms of protection used by the copyright statute were overly restrictive for the current state of technology.

As it will be argued below, the "fair use" analysis is one of the features of the copyright system that has been most directly affected by technological changes because the factors considered by courts in determining whether a use is fair cannot be separated from an examination of social patterns and generalized technological standards. ²⁰ The incorporation of social reality in the fair use analysis is an indispensable element that allows for the adaptation of copyright law, making it possible for the public to benefit from new technologies without simultaneously unduly depriving authors of legitimate protection for their creative works. As a result, full consideration of the particular circumstances in every alleged infringement, seen in light of the primary objective of bestowing the benefits of innovation to the public, will allow copyright law to grow and mature along with innovation.

II. Copyright {and, or, vs.} DRM 21

Before dipping into a critique of the potential misuse of DRM, it is important to recall the benefits these technologies offer. Not only have they provided copyright owners with the possibility of defending themselves from digital infringement, but they also have made it possible to create different business models, which take advantage of the capabilities offered by these powerful tools.

First of all, the possibility of using DRM is a great incentive to foster creativity and reap the benefits offered by the digital platform. Particularly, creators are now encouraged to digitize the result of their work because, thanks to these technologies, copyright owners will be able to much more effectively prevent the unauthorized access to the content of their works. Additionally, they will obtain with much greater efficiency and enhanced security the exact payment for any use of such works. As a result, content providers are now able to offer their services on several platforms and sell different versions of the same content, a phenomenon called "versioning." ²² Similarly, copyright protections have allowed owners to become more successful in price-discriminating by monitoring the frequency of uses of a work and using that as a criterion to distinguish among the individual purchasers.

Moreover, DRM has enabled copyright owners to bring goods to the market for a lower average price, given their benefits derived from a reduction in free riding and the subsequent increase in their overall profits. This means that DRM has dramatically increased efficiency of information access and distribution. It has even been argued that since DRM presumably fosters an increase in the use of the internet to distribute and search for content, the public

²¹ This expression is inspired by Pamela Samuelson. *Supra* note 8

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²⁰ See *infra* Section 3

²² See Carl Shapiro and Hal R. Varian, Versioning: The Smart Way to Sell Information, 76 HARVARD BUS. REV 106 (1998).

will also benefit from a decrease in the price paid for access to content on the internet.²³

The most striking feature of DRM technologies, however, is that they have created the basis for a shift from an enforcement system based on *ex post* sanctions to an *ex ante* structure of IP right-holders, thus potentially leading to an alternative to copyright law, a scenario sometimes referred to as a "pay per use-society."²⁴ Indeed, from an economic viewpoint the rationale for copyright law is to internalize the positive externalities derived by society from gaining access to an author's work through sanctions against unauthorized reproduction of the work, thereby offering a solution to the problem of non-exclusivity of content of the intangible goods. If DRM systems solve that issue as well, the argument that DRM may replace copyright law itself (at least as far as digital works are concerned) deserves some attention.²⁵ This might actually result in a fairly efficient market, without any more need to worry about false positives like wrong prosecutions, judicial mistakes, rent-seeking behaviors and risks of under- and over-deterrence more generally.

What is, then, the reason this rationale has not been seriously taken into consideration? The main objection to such scenario appears to be, unanimously, that a rigid and mechanical system would dramatically chill innovation by not allowing users to continue benefiting of some uses today generally accepted as fair, remarkably those that are derivative in nature and allow follow-on innovation to unfold. In more explicit terms, the unavoidable rigidity of this system would conflict with the somewhat fuzzy boundaries that characterize copyright, and it would be hard to reconcile with the doctrine of fair use. The friction with fair use is indeed one of the strongest points of contention to the idea of a pay-per-use model, and has been central in the criticism of several scholars.²⁶

A. DRM Misuse: A Definition

The most significant concern for the use of DRM is one that is often subject of consumers' complaints: "strategic" use of DRM technologies in the attempt to enforce intellectual property rights beyond their scope. Naturally, the crucial question is what can be considered an overextension of IP rights and which practices, by contrast, fall within their scope. While there may be many ways to expand the protection conferred by copyright, it is also important to note that only some of them, such as imposing a perpetual copyright regime (in contrast with the limited term of copyright) or locking up non-copyrightable material, are contrary to the copyright policy. In these particular instances, it is therefore imperative that courts and legislators make it possible for users to bypass DRM limitations in order to further the goals of copyright.

Some other practices, by contrast, can be situated within a more "gray area" and may be considered by courts as a legitimate attempt to enforce the rights conferred by IP law such as DRM restrictions on various characteristics of the work, including its field, its type of use, its resale and its number of uses. These are restrictions that may or may not be considered legal, depending on the context in which they are evaluated. Ideally, courts should be able to assess the legality of these restrictions and hold them invalid due to their excessiveness. In practice, this is not as easy as it may seem, for courts might not only have to struggle, as in most copyright cases, to balance the interest of the users and those of the copyright owner, but also grasp the complicated mixture of intellectual property and antitrust principles that these assessments call into question.

²³ See John Therien, Exorcising the Specter of a 'Pay-Per-Use' Society: Toward Preserving Fair Use and the Public Domain in the Digital Age, 16 BERKELEY TECH. L.J. 979 (2001)

²⁴ This term was deployed for the first time by United States Representative Thomas J. Bliley in the course of the discussion about the new right of access created through the new copyright statute. *See* 144 Cong. Rec. H7094 (daily ed. Aug. 4, 1998) (statement of Rep. Bliley) ("If left unqualified [....] this new right could well prove the legal foundation of a society in which information becomes available on a pay-per-use model.").

²⁵ See Stefan Bechtold, The Present and Future of Digital Rights Management: Musings on Emerging Legal Problems, in Digital Rights Management: Technological, Economic, Legal and Political Aspects 597, 597-654 (Eberhard Becker et al. eds., 2003) [hereinafter Bechtold, Present and Future].

See Jaqueline Lipton, The Law of the Unintended Consequences: The Digital Millennium Copyright Act and Interoperability, 62 WASH. & LEE L. REV. 487 (2005); Pamela Samuelson, Regulation of Technologies to Protect Copyrighted Works, 39 COMM. ACM 17,21 (1996); Thomas Vinje, A Brave New World of Technical Protection Systems: Will There Still Be Room for Copyright?, 18 EIPR 431 (1996); Pamela Samuelson, Anticircumvention Rules: Threat to Science, SCIENCE, Sept. 14, 2001, at 2028.

This article offers a particular solution to the problem of DRM misuse, which could conceivably be adopted by courts to deal with the more general problem of intellectual property misuse. Essentially, the key questions that the proposed solution attempts to answer is what would be the most suitable context (between IP and competition law) to evaluate the practices which belong to this "grey area", and what principles should guide the analysis.

More specifically, what will be extensively discussed here is how to offer a practical solution to a particular kind of practice that is accomplished through DRM restrictions and often falls within such grey area: leveraging the market power conferred by copyright so as to force buyers to buy a related product in a so-called "secondary" market (i.e. a market that is distinct and separated from the market for the first product). This kind of conduct, whose practice may result in a restraint on progress and thus fall plainly outside what copyright wants to promote, is commonly known in the antitrust analysis as tying or bundling. Its treatment has been highly debated throughout the history and the development of antitrust scrutiny, but according to the most recent Supreme Court authority, the is considered *per se* illegal as long as the plaintiff shows the existence of market power (which does not automatically stem from the existence of an intellectual property right, as recently clarified by the court in *Illinois Tool Works Inc. v. Independent Ink, Inc.* in the primary market *as well as* the existence of an anticompetitive effect, such as forcing on consumers to buy the complementary product, in the secondary market.

Surprisingly, in the context of DRM, the argument for viewing such leverage as illegal tie-in is relatively new. Scholars and regulators have so far tended to see these practices either as not meaningfully affecting competition³⁰ or as falling into one of the exemptions for technology licenses provided by competition law both in the American³¹ and in the European framework³². A contrary opinion today is developing upon the discovery of the frequency of these practices and the increased perception that they might be seriously harmful to both competition and innovation, in the secondary as well as in the primary market.³³

Initially considered a *per se* illegal practice, its illegality was revisited in *Northern Pacific Railway Co. v. U.S.*, where the Court began to require a showing of market power in the tying product and the effects of a not insubstantial amount of interstate commerce to trigger *per se* liability. 356 U.S. 1 (1958). A couple of years later, the Court in *U.S. v. Jerrold Electronics Corp.* treated tying under a rule of reason analysis, allowing defendant to justify it by indicating a redeeming virtue in the tying arrangement. 356 U.S. 567 (1961). The Court also clarified in *U.S. Steel Corp. v. Fortner Enterprises* that uniqueness in the tying product was not enough to infer market power. 429 US 610 (1977). Most recently in *Jefferson Parish Hospital Dist. No. 2 v Hyde*, the Court noted that merely forcing consumers is not a harm to competition, and some other anticompetitive effect has to be shown. 466 US 2 (1984). Moreover, the Court in *Jefferson Parish* specified that tying has to involve 2 products that are different based on the demand side and on consumers' perception. It used this criteria to create two safe harbours: (1) that there would be no liability for tying if there were competition in both the tying and the tied product markets, and (2) that below 30 percent in market share was not sufficient to create market power. *See id.* at 7.

²⁹ Illinois Tool Works Inc. v. Indep. Ink, Inc., 547 U.S. 28 (2006)

³⁰ See Bechtold, Present and Future, supra note 25, at 351; Stefan Bechtold, Digital Rights Management in the United States and Europe, 52 Am. J. Comp. L. 323 (2004) [hereinafter Bechtold, Digital Rights Management]; DIE KONTROLLE VON SEKUNDÄRMÄRKTEN –EINE JURISTISCHE UND ÖKONOMISCHE UNTERSUCHUNG IM KARTELL- UND IMMATERIALGÜTERRECHT (Nomos ed. 2007).

³¹ See U.S. Department of Justice and Federal Trade Commission, Antitrust Guidelines for the Licensing of Intellectual Property (April 6, 1995), reprinted in 4 TRADE REG. REP. (CCH) (1995).

³² See Commission Regulation (EC) No. 772/2004 of 27 April 2004 on the Application of Article 81(3) of the Treaty to categories of technology transfer agreements, O.J. 2004, at 11

³³ In fact, by making price-cutting feasible in the primary market, these practices may allow incumbents to deter entries of non integrated firms and reduce potential innovation: entrants will have to bear with lower revenues in order to catch up with rivals' production costs (which are lower because of their saving transaction costs by offering the 2 products together), thus facing greater difficulties to stay on business.

B. Different Types Of Misuse: "Defensive" And "Offensive" Leverage

Increasingly, DRM technologies and anti-circumvention regulation are used not merely to control content against unauthorized copy, but also to guard against the threat of undesired competition. This threat could be coming either from direct competitors, or alternatively from competitors of a complementary market.

1. Defensive leverage

In the first scenario, DRM is used to prevent the entrance of direct competitors by imposing exit restraints, i.e. making consumers enter into deals that exclude or greatly disfavor the possibility of switching to the products or services offered by other suppliers. Another way to accomplish this same objective is to lock consumers in by taking advantage of Standard-Setting Organizations so that relevant DRMs within a certain market are implemented, focusing only on a particular kind of technology, to the exclusion of the technologies supported by competitors. This threat in fact appears the biggest concern coming from the creation of the Trusted Company Platform Alliance, an industry working group formed with the purpose of "creating a standard for a trusted hardware computing platform." The abuse of standard-setting strategy tends to be prevented by the rules and principles that increasingly govern the activities in standard-setting bodies, and can thus easily be challenged as an anticompetitive practice whenever these principles are not respected. Nonetheless, some uncertainty in this field remains whenever a choice of the standard setting-body is justified by invoking security justifications. The main complication for public authorities with the assessment of the legality of these standards is how to give proper weight, as opposed to excessive consideration, to security justifications. Mainly for this reason, it has been questioned whether the copyright system should provide for a "trusted computing misuse," and whether the generalization of a certification system would not bring too many complications into the industry.

The substantial danger of a standard-setting misuse was a concern in the broadcast industry. In fact, that industry represented a good example of how the introduction of some soft regulation might suffice to address that concern. Particularly, the European Access Directive³⁹ included some clauses prohibiting DRM technology

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³⁴ See generally Mark A. Lemley, Intellectual Property Rights and Standard-Setting Organizations, 90 CAL. L. REV. 1889 (2002).

³⁵ See http://www.trustedcomputinggroup.org

³⁶ This uncertainty was also at issue in the consent decree of *United States v. Microsoft Corp.*, where Microsoft was explicitly permitted to condition any licensing of the application program interfaces or layer of Communication Protocols with several requirements. *See* 231 F. Supp. 2d 144, 193-95 (D.D.C. 2002). First, in addition to having a reasonable business need for a planned or shipping product, the licensee must meet a certain standard required by Microsoft to certify the authenticity and viability of its business. *See id.* Second, the licensee must pass a third-party verification test besides having a reasonable business need for a planned or shipping product). *See id.*

Stefan Bechtold, *Trusted Computing Initiatives – Protecting virtual Troy or creating a Trojan horse?* In TRUSTED COMPUTING. TECHNIK RECHT UND GESELLSCHAFTSPOLITISCHE SYSTEMUMGEBUNGEN (Christian Koenig et al. ed. 2004) at 77-99. *See Trusted Computing. Rechtliche Probleme einer entstehenden Technologie*, in 6 COMPUTER UND RECHT, 393 (2005); Roberto Caso, DIGITAL RIGHTS MANAGEMENT: IL COMMERCIO DELLE INFORMAZIONI DIGITALI TRA CONTRATTO E DIRITTO D'AUTORE (Cedam ed., 2004); Ross Anderson and Tyler Moore, *Cryptography and Competition Policy – Issues with 'Trusted Computing'*, in ECONOMICS OF INFORMATION SECURITY 12 (L. Jean Camp, ed., 2006), *available at* http://www.cl.cam.ac.uk/ftp/users/rja14/tcpa.pdf; Ryan Roemer, *Trusted Computing*, *Digital Rights Management, and the Fight for Copyright Control on Your Computer*, 2003 UCLA J. L. & TECH. 8 (2003); J. S. E. Rickson, *Fair Use*, *DRM*, *and Trusted Computing*, 46 COMM. ACM 34 (2003); Richard Stallman, *Can You Trust Your Computer*? (2002), available at http://www.gnu.org/philosophy/can-you-trust.html; J. W. Einberg, *Hardware-Based ID*, *Rights Management, and Trusted Systems*, in THE COMMODIFICATION OF INFORMATION (N. Elkin-Koren, ed., 2002).

³⁸ Arguably, besides the possible bias in the certification authorities, this would retard the launch of new product and thus slow innovation, in particular with regard to the open source movement where the software would have to be re-certified each time it has been altered: see Bechtold, *Present and Future*, *supra* note 25, at 643

³⁹ Dir. 2002/19/EC of the European Parliament and of the Council, of 7 March 2002 on access to, and

providers from using technology license agreements to thwart competition, either by preventing interoperability between DRMs or by preventing the inclusion of a competing DRM system in the same decoder. 40 Consistent with those principles, the Digital Video-Broadcasting ("DVB") project seriously undertook a pro-competitive commitment in the exploitation of its role, allowing several competing DRM systems to be included in one single Pay TV Decoder. 41 The spirit of the regulation was that in a market characterized by great network effects, simply abandoning the creation of standards to the war of competition might deter too many entrants and thus hold up potential innovation.

This is the reason why there was a general consensus in the inclusion of the so-called "no-mandate clauses" in both the context of the DMCA and the European Copyright Directive⁴², and why some scholars⁴³ have recently criticized the proposal of the FCC to mandate the implementation of the High-Bandwidth Digital Content Protection ("HDCP") onto every digital television set.⁴⁴ Particularly, such implementation would transfer the cost of protecting content from content providers to technology developers, and would be a paradigmatic example of how regulation at a too early stage might seriously chill innovation.⁴⁵

2. Offensive leverage

In the second scenario, i.e. to prevent competition in secondary markets (so called "offensive leverage"), content owners offer package dealings and try to enforce the tie-ins by making their primary products or services incompatible with the ones offered by competitors in such markets. An example is the case of the Sony Aibo Dog, a robot pet whose functions and controls were directed by several programs embedded in a particular storage device ("Sony Memory Stick"), strategically designed through a DRM technology as the only storage device compatible with Aibo. This way, DRM clearly chilled incremental innovation on the program technology by creative and skilled users. When a talented user of Aibo started to circumvent the DRM technology in order to experiment with some programs he had written to expand Aibo's functionality and provided in his website the instructions for others to do so, Sony sent a cease and desist letter warning him precisely of the anti-circumvention violation. ⁴⁶ This, despite its legal appearance collocating it amongst a legitimate means of enforcing copyright, nonetheless represents the accomplishment of a tie-in of the type we described above.

Most of the time, however, the two situations are not so easily distinguishable, and DRMs put in place both kinds of restrictions. A clear example of that is the printing industry, where a recent trend involves charging a subcompetitive price for the ink-jet or laser printer, with the prospect of recouping the lost profits by charging a high price for the toner cartridges. This situation could be achieved by imposing some contractual obligation on customers that purchase the printer, which forces them to buy cartridges only from that same brand (or one affiliated subsidiary). However, monitoring of this kind of deal seems unfeasible and therefore the pursuance of this strategy necessitates other additional means, which ensure fidelity to the contract. Here is where the use of DRM comes into play: incorporating such a technology into the printer allows the recognition of the type of cartridge in use, and the denial of access to the printer engine program if the cartridge's features do not match the ones required by the machine. This is exactly the type of technology at issue in Lexmark's printers, as we will see in the *Lexmark v Static Control* case. 47

interconnection of, electronic communications networks and associated facilities.

⁴⁰ See in this regard article 4 and 10

⁴¹ Stephan Bechtold, *Present and Future*, supra note 25, at 622

⁴² See 17 U.S. C. § 1201(c)(3); recital 48 of directive 2001/29 EC of 22 May 2001

⁴³ Molly S. Van Houweling, *The Digital Broadband Migration: Rewriting the Telecommunications Act:* communications Law Reform: Communications' Copyright Policy, 4 J. Telecomm. & High Tech. L. 97 (2002); Peter K. Yu, Anti-circumvention and Anti-anti-circumvention, 84 Denv. U. L. Rev. 13, 38 (2006).

⁴⁴ This is equipment that is able to detect the presence of the so-called "broadcast flag." *See* S. 2048, 107th Congress (2002), proposed by senator Fritz Hollings and named "Security System Standards and Certification Act".

⁴⁵ Van Houweling, *supra* note 43, at 38.

⁴⁶ See http://www.chillingeffects.org/anti-circumvention/notice.cgi?NoticeID=24

⁴⁷ See *infra*, Section 3.2

Another way to pursue the same objective is what HP tried to do by suing competitors that sell "recycling cartridges," claiming that these cartridges are not the assemblage of manufactured and recycled components but rather merely HP used cartridges after having fully refilled them. At third strategy is to embrace the business model of sales and fast shipment, hoping that the convenience of getting the cartridge directly at home will convince consumers accept the price difference compared to other cartridge sellers.

Which will prevail as the best strategy remains to be seen, but the fact that most of the printing manufacturers adopt this kind of strategy suggests that ink-refilling is a serious issue facing this business, and therefore perhaps some carving-out practices should be allowed for the benefit of future consumers. However, this view seems rebutted not only by those⁵⁰ who allege the existence of a cartel on toner cartridges among three printer manufacturers⁵¹ (which would imply that the carving-out is just a mechanism to avoid price-cutting by a non-cartel member), but also by the launch of a new and opposite business model recently announced in the printing industry by Kodak. Specifically, their plan is to offer more expensive printers (around \$200 as opposed to the \$100 average industry standard) but then offer replacement ink cartridges at lower prices.⁵²

In any event, the possibility of using DMCA violations as a powerful tool to impede competitors from entering a market has been made clear. From this concrete example, it is also clear that this kind of use cannot be deemed as plainly anticompetitive as it requires a further evaluation of industry practices and the effects on the market, considering the different policies and the different objectives that might be affected. By the same token, the reliance on antitrust law in this particular context bears the risk of letting certain practices be enforced, which is starkly inconsistent, with what copyright law is intended to encourage. Besides the possible price effects, the restrictions at issue may well chill innovations obtained by consumers or competing firms (for instance, the use of magnetic ink to squirt integrated circuits onto metalized plastic).⁵³

Another example, well known and widely discussed, is the anticompetitive conduct pursued by Microsoft and challenged by the Justice Department, pertaining to the licensing on a discriminatory basis of DRM encryption keys (necessary for interoperability purpose with Windows operating system) to hardware and software manufacturers⁵⁴. Not surprisingly, Microsoft alleged that the discrimination was due to security reasons. As mentioned above⁵⁵, there is some debate regarding the extent to which non-economic justifications (in particular, security reasons) can be invoked to justify a refusal to provide interoperability information. The official standard applied by the Supreme Court is that refusal to deal could trigger liability whenever it could be motivated exclusively by the intention to harm competition, but it is not clear yet to what extent courts disregard such reasons upon finding them to be a pretext for exclusion.⁵⁶ Eventually, the court decided that such discriminatory licensing was in fact used for anticompetitive purposes. It seems hard to believe that this strategy, if carried out successfully, would not meaningfully stifle innovation in the market for operating systems. But it is important to recognize that the above mentioned cases are on the border line, and concern situations where it is not easy to determine which would be the best approach looking to the benefit of the market.

There have been, however, other cases where the assessment was far less complicated, and where there was evident intent to take advantage of the DMCA regulation in order to obtain a protection from competitors in a setting that DMCA was not designed to cover. We are referring mainly to the *Chamberlain* and *Storage Technology* cases, where the practice at issue appeared exclusively adopted with the objective to foreclose competition in a secondary market. In *Chamberlain*, the product markets were garages and the garage-opener remotes⁵⁷; while in *Storage*

⁴⁸ http://news.com.com/HP+sues+firms+that+refill+ink+cartridges/2100-1041 3-5643687.html

⁴⁹ http://news.com.com/Dell+targets+overseas+printer+market/2100-1041 3-5875985.html

⁵⁰ One for all is Rhinotek's chairman, Gerald Chamales, which stated it clearly in the press release that can be found at http://news.com.com/HP+sues+firms+that+refill+ink+cartridges/2100-1041_3-5643687.html

⁵¹ namely Lexmark, HP and Canon

⁵² http://news.com.com/Paying+more+for+a+printer%2C+but+less+for+ink/2100-1041_3-6184538.html?tag=item

⁵³ Hal R. Varian, New Chips Can keep a Tight Rein on Consumers, NEW YORK TIMES July 4th, 2002, at C2

⁵⁴ See the original complaint by US DOJ, par. 24, available at http://www.justice.gov/atr/cases/f1700/1763.htm,

⁵⁵ See *supra*, footnote 33

⁵⁶ See Aspen Skiing Co. v. Aspen Highlands Skiing Corp., 472 U.S. 585 (1985); see also Verizon Comm. Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398 (2004).

⁵⁷ See infra, Section 3.1

Technology at stake was competition in the provision of maintenance and repair of particular hardware.⁵⁸

In the following paragraphs, the most relevant case law concerned with the survival of fair use in the DRM environment will be reviewed, with the intent to show the dissatisfaction of courts with DRM misuses and the gradual opening to the creation of the so called "fair access" doctrine. As indicated by its name, the doctrine is usually intended to create an exemption from liability for circumvention of TPMs when such circumvention is aimed at making a fair use of the protected work. This embraces, as will be stressed below, not only cases where "technical" fair use is allowed by section 107, but also those where the user can simply benefit of one of the legal exceptions or limitations to copyright protection, which are enshrined in the statute.

SECTION III. HAS FAIR USE SURVIVED THE DIGITAL REVOLUTION? A REVIEW OF THE CASE-LAW

The debate about the survival of fair use in the digital environment appears paradoxical, if one starts the analysis by looking at section 1201(c) and states that "[n]othing in this section shall affect rights, remedies, limitations, or defenses to copyright infringement, including fair use, under this title."

In reality, this declaratory statement can be interpreted in ways that allow bypassing its literal meaning. In fact, it is certainly not under contention that right, remedies, limitations or defenses themselves will not be taken away by any of the provisions introduced by the DMCA. The crucial point is that all these rights would be *de facto* affected by the anti-circumvention provisions to the extent that they will not be as viable as before the introduction of these provisions.

The first case addressing the core of the controversy was *Universal City Studios, Inc. v. Reimerdes*, dealing with the posting of DeCSS (a program that allows the circumvention of cascading style sheets (CSS) technologies) onto a website. ⁵⁹ In that context, the court specifically addressed the fair use defense and acknowledged that Congress was well aware of the importance of preserving its traditional role when it passed the statute. Also, it recognized the possible erosion of fair use by technological control on access, and therefore balanced the interest of the authors with the competing interests of non-infringing users by including some rules in favor of this latter category. More precisely: (1) it did not enact a ban on circumvention of copy-control mechanism, (2) it delayed the effective date of the anti-circumvention provision in order to allow an investigation of how to best reconcile with fair use concerns, an investigation which resulted in a two-year rulemaking process, and (3) it created specific exceptions for certain uses.

However, focusing on the viability of the fair use defense, what is interesting for our purpose is the statement made by the court regarding section 1201(c): "[it] simply clarifies that the DMCA targets the circumvention of digital works guarding copyrighted material, but does not concern itself with the use of those materials after circumvention has occurred." Thus, the holding rejected the possibility of asserting fair use in anti-circumvention proceedings, arguing that this doctrine protects only certain uses of a copyrighted work, and not the access to them. The ruling immediately raised the critics of the academic environment, where one of the immediate reactions was to object that "if fair use exists, fair access does not."

The concept was repeated in *United States v Elcom Ltd.*, concerning the publication of a code capable of disabling DRMs incorporated in the Adobe digital e-book format, where the court stated that "[t]he DMCA does not eliminate fair use nor substantially impair the fair use right of anyone [...] The fair user may find it more difficult to engage in certain fair use with regard to electronic books, but nevertheless the fair use is still available." The

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⁵⁸ See infra, Section 3.3

⁵⁹ 111 F. Supp. 2d 294 (S.D.N.Y. 2000).

⁶⁰ Universal City Studios, Inc. v. Corley, 273 F.3d 429 (2nd Cir. 2001)

⁶¹ Jacques De Werra, *The Legal System of Technological Protection Measures under the WIPO Treaties, the Digital Millennium Copyright Act, the European Union Directives and other National Legislations (Australia, Japan), in Adjuncts and Alternatives to Copyright: Proceedings of the 2001 Congress of the Association Litteraire et Artistique Internationale, 179-279 (2002)*

⁶² United States v. Elcom Ltd., 203 F. Supp. 2d, 1111, 1134-1135 (N.D. Cal. 2002).

growing dissatisfaction with the adoption of such a degraded notion of fair use (i.e., allowing for the use of a work only in a less technological format than its digital version) is demonstrated by the emerging of two proposals in 2003. The Benefit Authors Without Limiting Advancement or Net Consumer Expectations (BALANCE) Act ⁶³ and the Digital Media Consumer Rights Act (DMCRA)⁶⁴, if passed, would have allowed both circumvention and trafficking of a circumvention device when such circumvention would be excused by fair use.⁶⁵

In 2004, another court followed the same path of these decisions, and thus by the beginning of 2004 it seemed clear that fair use in its current context was on its demise, or at least substantially lessened by the operation of DRM technologies.⁶⁶

At that time, faith was fading in a judicial interpretation capable of restoring copyright law with an effective and viable fair use, and indeed one scholar had already turned his attention for that purpose to the administrative state, advancing an interesting proposal. The idea was to oblige copyright holders to make some access and use available to identified individuals and for limited stated purpose, and to institute an administrative agency in order to determine the classes of uses that need to be protected (with possibility for both parties to appeal unsatisfactory decisions).⁶⁷ The proposal was advanced with the hope that the ease of access and speediness of the administrative procedure⁶⁸ would make exaggerations by the parties less common, help to clarify permissible uses, and consequently make users more conscious of their fair use rights. Unfortunately, the proposal has not had any successful development.

However, the future prospects for fair use were not all dark. In fact, some prospects toward the incorporation of some limitation to the property rights conferred in cyberspace via anti-circumvention provisions started to appear in 2004, when for the first time the Federal Circuit embraced a more revolutionary view of the anti-circumvention provisions.

A. First Glimmer Of A "fair access" Defense: Chamberlain v. Skylink

Chamberlain Group, Inc. v. Skylink Tech., Inc. represents a landmark judgment on misuse of TPMs. ⁶⁹ The controversy originated by the fact that Chamberlain, a manufacturer of garage doors and garage door openers ("GDO"s, sold in a package together with garage doors) sued its major competitor in the remote control market, Skylink, alleging that by marketing garage door openers that were also capable of opening Chamberlain's doors, it was providing users with a tool that facilitated circumvention of a technological measure of protection as prohibited by section 1201 of the DMCA. In fact, the plaintiff had built into garage doors a computer program, which performed an operation of "resynchronization" every time a GDO tried to send signals to the program, thus requiring identification. This system was to be considered, under Chamberlain's read of the statute, a TPM that protected access to a copyrighted work (allegedly, the identification system), and accordingly every attempt to circumvent it had to be considered illegal. ⁷⁰

⁶³ H.R. 1066, 108th Congr. (2003)

⁶⁴ H.R. 107, 108th Congr. Section 5 (2003)

⁶⁵ The same proposal was advanced in the context of enacting the DMCA, but it was plainly rejected. Instead, an on-going rule-making process was created, and the declaratory statement was included in 1201(c). *See* H.Rpt. 105-551 pt. 2, at 86.

⁶⁶ See 321 Studios v. Metro Goldwyn Mayer Studios, Inc., 307 F. Supp. 2d 1085 (N.D. Cal 2004)

⁶⁷ See Jacqueline Lipton, Solving the Digital Piracy Puzzle: Disaggregating Fair Use from the DMCA's Anti-Device Provisions, 19 HARVARD J.L. & TECH 111, 149 (2005).

⁶⁸ See id. But see Mark A. Lemley and Anthony Reese, Reducing Copyright Infringement without Restricting Innovation, 56 STAN L. REV. 1345 (2004). As Lipton well portraits in her paper, the administrative agency proposed by Lemley and Reese would have a different focus. Instead of an administrative body committed to establishing classes of fair use, these two scholars suggested the institution of an alternative dispute resolution system in order to allow complaints to be brought immediately against infringers, without having to go through an expensive and probably time-consuming litigation that risks not being worth the effort.

⁶⁹ 381 F.3d 1178 (Fed. Cir. 2004)

⁷⁰ See Chamberlain Group, Inc. v. Skylink Technologies, Inc., 292 F. Supp. 2d 1030, 1041-43 (N.D.Ill. 2003)

An Illinois District Court rejected Chamberlain's request for injunctive relief, and instead granted defendant's motion for summary judgment ruling in its favor shortly thereafter. 71 Chamberlain appealed such ruling and thus the case reached the Federal Circuit, giving it an opportunity to clarify some issues regarding the liability under Section 1201 of the Copyright Act, and most importantly, the hot issue concerning its linkage to copyright infringement.

The court seized the opportunity to express its disagreement with the theory of access rights advanced by some academics, a theory arguing that the digital environment would have created an independent "access right," and based on the assumption that the exploitation of works would be shifting from having copies to "experiencing" those works⁷³. According to such theory, in fact, the copyright owners would for the first time be granted protection for their physical property, rather than their intellectual property.⁷⁴

The rejection was motivated simply by contending that traditional copyright does not support such a "direct" owners' access theory, and that, on the contrary:

The DMCA does not divest the public of the property rights that the Copyright act has long granted to the public.75

Notwithstanding this dictum, the court did not even go down the route of supporting the opposite theory, i.e. the public access theory which argues that the public owns the right to get access to copyrighted works.⁷⁶ Rather, the approach the court took represented an intermediate view, one that simply maintains that access has never been regulated by copyright law⁷⁷ and that by enacting section 1201(a), Congress merely wanted to furnish an ancillary cause of action to copyright infringement. ⁷⁸ According to this theory, it is up to Congress to define the scope of the limited monopoly that should be granted to authors in order to give the public appropriate access to their work product.79

This theory would seem the most reasonable attempt to maintain copyright balance. However, this did not save it from being severely criticized as inconsistent with the legislative intent for two main reasons. First, it was criticized for its alleged conflict with the very phrasing of section 1201, which purportedly links certain violations to "a work protected under this title" and other violations to "a right of a copyright holder under this title." Accordingly, the lack of any link between "right" and "work" would make it impossible to assert a valid defense to the infringement of some of the rights mentioned under this title. Secondly, it was criticized as inconsistent because the legislative history makes it clear that

"paragraph (a) (1) establishes a general prohibition against gaining unauthorized access to a work"

⁸⁰ H. Rep. 105-551, pt. 1, at 18

⁷¹ See id., at 1041.

⁷² See Jane C. Ginsburg, Essay: From Having Copies to Experiencing Works: The Development of an Access Right in U.S. Copyright Law, 50 J. COPYRIGHT SOC'Y U.S.A., 113, 116 (2003). See also Michael Landau, Has the Digital Millennium Copyright Act Really Created a New Exclusive Right of Access? Attempting to Reach a Balance between Users' and Content Providers' Rights, 49 J. COPYRIGHT Soc'Y U.S.A. 277, 289 (2001).

⁷³ See Chamberlain, supra note 70, at 1115.

⁷⁴ See generally Thomas Heide, Copyright in the EU and U.S.: What "Access-Right"?, 48 COPYRIGHT SOC'Y U.S.A., 363 (2001).

⁷⁵ See Chamberlain, supra note 70, at 1204.

⁷⁶ See Zohar Efroni, supra note 16.

⁷⁷ See generally Chamberlain, supra note 70. But see Orit Fischman Afori, Implied License - An Emerging New Standard in Copyright Law, 25 SANTA CLARA COMPUTER & HIGH TECH. L.J. 275 (2009) (contending that right of access is conferred by an implied license from acquisition of a copy of copyrighted works). See also ROBERT P. MERGES ET AL., INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE (2006), at 506-ss.

⁷⁸ This is the so-called "ancillary action theory", explained well by Zohar Efroni. *See* Efroni, *supra* note 13, at. 137. The author explains also that there would be a third viable theory, a "fair access" theory, which would subject the new "access right" to all the copyright limitations (including fair use). See id.

⁷⁹ See Chamberlain, supra note 70, at 1200.

and

"in order to provide meaningful protection and enforcement of the copyright owner's right to control access [...] section (a) (2) supplements the prohibition against the act of circumvention with prohibitions on creating and making available certain technologies."

Finally, opponents of the "appropriate access" theory argue that Congress made it explicit that general copyright defenses are inapplicable to the acts of circumventing access control, as opposed to the acts of circumvention of copy-control measures. It is also true, however, that content providers nowadays tend to incorporate both access and copy controls, resulting in both a merging of functionality and in the application of the harsher regime for control measures in general. 33

Moreover, what appears obvious from a read of *Chamberlain* is that the Court did not seem too concerned with congressional intent in passing the DMCA. Rather, it focused on the potential systemic impact on copyright that a different interpretation of the statute would imply. It thus gave prevalence to the values contained in the Constitution as a justification for copyright legislation, i.e. the promotion of progress, over a potentially unconstitutional reading of the statute. These are probably some of the factors that led the Federal Court, despite all the above considerations, to undertake the role of protection of a public policy interest, more precisely what it saw as the interest of avoiding monopolies created through interoperability issues and the overstretching of the DMCA.⁸⁴ Embarking on a role of creative interpretation, the Court stated that

"a copyright owner seeking to impose liability on an accused circumventor must demonstrate a reasonable relationship between the circumvention at issue and a use relating to a property right for which the Copyright Act permits the copyright owner to withhold authorization -- as well as notice that authorization was withheld"

and

"A copyright owner seeking to impose liability on an accused trafficker must demonstrate that the trafficker's device enables either copyright infringement or a prohibited circumvention. 85,"

In the particular case, it is precisely by focusing on the need for authorization by the copyright owner that the court found an absence of circumventor liability. By invoking the doctrine, which asserts the existence of an implied license for the purchasers of copyrighted works, it reasoned that consumers have the implicit authorization to use Chamberlain's garage doors with other companies' interoperating products. Ref. As to the trafficker liability issue, the court pointed at the fact that whenever the statute uses the term "access," it does so in connection with the term "protection.' Therefore, there could be no liability in the instant case because:

"A plaintiff alleging a violation of § 1201(a)(2) must prove: (1) ownership of a valid <u>copyright</u> on a work, (2) effectively controlled by a <u>technological measure</u>, which has been circumvented, (3) that third parties can now <u>access</u> (4) <u>without authorization</u>, in a manner that (5) infringes or facilitates infringing a right <u>protected</u> by the Copyright Act, because of a product that (6) the defendant either (i) <u>designed or produced</u>

82 *Id.*, at 38.

⁸¹ *Id*.

⁸³ See R. Anthony Reese, Will Merging Access Controls and Rights Controls Undermine the Structure of Anti-Circumvention Law?, 18 BERKELEY TECH. L.J. 619, 627-35.

⁸⁴ See Chamberlain, supra note 70, at 1201 ("Chamberlain's proposed construction would allow any manufacturer of any product to add a single copyrighted sentence or software fragment to its product, wrap the copyrighted material in a trivial "encryption" scheme, and thereby gain the right to restrict consumers' rights to use its products in conjunction with competing products. In other words, Chamberlain's construction of the DMCA would allow virtually any company to attempt to leverage its sales into aftermarket monopolies -- a practice that both the antitrust laws, and the doctrine of copyright misuse, normally prohibit.").

⁸⁵ *Id.*, at 1204.

⁸⁶ Supra, note 72.

primarily for circumvention; (ii) made available despite only limited commercial significance other than circumvention; or (iii) marketed for use in circumvention of the controlling technological measure. A plaintiff incapable of establishing any one of elements (1) through (5) will have failed to prove a prima facie case. A plaintiff capable of proving elements (1) through (5) need prove only one of (6)(i), (ii), or (iii) to shift the burden back to the defendant." 87

In short, the court concluded that:

"17 U.S.C. § 1201 prohibits only forms of access that bear a reasonable relationship to the protections that the Copyright Act otherwise affords copyright owners. While such a rule of reason may create some uncertainty and consume some judicial resources, it is the only meaningful reading of the statute." 88

A note for accuracy is in order here. A careful reading of the statute, in fact, does not contemplate the relationship as such. In a scrupulous review of the congressional intent and the analysis of the phrasing of the statute, a scholar has pointed out in what way this holding is substantially a departure not only from a plain reading of the statute, but also from Congress' intent. 89 According to Zohran Efroni, the ruling could be read mainly in two

1) That only the anti-trafficking provisions require a showing of reasonable relationship, given the burden of potential liability they impose on third parties and given particularly that these third parties may well be completely unaware of the employment of their devices in a way that facilitates circumvention. This interpretation assumes that perhaps because of the intrinsically high probability of infringement stemming from their activity, while infringers are judged by their actual acts, traffickers are judged by the array of the potential uses they enable.

Or

2) That every violation of Section 1201 would require showing a reasonable relationship with copyright infringement. The problem with this reading is that showing the existence of a copyrighted work effectively protected by an access control measure, as requested by the court in *Chamberlain*, would not suffice in the context of Section 1201(a)(2), where to prove the linkage a showing of the actual use of the device in order to infringe or facilitate infringement would be necessary.

His critique recognizes that the most plausible interpretation of the ruling seems the former; however, it also contends that the interpretation at issue does not find support in the history or in the language of the statute. Nonetheless, despite this "literalist" criticism, Efroni does not conclude that the court erred in making such a departure. What judicial interpretation sometimes requires, indeed, and particularly if it is compelled to it by the disruptive impact of technology on the existing law, is resorting to good sense. This may force a court to "strip" a statute from its letter (if not from its spirit) whenever something is wrong with that statute. 90 He thus sympathized with what he recognized as an attempt of repairing the excessive breadth conferred by Congress to a copyright statute. Further, he warned about some of consequences of embracing an independent "access right." For the first time, a right would be conferred whose protection is relevant only to digital embodiment of the works, and subordinate to effective TPMs. What is more, it would not be listed in the exclusive right conferred by section 106. Thus, it would be not subject to various provisions of the Copyright Act, among which also the express preemption mentioned by section 301.91 And even though state law or equity principles could limit the scope of this new access right, the uncertainty and the lack of uniformity intrinsic in this regulatory structure would dramatically alter the balance struck by Congress in enacting the Copyright Act. Accordingly, the author sides with those who commend

⁸⁷ Chamberlain, supra note 70, at 1203.

⁸⁸ *Id.*, at 1202.

⁸⁹ Efroni, *supra* note 16, at 144

⁹⁰ *Id.*, at 163 (paraphrasing Justice Douglas in *Peak v U.S.*, 353 U.S. 43, 46 (1957)).

⁹¹ The express pre-emption applies only to "activities violating legal or equitable rights that are not equivalent to any of the exclusive rights within the general scope of copyright as specified by section 106." See DMCA § 301(b)(3).

the interpretation of the Court in the given case, as it stands as the first, critical step towards the creation of a "fair access" doctrine. 92

However, a complete analysis of the case cannot neglect mentioning the fact that the court left open two questions: 1) whether section 107 might serve as an affirmative defense to a *prima facie* violation of section 1201, and 2) how a safe harbor could be established for trafficking devices that may be considered anti-circumvention tools.

B. Misuse Rejected On Procedural Grounds: Lexmark International, Inc. v. Static Control Components, Inc.

The Sixth Circuit in *Lexmark International, Inc. v. Static Control Components, Inc.* took a different approach to the problem, arguably more respectful of Congressional intent. ⁹³ Once again, the statutory interpretation on which this judgment is based was not entirely orthodox. Nonetheless, and even though some of the reasons supporting the decision can be perceived as misleading, the judgment can be considered as an important occasion to bring attention to the problem of DRM misuse. As a matter of fact, the judgment stands as a signal of the courts' unwillingness to enforce overreaching anti-circumvention provisions. Even more importantly, it fomented the scholarly debate and conceivably contributed to raising judicial awareness over the perniciousness of those practices.

As mentioned earlier, the DRM technology at issue here was the means used to accomplish an effective tie-in: the purchasers of Lexmark printers could choose to buy a discounted package, where instead of normal Lexmark cartridges they would find so-called "Prebated Cartridges." This type of cartridge was special because once terminated it would have to be returned, as specifically stated in a contractual clause, instead of getting refilled with new ink. This latter possibility was in fact excluded by the use of software ("Printing engine program", hereinafter "PEP"), within the printers, which ensured the use of only original Lexmark cartridges. The program, registered with the copyright office, required the cartridge to give a "secret handshake" by providing a code that was incorporated in the cartridges, specifically in their Toner Loading Program (hereinafter, "TLP"), also registered with the copyright office, and necessary to make the PEP function.

The defendant, Static Control ("SCC"), mimicked Lexmark's toner loading program so as to create another program that resulted in compatibility with the Printer's Engine Program situated in Lexmark's printers. It then purported to sell the program to competitors in order to incorporate it in their cartridges, thus nullifying Lexmark's tie-in. To prevent that, Lexmark sued, asserting copy infringement, circumvention of a TPM that protects access, and trafficking of a circumvention-facilitating device. The theory for anti-circumvention liability was that PEP and TLP give access to each other, and are therefore both TPMs that protect access to a copyrighted work.

The district court initially granted Lexmark a preliminary injunction, rejecting both defenses brought by SCC: that the circumvention of PEP was exempt from liability because it constituted reverse engineering as established in section 1201(f)(2) and (3), and that the PEP was not copyrightable because of its functionality. However, on appeal the 6th Circuit reconsidered this latter argument and reversed, holding that functionality impedes the protectability of a lock-out code The alleged reason was that efficiency concerns may narrow the practical range of the potential choices, as already ruled in the past in other cases regarding computer programs. Post

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⁹² See Zohran Efroni, Towards a Doctrine of 'Fair Access' in Copyright: The Federal Circuit's Accord, 46 IDEA 99, 136 (2006) (suggesting that courts might want to follow the standard used for indirect liability in Sony, since the anti-trafficking provisions are nothing else than codification of an indirect liability for unlawful circumvention). In this respect, it is worth noting also that Congress explicitly rejected this standard for liability of the anti-circumvention provisions: see Universal City Studios, Inc. v. Corley, 273 F.3d 429 (2nd Cir. 2001), at 443
⁹³ See 387 F.3d 522 (6th Cir. 2004)

⁹⁴ The reason being that the defendant's program could no be considered independently created as required by section 1201(f)(2). Indeed, this subsection requires "the purpose of enabling interoperability of an independently created computer program with other programs, if such means are necessary to achieve such interoperability, to the extent that doing so does not constitute infringement under this title". 17 U.S.C. § 1201(f)(3).

⁹⁵ See Computer Assoc. Int'l, Inc. v. Altai, Inc., 982 F.2d 693 (2nd Cir. 1992); Lotus Dev. Corp. v. Borlnd Intern. Inc., 49 F.3d 807 (1st Cir. 1995).

This holding has some interesting consequences for DRMs, which are usually established by computer programs. Most importantly, a consequence is that reverse engineering competitors' DRM in order to achieve the interoperability of their platform with a complementary program will be likely considered legitimate for two reasons. First, the DRM may simply be the only way by which the copyright holder is able to fence off infringers because of the limited amount of choices dictated by efficiencies or industry standards. In this case, the purpose or the amount of the competitor's mimicking would not matter because the DRM technology would not be a copyrighted work, as there would not be any available functional choice other than the combination of codes implemented by the DRM. Second, the mimicking activity might constitute fair use. Upon such an allegation by the defendant, the outcome would be more uncertain as a court would have to go through the analysis described in section 107.

The kind of reverse engineering at issue here, however, is to be distinguished from the reverse engineering mentioned by section 1201 among the exceptions that allow circumvention of TPMs without a triggering of liability. First, it is distinguishable because the latter refers to engineering having as object the copyrighted work protected by DRM, and not the DRM itself. Second, the two are different because this exception was narrowly crafted by Congress specifying that can be circumvented only if

(1)"[...] those elements of the program that are necessary to achieve interoperability of an independently created computer program with other programs ", (2) "if such means are necessary to achieve such interoperability" and (3) "to the extent that doing so does not constitute infringement under this title." ⁹⁶

Moreover, it is important to bear in mind that the exception for reverse engineering was not intended to operate for TPMs that control access to a non- protected work. 97

Under this interpretation, it would seem that the defendant may still be found liable, even though the TPM was used to protect a non-copyrighted work. That is probably why, to impose a further hurdle to strategic use of DRM and avoid stretching DMCA liability, the Circuit Court in *Lexmark* advanced the argument that the TPM was not "effective" because the code of the PEP was physically provided to users inside the printer memory, from which place it could be translated in readable source code. Accordingly, the measure adopted was not effective because of a "leak" in the system: what was protected on the audio-visual level could be retrieved on the literal level, by disassembling the printer.

Although it is appreciable that the court embraced this public policy perspective, its reasoning cannot be considered consistent with the statute. The statute itself simply defines as effective those technological protection measures, which, in the ordinary course of operation, require "the application of information, or a process or a treatment, with the authority of the copyright owner, to gain access to the work." It does not question whether and how the key to access the copyrighted work is conferred.

If the word "effective" had to be interpreted according to *Lexmark*, DMCA protection would resemble the type of protection provided to trade secrets: whenever some information is revealed because of a failure to deploy "reasonable efforts" to protect it, the protection conferred by the law is lost. This would arguably be at odds with Congress' attempt to "to facilitate the robust development and world-wide expansion of electronic commerce, communications, research, development and world-wide expansion of the digital age" by enacting the legislation. As a matter of fact, were courts in the future to follow this interpretation, proving DMCA liability would become much more difficult given that TPMs would be effective only where it would be extremely difficult, if not impossible, for the single user to get the "unlocking key" in any way other than by authorization of copyright owner.

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⁹⁶ See DMCA § 1201(f)(1).

⁹⁷ See Jane Ginsburg, testimony at Copyright Office Anti-Circumvention Rule-Making Hearing, May 9, 2003, p. 46, http://www.copyright.gov/1201/1203/hearings/transcript-may9.pdf.

⁹⁸ See DMCA § 1201(a)(3)(A)-(B) (using example of descrambling to explain to meaning of "circumvent a technological measure" as actions "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").

⁹⁹ S. REP. No. 105-190, at 1-2 (1998).

Thus DRMs would likely have to become personalized, for instance, through fingerprinting or voice recognition systems, to ensure that no one but the individual consumer, even in case he passes on the key to others, would be able to access the protected work.

More importantly, this opinion does not resolve the problem of misusing DRMs. Printer manufacturers could easily avoid this issue by not including any code in the memory. The problem is that the majority here temporarily tackled a situation that it perceived as an abuse, but for which there is actually a significant gap in the applicable legal rules. Already in the academic debate prior to the *Lexmark* ruling, Professor Burk noted the existence of such a gap invoking the need for an anti-circumvention misuse doctrine in addition to the existing defense of copyright misuse, which would prevent the possibility that circumvention liability would arise even in the absence of a valid copyright claim. ¹⁰⁰

In the concurrence, Judge Merritt addressed these concerns and objected to the limited scope of the ruling, warning future companies that the DMCA cannot be read to suggest that circumvention is a strict liability offense. Focusing on the phrasing of the statute, he pointed to the existence of the wording "for the purpose of," and argued accordingly that whoever invokes anti-circumvention liability shall bear the burden of showing the purpose (or another form of intent admitted by section 1202(2)) of pirating works protected by the copyright statute. ¹⁰¹

Once again, it has to be noted here that this reading appears to depart from the literal expression of the statute, which talks about "purpose" only referring to the acts of circumvention. Nonetheless, it is maintained here that this intent-based approach represents a valid option for courts having to address the issue in the future. Indeed, in the author's view this concurrence opinion with the procedural history of the case provides the right suggestion on how DMCA claims should be assessed. Specifically, the commonality lies in the fact that in both cases, the inquiry does not follow any of the extreme theories, according to which either (1) the link between copyright infringement and circumvention of DRM would be automatically presumed ex lege or (2) the link would have to be proven in the particular case (which appears to be fairly difficult to do a prior, without depriving the statute of its meaning). Rather, it focuses on the likelihood that such link exists. To be clear, the plaintiff in the instant case sued for both copyright infringement and DMCA liability, pursuing the issuance of a preliminary injunction through summary judgment. As a natural consequence, the analysis on the merits is obviously less profound than in an ordinary judgment. At issue was merely the likelihood of prevailing in the merits, which was in fact addressed by the court with regard to both the copyright infringement claim and the DMCA violation claim. In this way, a link between the two different kinds of violation can be found, to the extent that they both require showing a likelihood of copyright infringement. Therefore, it can be concluded that, although the way the majority reaches its conclusion is perhaps subject to criticism, it similarly suggests a solution, which avoids the excesses, thereby allowing the DMCA to be realigned with the core rationale of traditional copyright law.

C. The Federal Circuit Doubles: Storage Technology Corp. v. Custom Hardware Engineering & Consulting, Inc.

The Federal Circuit had another occasion to reaffirm the "fair access" doctrine in *Storage Technology Corp. v. Custom Hardware Engineering & Consulting, Inc.*¹⁰² The claim originating the case came from a manufacturer of automated data storage machines, which had incorporated in its machines a required password in order to avoid unauthorized reconfigurations of the maintenance code. The claimant's argument was that the defendant, an independent machine maintenance and repair company, bypassed the password in the course of its operations of repairing the software. Perhaps surprisingly, the District court failed to see the use of TPMs underlying the manufacturer's strategy. Clearly, the manufacturer was trying to enforce a tie-in no different from the one

¹⁰² 421 F.3d 1307 (Fed. Cir. 2005).

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¹⁰⁰ Dan L. Burk, Anticircumvention Misuse, 50 UCLA L. REV. 1095, 1131 (2003).

¹⁰¹ DMCA § 1201(2)(a) ("...primarily designed or produced for the purpose of circumventing a technological measure that effectively controls access to a work protected under this title"). However, a strong intent requirement can be found also in the following sections. DMCA § 1201(B)-(C) ("...has only limited commercially significant purpose or use..." and "...is marketed by that person or another acting in concert with that person with that person's knowledge for use in circumventing a technological measure that effectively controls access to a work protected under this title...").

accomplished and considered illegal in *Eastman Kodak Co. v. Image Technical Services, Inc.*¹⁰³ Clearly, the defendant here could avail himself of the defenses specifically provided by Section 117 (a) and (c) of the Copyright Act. On appeal, therefore, it was relatively easy for the Federal Circuit¹⁰⁴ to recognize that there was no copyright infringement at all, and to state consequently:

"To the extent that [Appellant's] activities do not constitute copyright infringement or facilitate copyright infringement, [Appellee] is foreclosed from maintaining an action under the DMCA." ¹⁰⁵

This step is as simple as it is critical to delineate the doctrine of "fair access." Importantly, this can be considered an answer to the first question left open by the court in *Chamberlain*. ¹⁰⁶ In that context, by carrying out a summary judgment analysis before deciding on the merit of the anti-circumvention claim, and in subordinating the viability of this latter to the likelihood of success of the copyright claim, the court provided no indication of whether a similar reasoning (i.e., linking the anti-circumvention claim to the copyright claim) should be applied when deciding over the raising of a defense such as fair use. Admittedly, an analysis at the preliminary stage (like the one performed in *Lexmark*) wouldn't be equally straightforward. What is important to note, however, is that the Federal Circuit will be bound by this precedent and thus will ultimately always have to address the question of whether an access by circumvention can be categorized as "fair" (i.e., where an application of the fair use doctrine rules out the possibility of copyright infringement) or not.

In addition, the court attempted to address the second question left open in *Chamberlain*: in order to create a safe harbor for activities that might constitute trafficking of circumventing tools, the court linked every violation of 1201 with the likelihood of actual acts of infringement. What the Court developed here in response is a procedural adjunct to the "fair access" doctrine, which provides that even if plaintiff convinces the court at this stage about the success of its copyright claim, he "still must prove that the circumvention ... either 'infringes or facilitates infringing a right protected by the Copyright Act." This adjunct enlarged the scope of the doctrine, and thereby confirmed the necessary linkage between circumvention and infringement identified by *Chamberlain*. What is even more, it managed to obviate the lack of uniformity derived from the absence of ruling in *Chamberlain* on the standard for successfully stating a claim under section 1201(a). In fact, by requiring a demonstration of something more than the mere existence of a theoretical or *potential* linkage with some infringement activities, it substantiated this requirement into showing that the circumvention *actually* facilitates some of these activities.

As a broader policy consideration, note that what the Federal Circuit did by elaborating on the "fair access" doctrine is simply applying that principle referred to at the beginning of this article. The new technologies rendered ambiguous the literal terms of the Copyright Act, particularly those related to the fair use. The Court, therefore, properly construed the statute in light of the basic purpose of the Copyright Act of conferring monopolies only to the extent that it would be capable of stimulating the labor of authors, and in a way that would ultimately benefit the public. The key problem with this principle is, of course, establishing how much is the appropriate incentive to stimulate authors' labor, and the extent to which this benefit would offset the direct benefit derived from allowing access to their works. This balance between ultimate and intermediate interests is complicated by the value that copyright law gives to transformative uses, and is in fact the critical tension underlying copyright law.

^{103 504} U.S. 451 (1992)

¹⁰⁴ Given that the U.S. Appellate Court specialized in the subject of patents and copyrights, it is not surprising that the Court is more attentive in the assessment of legal questions on these matters.

¹⁰⁵ Storage Tech, supra note 102, at 1318.

¹⁰⁶ See *supra*, final paragraph Section. 3.1

¹⁰⁷ Storage Tech. Corp., supra note 102, at 1318.

¹⁰⁸ "The sole interest of the United States and the primary object in conferring the monopoly [...] lie in the general benefits derived by the public from the labors of authors": see *supra*, Section 1.1.

¹⁰⁹ See Julie E. Cohen, Lochner in Cyberspace: The New Economic Orthodoxy of "Rights Management", 97 MICH. L. REV., 462 (1998).

IV. OTHER POSSIBLE APPROACHES

A. Crafting A Narrow-Tailed Presumption To Create An Anti-Circumvention Misuse Defense

By the end of Storage Technology, it seemed clear that courts had crafted a solution to the problem of DRM misuse through judicial interpretation, rather than waiting for a solution coming either from the legislative or from the executive branch.

However, it is also evident that such solution comes at some cost, as it brings courts face to face with some technical difficulty, particularly in those grey areas where the legitimacy of the DRM restrictions is controversial. To be sure, as the success of the "fair access" defense is inevitably correlated with that of the fair use analysis, it is not hard to imagine that a court will struggle when deciding whether certain activities would qualify for a fair access defense under section 107.

For these reasons, this article recommends that courts and legislators develop such analysis further, and identify some guiding factors designed to enhance legal certainty, allowing both firms to make decisions and lawyers to advice their clients on this matter. A proposal for concrete criteria for developing the analysis further will be sketched hereafter; however, it seems important to make a prior remark. Namely, such proposal is just an alternative to a more general solution addressing the problem of the unpredictability of fair use itself, which is beyond the scope of this article. A valid alternative option might be to combine the wisdom of the fair use doctrine with the more continental, civil law approach to copyright limitations, by defining some kinds of privileged uses to be statutorily pre-established within the meaning of "fair use" such as widely accepted transformative uses including teaching, researching and news reporting.110

The idea for the solution proposed here draws on the insights of a paper written in 2005 by Professor Lipton, discussing the death of fair use in the digital environment. 111 Prof. Lipton crafted a solution for the specific kind of DRM misuse that was at issue in Chamberlain and Lexmark of physical tying accomplished through the integration of copyrighted software with physical products.

It is argued here that, despite the limited scope of the solution proposed, focused on interoperability concerns, and thus confined within a narrow set of circumstances, it provides useful insight for the purpose of solving the more general issue of intellectual property misuse.

The suggestion of Prof. Lipton originates from the conflict of law rules contained in the Uniform Computer Information Transaction Costs Act (UCITA), a model code which amongst other things addresses the issue of which rules should be applied for the mixed transactions involving both computer information and physical goods. Comparing such conflict of law issue with the problem of transactions involving intellectual property and another connected good or service, the so called "tied product" under the traditional antitrust analysis, Prof. Lipton realized that the proposed solution would be well suited to regulate the strategic use of DMCA provisions in a way that prevents the leveraging of copyrighted works into a secondary market.

The rules provide that the incidental incorporation into a physical product would not bring a transaction involving that product under the ambit of UCITA's contractual default rules automatically. 112 Similarly, Prof. Lipton suggested that Congress should introduce a presumption against DMCA liability for cases in which (a) the copyrighted work in question is merely incidental to a product manufactured by the complainant and (b) a

¹¹⁰ American University's School of Communication identified some presumptively fair uses (subject to the implicit limit of proportionality), which should be taken into account as prima facie evidence of legality by the courts called to judge on the possible infringement occurred in the creation of derivative works. See, e.g., Peter Jaszi et al. Code of Best Practices in Fair Use for User-Generated Content, PROGRAM ON INFORMATION JUSTICE AND INTELLECTUAL PROPERTY (2012), http://www.wcl.american.edu/pijip/go/bestpractices.

¹¹¹ See Jacqueline Lipton, The Law of the Unintended Consequences: The Digital Millennium Copyright Act and Interoperability, 62 WASH & LEE L. REV. 487 (2005).

112 See id., at 518 (referencing to section 103(b)(1) of the UCITA).

technological encryption measure has been circumvented for the purpose of creating an interoperable product.

Such presumption clearly resembles the one suggested by Judge Merritt in the *Lexmark* case, but it differs by adding one element that reflects the core rationale of the DMCA of protecting copyrighted works against piracy. Specifically, a plaintiff invoking the DCMA should at least show the link between the circumvention and piracy. This presumption postulates that a merely incidental inclusion of protected software into the physical good does not serve the public interest, as in such a case the benefit of achieving interoperability for complementary products outweighs the gains derived to the system from the enforcement of IPRs. The logic is that if the incorporation of the software code is of such small significance (and here, of course, the plaintiff would have the burden to show the opposite, i.e. the commercial significance of the inclusion of the additional product into the physical goods), then the protection of its IP as an incentive for its creation would be of less value to the system than allowing interoperability and thereby the development of new (and potentially better) products.

Such burden for the plaintiff is obviously easier to sustain than showing (as it would be required under Judge Merritt's test) the defendant's purpose to pirate, since it might be difficult for a copyright holder to obtain the elements that prove the defendant's intention. In addition, this would be also consistent with the very wording of section 1201(a)(1)(A), where proof of the specific intent is not required.

As possible factors to prove that the incorporation of computer information into a physical product was not a strategic choice, Prof. Lipton suggested five "commercial significance" factors: 1) consumer expectations, i.e. whether the presence of the software within a product constitutes an integral part of the product's appeal to prospective purchasers; 2) commercial cost of the software as a proportion of the overall cost of designing and manufacturing the physical product in question; 3) time and effort taken to develop the relevant software; 4) commercial viability of the relevant good without the incorporation of the software; and 5) efforts taken to register the relevant software code at the Copyright Office. 113

By the same token, it is submitted here that in order to satisfy the court that the link between the two markets operated by imposing DRM restrictions is motivated by commercial demand, rather than exclusionary purposes, the company at issue would have to show the existence of, at the very least, one of the first four conditions. ¹¹⁴

Again, such presumption would operate only to avoid enforcing interoperability carve-outs, and would not cause the resurrection of fair use with regard to other legitimate uses. For those concerns, Lipton pointed to anti-circumvention rule-making ¹¹⁵, and argued that in that context specific exemptions will substantially revise DMCA in the near future (foreseeing also a possible broader review of the DMCA with respect to more general issues such as the fair use defense). ¹¹⁶ This presumption, in turn, would fill a gap left by legislators, who at the moment of enacting the anti-circumvention provisions did not foresee the possibility of such a distorted application. ¹¹⁷

¹¹³ See id., at 526.

¹¹⁴ I.e., that consumer expectations were oriented in this sense, that the product would be otherwise non-commercially viable and that a significant amount of money, time or efforts was spent to develop the "tied" product

¹¹⁶ Lipton, *supra* note 111, at 521.

Trademark Office Bruce Lehman (who also testified before the House Judiciary Committee during the DMCA deliberations) said recently in an interview: "The DMCA anti- circumvention provisions were intended to be used by copyright owners to protect their copyrighted works. But [Lexmark] is not preventing access to a copyrighted work, it's preventing the use of a machine [a toner cartridge]. That doesn't really have anything to do with the DMCA and the anti-circumvention provisions of the DMCA... [S]ince I was involved in the creation and evolution of the DMCA, I can say flatly there was no intention to cover that kind of a situation. The DMCA was crafted to protect copyright owners' rights, not people that make machines or—unless the machine has significant copyrighted elements—the machine itself". See CORPORATE COUNSEL, at http://www.law.com/jsp/cc/pubarticleCC.jsp?id=1095434429886.

B. Developing A Renewed "Fair Use" Doctrine And Proactive Consumer Protection Legislation

Fair use is a judicially developed defense (now codified in section 107) to copyright infringement which exempts conducts such as reporting, scholarship, criticism 118, and parody 119 from infringement liability. Moreover, several courts have accepted this defense to justify certain forms of reverse engineering. 120 Given that the main problem resulting from the misuse of DRM is one of interoperability, we cannot neglect to mention such defense as a possible solution to our concerns.

However, fair use is uncertain. In fact, defining what is "fair" involves an analysis of the intention of the alleged infringer, which shifts the attention from the behavior of the DRM user (i.e. the copyright owner), to that of the single alleged infringer. The analysis of the intention, moreover, is only one part of the test (which focuses on the purpose and character of the use), which then evaluates other factors, including (but not limited to) the nature of the copyrighted work, the amount and portion used in relation to the copyrighted work as a whole, the effect of the use upon the potential market for or value of the copyrighted work. ¹²¹ What is useful to bear in mind, in this respect, is that these factors are just a synthesis of the possible considerations in order to assess "fairness," initially determined by the courts and more recently codified in section 107 of the Copyright Act. The ultimate question in assessing fairness is whether the long-term societal benefit derived from the grant of copyright to the author is offset by the short-term interest of society in granting access to the work. As stressed above, consumer expectations and the technological advance of society play a decisive role in shaping the concept of what constitutes a use that can be considered "fair." With the rise of the new technological age, however, the perception of fairness has become increasingly blurred. On one hand, the widespread availability of goods on the internet seems to have relaxed the bar of illegality that characterized traditional copyright. On the other, the reduction in transaction costs that DRMs afford has enabled more transactions to occur, and therefore the potential for uses that do not subtract any profit to the market of the copyright owner has shrunk.

To understand the current situation, one probably needs a brief review of the terms of the debate after the incorporation of fair use into the Copyright Act. Much has been written about the nature of fair use, mainly regarding its nature (whether it is a user right or merely an affirmative defense), its rationale (market-based or userbased), the relevance of its factors in the overall analysis, and how the digital era has impacted it. The first famous article written after its codification was "Fair use as market failure [...]" by Professor Wendy Gordon, which clearly explained the rationale at the root of fair use and how this should inform the fair use analysis. 122In the article, Professor Gordon hinted at the fact that this rationale is strictly relevant for the determination of the leading factors of the fair use analysis, and accordingly argued that fair use should be found when (1) there is a market failure, (2) the transfer of the use to defendant is socially desirable (so called "implied license" argument), and (3) the award would not cause substantial injury to the incentives of the plaintiff copyright owner. This view found its main opponent in Professor Lunney, which in "Fair use as market failure: Sony revisited" contended that the rationale portrayed by Prof. Gordon was far too focused on the interests of copyright holders. 123 He pointed out that such

¹¹⁸ 17 U.S.C. § 107 (1994)

¹¹⁹ See Campbell v. Acuff- Rose Music, Inc., 510 U.S. 569 (S.D.N.Y. 1994).

¹²⁰ See Sega Enters. Ltd. v. Accolade, Inc., 977 F.2d 1510, 1527-28 (9th Cir. 1992); Atari Games Corp. v. Nintendo of Am., 975 F.2d 832, 843 (Fed. Cir. 1992); Sony Computer Entm't, Inc. v. Connectix Corp., 203 F.3d 596 (9th

^{121 17} U.S.C. § 107 ("...including such use by reproduction in copies or phonorecords or by any other means specified by that section, for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright. In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include — (1) the purpose and character of the use, including whether such use is of a commercial nature or is for non-profit educational purposes; (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and (4) the effect of the use upon the potential market for or value of the copyrighted work...").

Wendy J. Gordon, Fair Use As Market Failure: A Structural and Economic Analysis of the Betamax Case and Its Predecessors, 82 COLUM, L. REV. 1600 (1982).

¹²³ Glynn S. Lunney, Jr., Fair Use and Market Failure: Sony Revisited, 82 B. U. L. REV. 975 (2002).

rationale would mean that in any circumstance where there is a loss in revenue or potential revenue, the public interest would be best served by not allowing the activity to be classified as fair use. In fact, this presumption could be offset only in the case where the user shows the intention of making some "transformative use." What Lunney recommended, instead, was to consider the mere increase of access to the works as a significant public interest. Accordingly, he required the presumed plaintiff to show a reason why the society would be better off by prohibiting the contested use. The debate followed through another article written by Prof. Gordon, where she expressed regret for the way her former article had been interpreted. She highlighted that Prof. Lunney's interpretation relied too heavily on the transaction cost argument, whereas she intended to refer to both technical market failures (such as lack of information and existence of negative externalities) and the market failures generated by the law, i.e. those that make the primary objective not the pursuit of an economic value (for example, a law protecting minors who have entered a transaction).

In short, the discussion centered on the question of whether the fair use defense should limit its inquiry to an economic, market-based analysis, and both professors were clearly against such an outcome. By contrast, courts have seemed to embrace in several cases a predominantly economic view, with a fair use doctrine hinging almost exclusively on the first and the fourth factor. Thus, a showing of commercial purpose on the part of the defendant would lead the analysis towards hostility for a finding of fair use; and even more importantly, the possibility of finding fair use would be nullified by showing that the commercial exploitation made by the infringer represents an intrusion in a potential market that the copyright owner could anticipate to enter with his copyrighted work.

A scrupulous review of the judicial decisions embracing this view and a detailed analysis of their possible flaws is beyond the scope of this article. Nonetheless, clarifying the terms of the debate seems necessary to emphasize its link to the core issue analyzed by this paper: the misuse of DRMs. The net reduction of transaction costs originated by internet and DRM, in fact, would seem to lessen the persuasive power of the market failure argument (there being a potential market almost everywhere) and support an increased reliance on the other criteria, which implies that the real value of fair use resides in increasing public access to the creative works. This is the public access right theory that was suggested by *Sony*, and the *Chamberlain* court seemed to refer to it. Were courts in the future to embrace this approach, they would probably shift the burden to the plaintiff and make fair use a *prima facie* defense with no need for corroboration unless the plaintiff succeeds in showing he has sufficient evidence to make his case.

Incidentally, it can be recalled that, amongst the factors indicated by Professor Gordon as causing departure from perfect competition, critical was the lack of perfect information. ¹²⁵ In this regard, it is also worth noting that imposing through consumer law the duty to label DRM-protected contents and disclose the technical features of the copyrighted works (included the compatibility requirements originated by DRM technologies) would make the market failure argument even weaker. ¹²⁶

This would be useful for consumers to make rational choices based on information acquired before the transaction actually takes place, thereby fixing the alleged market failure. The labeling duty should not only encompass the restricted uses that are normally allowed, but also issues of incompatibility with other DRMs and the quantity and quality of personal information collected through the machine (for privacy concerns). Moreover, imposing such a duty would gradually raise consumer expectations, stimulating the creation of new and better services as well as fostering DRM best practices. Being able to make cross-comparisons amongst several types and versions of goods, consumers will become sophisticated buyers and thus allow "the invisible hand of competition" to drive the use and design of DRMs.

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Wendy J. Gordon, Market Failure and Intellectual Property: A Response to Professor Lunney, 82 B.U. L. REV. 1031 (2002).

The other two factors being the high transaction costs, and the internalization of the costs and benefits within the parties of the transactions. *See id.* at 1607-1608

parties of the transactions. See id., at 1607-1608.

This is the approach used by German consumer law and encouraged also by some scholars. See Stephan Bechtold, Digital Rights Management, supra note 30; Natali Helberger, Using competition law as tool to enforce access to DRM...and failing, 2 INDICARE MONITOR 260 (2005).

C. A Technical Solution: Implementing A Symmetric Right Expression Language (REL)

One commentator has stepped out from the criticism coming from the impact of DRM on fair use, contending that there are some aspects of DRM, which can be used to protect fair use and foster openness and innovation. 127 In particular, he referred to the implementation of a rights locker architecture, which allows users to access their personalized content from any device and any location, the information being stored on a network server rather than on a particular device. This would eliminate the problem of having copies of the protected content on single devices and would allow a much easier accommodation of the privileged uses encouraged by copyright law. One solution, for example, could be to grant access to the rights locker for some categories of users without the right holder's permission. 128

However, this kind of solution implies centralizing the control over who can benefit from fair use, a choice whose disadvantages have been pointed out by Dan Burk and Julie Cohen in 2002. 129 First of all, it would be difficult to ensure that users can benefit from fair use privileges when this would run contrary to the interests of rights holders and of the operator of the rights locker. Secondly, and partially as a consequence of this, users would be intimidated and discouraged by the need to follow the procedure, which ultimately would result in a system that chills some spontaneous uses.

Another suggested approach, encouraged by computer science engineers and programmers, is the implementation of dynamic DRM systems providing a rights expression language in which creativity can be properly expressed and a system is constructed which is able to cope with the relationships among numerous right holders for many generations. 130

To comply with this task, DRM would incorporate Right Expression Language ("REL") capable of describing a wide array of rights and conditions for using digital resources. ¹³¹ This solution would differ from the previous one insofar as the control over fair use would not rely on a central monitoring system, but would rather be dependent on the best achievement of science in the right expression language. This system would be more generally open to the public and would foster innovation and standardization without running the risk of being detrimental to interoperability. In fact, in contrast to the centralized solution mentioned above, DRMs here would be forced to use the same language and therefore be able to communicate with each other, relieving users from the annoying and frequent incompatibility complications. Imagine, for example, a user who downloads a protected song and then realizes that he will also have to download another type of media player in order to be able to play that song because it cannot run it with the one he owns. With an open rights expression language like the ones that are currently being developed and improved¹³², this problem would be minimized because of the general implementation of an open

¹²⁷ Stephan Bechtold, *Present and Future*, supra note 25, at 600-601.

¹²⁸ Note that this reminds the suggestion that we gave *supra* to improve certainty in fair use; moreover, this is the principle underlying the structure of the Digital Media Project, that creates DRM capable of expressing a symmetric language. Information about this project, started in 2003 by Leonardo Chiariglione, can be found at http://www.chiariglione.org/project. On a similar note, see the work of Timothy K. Armstrong, Digital Rights Management and the Process of Fair Use, U of Cincinnati Public Law Research Paper No. 07-10. Available at SSRN: http://ssrn.com/abstract=885371

129 See generally Burk and Cohen, supra note 9.

¹³⁰ See Bechtold, Present and Future, supra note 25, at 603.

¹³¹ See Alan Cunningham, Rights Expression on Digital Communication Networks: Some Implications for Copyright, 13 INT'L J.L. & INFO. TECH. 1, 11-17 (2005).

¹³² See Bechtold, Present and Future, supra note 25, (quoting Masayuki Kumazawa et al., Relationship among Copyright Holders for Use and Reuse of Digital Content, in Proceedings of the Fifth ACM Conference on DIGITAL LIBRARIES 254 (2000); Masayuki Kumazawa et al., Representation of Reuse Mechanisms for Digital Work with Multiple Right-Holders, in Proceedings of the 2001 Symposium on Applications and the INTERNET 145, (Saint 2001); Michiko Yasukawa, A Method for Making Dynamic License Agreements in Reuse of Web Contents, 43 (SIG 2) IPSJ TRANSACTIONS ON DATABASES 179 (in Japanese); Michiko Yasukawa, A Dynamic License Agreement System for Reuse of Web Contents, in SEMANTIC ISSUES IN E-COMMERCE SYSTEMS, IFIP TC2/WG2.6 NINTH WORKING CONFERENCE ON DATABASE SEMANTICS 35 (Robert Meersman et al, eds. 2003).

standard on every DRM, as it would be the case for the Open Media Project. 133

However, the REL would have to include semantic to express the interests not only of creators and rights holders, but also of the information users (becoming thus a symmetric REL, as no currently existing REL so far): the ability to translate into the codified expression language attributes such as locality, purpose and perhaps also private or public nature of the use is indeed necessary to achieve a neutral and balanced system.¹³⁴

Moreover, there remain criticisms with respect to the sensitivity of such a language to the societal values and beliefs. Even admitting that the language would be able to translate every kind of right and condition characterizing digital content, that implementation would be defective in 2 ways. First, it would hardly be able to balance several factors as done in the "fair use" analysis. Second, the result would be just a snapshot of the standard used by society at a particular moment, in contrast with the evolving nature of human progress, especially in today's new technological age.

These technical issues illustrate that, given the intrinsic unpredictability of fair use, it is impossible to build a machine capable of replacing human reasoning for evaluating the fairness of a use. It might be possible to achieve something which gets closer and closer to a case by case analysis, but this would never be able to fully embrace all the considerations that constitute the basis for a particular choice in the traditional judicial assessment. This is also the reason why there was so much reluctance in codifying the fair use doctrine, fearing that it would cause a drastic reduction of its scope. In fact, the unpredictable nature is inherently a by-product of its origin, reminding us that judicial analysis entails a case-by-case evaluation. As a result, the fair use codification could not encapsulate this analysis in a rigid four-factor test, and thus would leave the door open for further considerations. ¹³⁵

And even though an overview of the case law might show a tendency to limit the inquiry to those four factors, scholarship has generally disregarded replacing sensitive and partially irrational human reasoning with a predetermined and predictable mechanical process. ¹³⁶ In short, it is recommended here to forget about the hypothesis of entrusting a machine with such a responsibility, for the mere act of balancing among the fair use factors requires a good dose of common sense and a general perception of the needs and the conceptions of society toward a particular attitude. ¹³⁷

V. FACING THE ISSUE: STRIKING THE PROPER BALANCE BETWEEN ANTITRUST AND IP

A famous statement made by the DC Court in the well-known *Microsoft* case¹³⁸ is perhaps the best example for illustrating the tension between intellectual property and competition law. In that context, the court addressed whether the defendant deserved immunity from antitrust for its acts of enforcement of legitimately obtained IP rights:

The company claims an absolute and unfettered right to use its intellectual property as it wishes: "If intellectual property rights have been lawfully acquired," it says, then "their subsequent exercise cannot give rise to antitrust liability." [...] That is no more correct than the proposition that use of one's personal property, such as a baseball bat, cannot give rise to tort liability. As the Federal Circuit succinctly stated, "Intellectual property rights do not confer a privilege to violate the antitrust laws." ¹³⁹

¹³³ A project for building an open source DRM environment, started in 2003. *See* http://www.newmediamusings.com/blog/2004/08/open media the .html.

Bechtold, *Present and Future*, *supra* note 25, at 604

¹³⁵ See 17 U.S.C. § 107 (using the wording of "shall include: [...]").

¹³⁶ Burk and Cohen, *supra* note 9.

¹³⁷ In fact, these considerations are embodied in the analysis of the first factor (nature and character of the use) and, less evidently, in a portion of the fourth factor analysis.

¹³⁸ See U.S. v. Microsoft Corp., 253 F.3d 34 (DC Cir. 2001).

¹³⁹ In re Indep. Serv. Orgs. Antitrust Litig., 203 F.3d 1322, 1325 (Fed. Cir. 2000).

This makes clear that in principle, antitrust law owes no deference to intellectual property; a fairly strong statement, the reading of which may well lead some to think that a conflict between these laws may in practice result in undermining the incentive given by IP laws.

In other cases, however, the approach taken by the courts has been somewhat more respectful of intellectual property rights. In *ISO Antitrust Litigation*, the Federal circuit designated a particular set of rules governing the refusal to license IP rights, as opposed to the general rule governing other kinds of refusal to deal, precisely recognizing the special nature of IP rights and their special role in the stimulation of investment. A similar approach was taken also by the European Court of Justice, where they distinguished IP rights from other property rights in the context of the application of the so called "essential facility doctrine," which in turn has been recently disregarded by the US Supreme Court. What seems to follow from the existence of such different standards, then, is that IP rights do deserve a special treatment, although the specialty cannot go so far as to exempt the exercise of IP rights from the application of competition law. In the case where a conflict occurs, what rules will prevail and to what extent the rules apply will be a matter for the individual jurisdiction to decide.

In the United States, it is important to remember that intellectual property protection, unlike antitrust legislation, is linked to a specific article of the Constitution.¹⁴³ This constitutional base explicitly refers to the values of promoting progress in science and useful arts, which should inform the legislative action in this area. Such explicit reference may be taken as an indication of the prominence of such values over the objective of promoting competition, which the Constitution does not directly address and can be only related to the more general congressional power granted through the Commerce clause.¹⁴⁴ In fact, some might argue that the lack of explicit constitutional recognition of the value of protecting competition in the market can be used to support the argument that courts should resolve any conflict between IP and competition law by giving a first look at the content of IP rules, to ascertain there is no violation of any right. Under this theory, only after an IP analysis should the inquiry turn to other considerations such as rules and policies that may be of relevance outside the IP realm.

This kind of approach, however, seems overly simplistic. Giving full priority to the application of an entire branch of law over another, indeed, is failing to recognize that laws are there to serve the public interest in certain values and that the pursuit of such values often requires a balancing of the interests at stake. This would find support, for example, in the rules that determine the regime applicable between family and commercial law in a contextual break-up of marriage and corporation between two spouses. While the regime of separation generally follows the rules established by family law, it would be unwise and unsatisfactory for potential creditors of the spouses not to use the standards adopted for the other economic operators on the interruption of the commercial enterprise. The underlying message here is that every law has its own policy and procedures and designates a particular set of rules, which are tailored to the values that the particular legislation is aimed to promote. As a consequence, courts will have to struggle to find the optimal solution, which best serves both private and public interests at stake, considering the particular details and circumstances of the situation.

A third hypothesis is that of adopting a mixed kind of approach. The scenario would be that courts choose to treat all these disputes (i.e., those where both IP and competition laws are involved) as pure antitrust or pure IP suits, but intermingle the antitrust assessment with the key concepts of the IP discourse, or vice versa, in order to further both the objectives of IP and competition law in the same context. ¹⁴⁵ In line with this reasoning are, for example, the

¹⁴⁰ Id.

¹⁴¹ See joined cases C-241/91 P and C-242/91 P, Radio Telefis Eireann (Rte) and Independent Television Publications Ltd. v. Commission of the European Communities, Judgement of the European Court of Justice of 6 April 1995, published in Recueil 1995 p. I-00743. In this case, the European Court of Justice established the so-called "new product test" to justify the overriding of IP laws and impose a duty to deal in "exceptional circumstances." For a more recent application of this test, see the European Microsoft case: case T- 167/08, European Commission v Microsoft Corporation, judgment of the Court of First Instance of 17 September 2007, published in Recueil 2007 p. II-03601

¹⁴² See generally Verizon Commc'ns Inc. v. Law Offices of Curtis v. Trinko, LLP. 540 U.S. 398 (2004).

¹⁴³ See *supra*, Section 1.1

¹⁴⁴*See* U.S. CONST. Art. I, § 8, cl. 3 ("The Congress shall have power . . . To regulate commerce with foreign nations, and among the several states, and with the Indian tribes.")

¹⁴⁵ See Robert Pitofsky, Antitrust and Intellectual Property: Unresolved Issues at the heart of the new economy,

decisions of both the Supreme Court and the ECJ, which apply a special standard for the legality of refusals to deal in intellectual property cases.

The implementation of this kind of approach, however, is far from being straightforward. Courts will often have a hard time determining which rules should prevail in the particular context. In addition, judges are not all equally equipped with the economic skills needed to properly assess antitrust matters, nor can one expect that those who are in fact equipped with such skills happen to have also thorough knowledge of the particular nature of IP rights.

To address and attempt a solution to the problem, this paper recommends the application of a three-prong test, which facilitates decisions in a mixed IP-antitrust context. First of all, the analysis should look into whether some blatant violations of either IP or antitrust laws exist. Secondly, and only if no blatant violation is found, the court should undertake a balancing of pro-competitive and anti-competitive effect coming from the practice at issue. Finally, assuming that no finding of violation occurs in the first two prongs, the analysis should shift to consider whether there could be a potential non-literal violation of IP laws, according to the ordinary principles and rules applicable in this area.

A. Why DRM Misuse Should Be Dealt With Inside Copyright Law

Because in the above paragraph the hypothesis of favoring a solution within IP law was dismissed perhaps too quickly, this paragraph includes a summary of the arguments supporting such solution, with particular reference to the DRM misuse.

In the search for a proper remedy to this problem, the main argument in favor of copyright policy over competition policy is that the former, like patent and trademark law, already provides some doctrines and principles to prevent the misuse or overstretching of IP rights. Such doctrines have been developed throughout the years upon a thorough analysis and pondering of the effects that particular practices can have on the effectiveness of intellectual property's incentives.

Tampering with the balance struck by Congress in shaping the optimal legislation is indeed an extremely delicate operation, which has to be undertaken with rigorous attention to the goals and principles of IP law. At first glance, it would seem that non-specialized courts would be ill-suited to properly accommodate those principles. 147 The consideration of IP principles might be difficult in practice also for competition authorities, especially given the recent trend in antitrust law to base decision-making mainly on economic analysis, presumably to the exclusion of other public policy considerations.

On the other hand, it could be counter-argued that in US the copyright is essentially economically grounded, and thus the purposes of the two different areas of law could be reconciled even in the context of a pure antitrust analysis. 148 A reconciliation of the aims of the two different legislations would be consistent with a particular stream of economic scholarship, which has provided substantial evidence suggesting that competition itself may act as a greater spur to innovation than monopoly. 149

¹⁴⁹ See Mark A. Lemley, A New Balance between IP and Antitrust STANFORD LAW SCHOOL, LAW & ECONOMICS RESEARCH PAPER SERVICES No. 340 (April 2007), available at SSRN: http://ssrn.com/abstract=980045 (citing Kennet Arrow, Economic Welfare and the allocation of resources for invention, in THE RATE AND DIRECTION OF INVENTIVE ACTIVITY: ECONOMIC AND SOCIAL FACTORS, 609, 614-16 (Richard R. Nelson Ed. 1962)).

prepared remarks at Antitrust, Technology and Intellectual Property Conference, March 2, 2001, at Berkeley Center for Law and Technology, available at :http://www.ftc.gov/speeches/pitofsky/ipf301.shtm 146 Think about, for example, the "useful article" doctrine, the "merger/scenes a fair" and the fair use doctrines, as well as the idea/expression dicotomy.

¹⁴⁷ Not surprisingly, the most substantial contribution in this area has come from the U.S. Court of Appeals for the Federal Circuit (CAFC), the special Court hearing appeals where the original action included a complaint arising under the patent laws. See, by way of example, the recently developed "fair access" doctrine which was described supra, Section 4.3.

148 See Samuelson, supra note 12.

Speaking about reconciliation of aims in the name of the public interest is, however, being simplistic and overly optimistic. Although it makes some sense to speak of both systems "striving for the same goal of innovation," this rhetoric overlooks the importance of timing in the pursuit of such goal. To be sure, this is a good example of the kind of confusion that the courts could be struggling with while trying to enforce both competition and IP law. While the economic reasoning underlying copyright law is to sacrifice in the short term (i.e., the life of the authors plus 70 years) the public benefit derived from a particular creation so as to incentivize further creations (by way of promising an economic reward for such activity) and potentially transfer that creation to the public in the long run, the timing-benchmark used by competition law is much less clear. In addition, even the debate over what is exactly the pursuit of competition law is far from settled: it is not clear yet (depending on the country considered, of course) whether the goal of this law should be the maximization of total welfare or it should also be concerned with distributional transfers of welfare from consumers to producers. This uncertainty is also due to the extremely broad expressions used by sections 1 and 2 of the Sherman Act, which left lots of room for judicial interpretation and allowed for the accommodation of societal needs, economic interests, and prominent political objectives.

Leaving the policy argument aside, there are also some more concrete advantages for end-users in choosing IP rather than antitrust laws to prevent or sanction DRM misuse. First of all, IP law forbids a broader range of vertical restraints, arguably as a consequence of the fact that IP responds to a larger set of policy concerns. By contrast, in this area antitrust enforcement seems to have increasingly relaxed over the last decade. This retrenchment is mainly due to the increasing importance of economics in this field, and the influence of some economists advocating for a treatment of vertical restraints with the rule of reason. Consistent with this trend, a recent decision from the Supreme Court got rid of the last segment of *per se* liability for vertical restraints. As a result, it is fair to say that an IP-centered analysis might allow courts to prevent enforcement of vertical DRM restrictions that would be permissible under the antitrust laws.

A similar argument might also be advanced for the regulation of horizontal restraints, considering that several IP doctrines encourage competition on the same line of product regardless of the market power of the IP owner. Take for example, in addition to the copyright doctrines, the legality of reverse engineering, in both copyright and trade secret law, the patent statutory bar provision of 35 U.S.C.102 (b) and the first inventor defense against patent infringement in 35 U.S.C. 273, trademark genericness, the fair use doctrine, and functionality defense against trade dress infringement in trademark law. On the other hand, however, IP law does not regulate pricing conduct, and thus would not be concerned with DRM restrictions that are means to accomplish price-fixing, bid-rigging and other restraints subject to the harsh standard of *per se* rule of illegality in antitrust.

Finally, IP law provides for a much more diversified and powerful set of tools to accomplish its objectives. For example, IP legislation allows remedies for contract breaches to be bolstered and default terms are provided to fill incomplete contracts. These features, combined with the relative certainty of legal standards in comparison with antitrust, constitute a powerful deterrent against opportunistic or anticompetitive litigation. ¹⁵⁶

¹⁵⁰ Pitofsky, *supra* note 145.

¹⁵¹ If the answer is affirmative, then the extent and the specific terms that affect competition policy must be considered. For the most provocative seminal work on this topic, *see* Robert Bork, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF (1978).

¹⁵² See 15 U.S.C. § 1 ("Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is declared to be illegal..."). See also 15 U.S.C. § 2 ("Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a felony...").

See Ward S. Bowman, PATENT AND ANTITRUST LAW, 54-56 (1973); Herbert Hovenkamp et al., IP AND ANTITRUST: AN ANALYSIS OF ANTITRUST PRINCIPLES APPLIED TO INTELLECTUAL PROPERTY (2nd ed., 2010).
 See generally Leegin Creative Leather Prods., Inc. v. PSKS, Inc., 551 U.S. 877 (2007).

¹⁵⁵ It has to be acknowledged, however, that there is no uniform treatment of reverse engineering in copyright law. *See, e.g.*, Data General Corp. v. Grumman Sys. Support Corp., 36. F.3d 1147 (1st. Cir. 1994) (arguing against such interpretation because the object code is unintelligible by humans).

Because the wording of the Sherman Act is extremely vague, it can be subject to very different and sometimes conflicting interpretations,

B. Why DRM Misuse May Be Protected Under The Rules of IP law

Besides the particular instances where IP law explicitly allows DRM restrictions, there are also some procompetitive considerations that should inform courts' decisions in the typical antitrust analysis. In particular, at least a couple of considerations should strike courts when evaluating whether the public interest might be served by allowing DRM restrictions, and the risk of underestimating the potential pro-competitive effects of such practices. One consideration bears upon the restrictions imposed by DRM on the type of uses permitted of the protected work: in such scenario, courts ought not to consider the restrictions as an extension of copyright that is per se detrimental to the public, and should instead uphold them to the extent that they are just a necessary means to achieve effective price discrimination. If one looks at the global welfare, perfect price discrimination (so called "first degree" discrimination) is exclusively beneficial because it allows vendors to increase revenues by charging a customized price, and it makes more consumers satisfied by enabling them all to get the good for the price they are willing to pay. 157 The only problem with it is that it is usually very difficult to accomplish given the lack of perfect information about consumers preferences and the difficulty of controlling arbitrage (i.e., the ability of one customer to resell the goods to another consumer, who would be willing to pay a higher price for it). For this reason, regulation has generally disregarded the argument of efficiency of perfect price discrimination, minimizing its persuasive value and being generally hostile to it. The perfect example of that is the Robinson-Patman Act, which plainly prohibits price discrimination without even considering that this could be just the result of aggressive competition in a particular geographical area.¹⁵⁸ This legislation, however, applies only to goods and not to services, thus leaving room in this context for the development of price discrimination strategies.

IP laws, by contrast, are much more conducive to price discrimination. Suffice it to say, for example, that both the first sale and the exhaustion doctrines could be circumvented by licensing rather than selling a product. This is not to say that courts should allow DRM price discrimination without limitation, but rather to reinstate the argument that they should look more carefully at the policy underlying the particular field of IP. Patent law, for instance, greatly facilitates this kind of restriction by giving the right to use the patented invention, among the exclusive rights granted to the patentee. By contrast, copyright law confers an exclusive right only with regard to certain uses, and thus impedes the control over some other minor uses, which are allegedly important for the purpose of diffusing creativity and knowledge in the public scene. Think, for example, of the sampling of a song or the activity of news reporting. Another sign of the difference of policies amongst IP laws can be found in the possibility to resell the goods imported from another jurisdiction. While in copyright law geographic price discrimination is discouraged by conceding the right of reselling to the first importer, trademark and patent law have a more far-reaching extension entitling the right holder to prevent resale by threat of suing the alleged importer in his home country.¹⁵⁹

A second consideration bears upon those types of restrictions that are designed to track down the frequency of use. Once again, (and for the same principle stressed above), these restrictions should not be considered *per se* illegal, and may well turn out to be beneficial for end-users (i.e., to the extent they represent a means to accomplish effective price discrimination). In order to put such restriction in place, IP owners usually sell their IP together with some complementary product and try to integrate them through tying contracts, product design, and/or threat of

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¹⁵⁷ It is clear that such assumption may be strongly opposed by those who consider the relevance of distributional concerns for antitrust law and argue that its goal should be the maximization of consumer surplus.

This is one of the main reasons of why the report recently issued by the Antitrust Modernization Commission recommends to get rid of the Robison-Patman Act. *See* Antitrust Modernization Commission, *Report and Recommendations* (April, 2007), available at http://www.amc.gov/report_recommendation/toc.htm.

159 See generally 35 U.S.C. 271 (referring explicitly to inducing and importing activities which have a market effect

¹⁵⁹ See generally 35 U.S.C. 271 (referring explicitly to inducing and importing activities which have a market effect in the United States) ("Whoever without authority supplies or causes to be supplied in or from the United States[...] in such manner as to actively induce the combination of such components outside of the United States in a manner that would infringe the patent if such combination occurred within the United States.") Conversely, in trademark law, the extraterritorial reach has been implied by the broad jurisdictional language in the Lanham Act. See 15 U.S.C.A. § 1127 (West 1998) (stating in relevant part that "the intent of the Lanham Act is to regulate commerce within the control of Congress by making actionable, the deceptive and misleading use of marks in such commerce.") See also Erika M. Brown, Essays: The Extraterritorial Reach of United States Trademark Law: A Review of Recent Decisions Under the Lanham Act, 9 FORDHAM INTELL, PROP. MEDIA & ENT. L.J. 863 (1999).

infringement suits to the competing suppliers. As mentioned above, patent law gives a broader range of control over uses by conferring the right to use the invention among the exclusive right granted to the patentees. As a result, a business model based on the frequency of use of an invention can be arranged by the patentee simply by choosing to license the invention for every single use, rather than selling it definitively and thus giving away every legal right to master use control. In addition, patent law potentially expands the scope of control by allowing holders to sue for each single step toward the infringement on a patent holder's rights, since it holds potentially liable whoever sells or imports single components of a patent (or a material or apparatus for use in practicing a patented process)¹⁶⁰ with the exception of those goods that can be characterized as staple goods.¹⁶¹

The approach embraced by copyright law regarding usage control appears less clear-cut, at least in the digital context. While as a preliminary matter copyright law considers each individual digital copy temporary made on RAM an infringement, it also delineates several specific exceptions to it. Thus, it seems reasonable to argue that generally speaking, restrictions directed to implement a frequency-based pricing will be upheld more likely in patent law, but there are some minor caveats related to the potentially applicable copyright exceptions. By way of example, reference can be made to a specific case where the same practice was validated in the context patent law, while considered misuse in the area of copyright law. Particularly, in *Lexmark*, the company's DMCA claim was rejected for the patent on its printers and imposing restrictive terms in the shrink-wrap license signed by the purchasers of the package containing rebated cartridges. The description of the package containing rebated cartridges.

C. Addressing Both Types Of Concerns: Lessons From The Case Law On Intellectual Property Misuse

In this paragraph, a clear distinction will be made between the doctrines of patent and copyright misuse. After explaining how they differ from antitrust violations, a suggestion will be advanced for a more inclusive approach, which also looks appropriate for dealing with the misuse of DRM systems.

The basic starting point is that copyright law, and this is even truer for patent law, is based in United States on a utilitarian rationale. As indicated above, what intellectual property laws strive for is the establishment of an appropriate incentive to spur investment in innovation. The proper measure of such incentive is designated by statute, which sets forth rules providing authors with exclusive rights surrounded by certain limitations. Mainly, these limitations refer to subject matter, duration of the grant, and requirements to be fulfilled in order to acquire the right.

Such constraints imposed on right holders are, however, just an approximation for what would be the optimal incentive for the particular situation. Due to the fact that high transaction costs make unfeasible a grant of rights to creators on an individual basis, the system attempts to strike the balance the best possible way by designing a framework, which ensures respect of certain requisites for the enforcement of IP rights. In order to allow the particular situation to be taken into account for the purpose of defining more narrowly rights and obligations of right holders, the system includes also some subjective and equitable constraints. Patent misuse and copyright misuse doctrines, and the fair use defense in both copyright and trademark law, are an example of such constraints. These doctrines are simply an attempt to fine-tune the balance of rights granted to a particular creator. ¹⁶⁵

Brett Fischmann and Dan Moylan, in an article written at the beginning of the century, provide a careful analysis of the misuse doctrine 166 and its rationales, individuating 3 substantive functions: 1) corrective functions, which fill the

¹⁶⁰ See 35 U.S.C. 271(c)

¹⁶¹ See 35 U.S.C. 271(d)

¹⁶² See, e.g., 17 U.S.C. § 117(a) (right of making additional copies or adaptation as essential step in using software); *id*, at § 117(c) (right of making copies or adaptation to maintain or repair a hardware). See generally 17 U.S.C. § 107.

¹⁶³ Note that the decision to reject the claim was far from uncontroversial. On the contrary, the District court found infringement of DMCA, and the decision was rebutted on appeal.

¹⁶⁴ See Arizona Cartridge Remanufacturers Ass'n, Inc. v. Lexmark Int'l, Inc., 421 F.3d 981 (9th Cir. 2005).

¹⁶⁵ See James A.D. White, Misuse or fair use: that is the software copyright question, 12 BERKELEY TECH. L.J. 251, 255 (1997).

¹⁶⁶ See Brett Fischmann and Dan Moylan, The Evolving Common Law Doctrine of Copyright Misuse: A Unified Theory and its Application to Software, 15 BERKELEY TECH. L.J. 865 (2000).

gaps left in statutory law; 2) coordinating functions, which reconcile the different and interdependent bodies of antitrust, patent and copyright law; and 3) safeguarding functions, which preserve the public interest in accordance with the policy underlying the specific body of intellectual property law at issue.¹⁶⁷

As it is of foremost importance to understand the fundamental principles on which this doctrine rests, a brief overview of the case law will follow. This may be repeating for those who have already read the above-mentioned article, who may well skip to the following paragraph.

The intellectual property misuse doctrine arose for the first time in 1917, when in *Motion Picture Patents v Universal Film Mfg Co* the Supreme Court came across a patentee who had licensed its projectors upon the condition that films be purchased from the patentee. ¹⁶⁸ The practice at issue was found to clearly violate both the policies underlying copyright and antitrust law, so from the holding it was not clear which of these two policies prevailed as argument for denying relief to the patentee. A few decades later, however, the court addressed in *Morton Salt Co v S. Supiger* the relationship between patent misuse doctrine and antitrust law, stating that it was not necessary to find a violation of the latter in order to raise a valid defense to patent infringement. ¹⁶⁹ All a defendant needed to show, according to the court, was that the plaintiff was trying to enforce the patent beyond its term. Such statement, thus, allowed for the first time a court to speak about patent misuse as a valid defense to patent infringement.

The doctrine then developed through its applications within the patent context, where two most paradigmatic cases were non-compete clauses (which prevented licensee from producing or selling competing goods) and the tying of a patented good or service with a patented product or process. In 1988, Congress intervened with the Patent Reform Act) to refine the doctrine by declaring patent tying arrangements no longer a *per se* misuse. ¹⁷⁰

While in trademark law the scope and application of the misuse doctrine differs across circuits, ¹⁷¹ in the realm of copyright a fairly uniform theory has developed since the 1948 case of *United States v. Paramount Pictures Inc.*, which involved block-booking of movies. ¹⁷² Nonetheless, its development was slower than in the patent area, and it remained with no application by appellate courts until 1990, when the 4th Circuit in *Lasercomb America Inc. v. Reynolds* condemned a contractual clause prohibiting its customers from developing a competing product for 99 years. ¹⁷³ In that circumstance, where it was clear that the plaintiff was trying to enforce copyright beyond its terms, the court reiterated the assertion made in *Morton Salt Co. v. G.S. Suppiger Co.* that in order to validly raise this defense, there is no need to allege an antitrust violation, and consequently there is no need to demonstrate the existence of market power.

This view (confirmed later by the 9th Circuit in *Practice Management Information Corp. v. American Medical Ass'n* 174 and in *Alcatel USA Inc. v. DGI Technologies Inc.* 175) is strongly criticized by a number of scholars 176 who

¹⁶⁷ See id, at 877 (stating that the public interests underlying copyright law are" 1) promoting creative transfers; (2) preserving the unlimited reuse of ideas and unprotected expression; and (3) stimulating downstream innovation and competition insoftware development").

¹⁶⁸ See Motion Picture Patents Co. v Universal Film Mfg Co., 243 U.S. 502 (1917).

¹⁶⁹ See generally Morton Salt Co. v G.S. Suppiger Co., 314 U.S. 488 (1942).

¹⁷⁰ See 35 U.S.C. § 271(d)(5), (stating that there is no liability for a patentee who "conditions[] the license of any rights to the patent . . . on the acquisition of a license to rights in another patent or purchase of a separate product, unless, in view of the circumstances, the patent owner has market power in the relevant market for the patent or patented product on which the license or sale is conditioned").

Although the right to enforce a trademark is limited by a collection of principles largely based on equity. *See*Raymond Nimmer & Murali Santham, *The Concept of Misuse in Copyright and Trademark Law: Searching for a Concept of Restraint*, 524 PLI/Pat 397, 410 (June 1998).

^{172 334} U.S. 131 (1948).

¹⁷³ 911 F.2d 970 (4th Cir. 1990).

¹⁷⁴ 121 F. 3d 516 (9th Cir. 1997).

¹⁷⁵ 166 F. 3d 772 (5th Cir. 1999).

¹⁷⁶ See Takenaka, Extending the New Patent Misuse Limitation to Copyright: Lasercomb America Inc v Reynolds, 5 SOFTWARE L.J. 739, 746-748 (1992), Tony Paredes, Copyright Misuse and Tying: Will Courts stop Misusing Misuse? 9 HIGH TECH. L.J. 271 (1994); Roger Arar, Note, Redefining Copyright Misuse, 81 COLUM. LAW REV.

instead advocate for an antitrust approach to misuse.¹⁷⁷ Their argument is essentially that in this particular area of law, a perceived deficiency from the IP protection viewpoint may be outweighed by the demonstrable procompetitive effects in the marketplace. As it stands, the doctrine does not fail to see that the intermediate objectives of IP and copyright are different and thus lead to a different treatment of the same practices. 178 Nonetheless, the doctrine prefers to rely on antitrust principles because in this way, clauses that would appear opposed with the intellectual property principles could still be saved in the name of the common goal shared by both antitrust and IP of promoting innovation through an efficient utilization of the IP rights. The underlying reason is that antitrust analysis, and particularly the so called "rule of reason" test, allows a more judicious balancing of the effects and thus is the best context to fine-tune optimal protection for particular situations. On the other hand, the antitrust analysis would not take into account the public policy behind the issuance of intellectual property rights, and would focus exclusively on the effect of the practice on competition. ¹⁷⁹ For this reason, some courts and commentators have focused on a "public policy" approach and are skeptical of anything that could tamper with the carefully prescribed balance achieved by the statutory scheme of IP law. One of these courts was the Supreme Court in Paramount Pictures, which recognized that the public policy behind granting intellectual property is dependent upon a successful operation of the market mechanism because it allows consumers to differentiate among innovations based on quality, thus offering an additional argument to the supporters of the antitrust approach to IP misuse. 180

Overall, the most supported view seems that of the antitrust-based approach, essentially because it would be better suited to further the objectives of both laws. Recently, some scholars have raised the objection that the commonality of long-run interests is not maintained in network industries, because of the tendency for inefficient technologies to establish and resist replacement by superior alternatives. 181 Most of the critics however, would still argue that an antitrust-based approach presents some other advantages even in network industries. For example, under a pure antitrust analysis it would be possible to find liability where the defendant is leveraging its dominant position even with no licensing practice in place. On the contrary, for a traditional or "public policy" copyright misuse argument, a licensing practice would be an essential element of the claim. In addition, an antitrust suit could obtain a far more invasive remedy, such as compulsory licensing, should this be considered beneficial to the market.182

D. A Practical Solution: Towards A Three-Pronged Test for IP Misuse

Brett Fischmann and Dan Movlan, after a thorough review of the relevant case-law on IP misuse provided an important insight on the relative importance of this kind of debate. ¹⁸³, The key question is not whether in general the analysis should hinge on the policy approach of antitrust or IP, but rather what kind of restriction is at issue, and

¹⁷⁸ Ramsey Hanna, Note, Misusing Antitrust: The Search for the Functional Copyright Misuse Standards, 46 STAN Law Rev. 401, 419-21 (1994)

^{1291, 1311 (1981);} Byron A Blicki, Standard Antitrust Analysis and the Doctrine of Patent Misuse: a Unification under the Rule of Reason, 46 U. PITT L. REV. 209 (1984); Dianne Brinson, Patent Misuse: Time for a Change, 16 RUTGERS COMPUTER & TECH. L.J. 357 (1990); Scott A. Miskimon, Divorcing Public Policy from Economic Reality, 69 N. C. L. REV. 1672 (1991); and Philip Abromats, Comment, Copyright Misuse and Anticompetitive Software Licensing Restrictions: Lasercomb America Inc v. Reynolds, 52 U. PITT. L. REV. 629 (1991).

Followed by the 7th and 8th Circuit. See Saturday Evening Post Co. v. Rumbleseat Press Inc., 816 F.2d 1191, 1200 (7th Cir 1987); United Telephone Co. of Missouri v. Johnson Publishing Co., 855 F.2d 604 (8th Cir. 1988).

Even accepting that the focus is on both static and dynamic competition, it seems difficult that the restriction in the former eventually allowed by the Courts to promote the latter would match the value attributed by IP owners to the ex ante grant of IP rights. See Brett Fischmann and Dan Moylan, supra note 156 at 20. Investing in innovation is an inherently risky activity, which therefore needs some safe valves to rely on. Antitrust law simply cannot provide them because of its procedural shortcomes and because of its tendency to favour follow-up innovation.

180 See Paramount Pictures, at 157-158.

¹⁸¹ Mark A. Lemley, Antitrust Law and the Internet Standardization Problem, 28 CONN L. REV. 1041 (1996), Kenneth W Dam, Some Economic Considerations in the Intellectual Property Protection of Software, 24 J. LEG. STUD. 321 (1995), Dennis Karjala, Copyright protection of operating software, Copyright Misuse and Antitrust, 9 CORNELL J. L. & PUB. POL'Y 161 (1999)

¹⁸² Karjala, *id*. at 190

¹⁸³ Fischmann, id.

which specific policy it offends. Accordingly, their piece of advice is to use a two-step test: the first question should be whether the restriction rises a per se violation of either antitrust or copyright law, while the second inquiry should assess whether the restriction presents antitrust concerns to be analyzed under the rule of reason. ¹⁸⁴ Subsequently, however, the two authors recommend not utilizing the copyright balancing test, as this would lead to extreme uncertainty and would overlap with the role of fair use. The rationale behind such a two-step test is extremely sound, but presents in the author's view a fundamental flaw: precisely, the omission of a copyright "rule of reason" test. It is true, as Brett Fischmann and Dan Moylan point out, that a possible overlap of this third prong of the test with the fair use defense exists. However, that is of little consequence given that both defenses could be raised together in the same proceeding. The only implication will be that the court will analyze the misuse defense first, for if its analysis will converge in the fair use analysis, the second defense will not be even addressed.

Moreover, some adjustments to the rule seem necessary in order to allow coordination between antitrust and IP concerns. What is critical, indeed, is that the dispute be resolved within the branch of law that would be more affected by the decision. This is important in order to maintain certainty in the laws and uniformity in their application. As a result, an optimal rule has to delineate some criteria that allow determining which branch of law is primarily involved. For this purpose, the recommendation of this article is to incorporate Professor Lipton's criteria into the third part of the test just described. ¹⁸⁵ The criteria would assist in establishing what the motivation behind the strategic use of IP is. Thus, if the IP use was primarily for legitimate commercial purposes, the parameter of evaluation would be IP rules. But where the circumstances show that the choice is primarily determined by the objective of leveraging market power into a secondary market, then the analysis would switch to an antitrust one.

A hypothetical application of the test can be done with respect to the Lexmark case. Under this approach, the Court should have first looked at whether the tie-in accomplished by the printing manufacturer amounted to a per se violation of antitrust law. According to the governing Supreme Court precedent on the issue, Jefferson Parish, 186 the defendant Static Control had to show that Lexmark enjoyed substantial market power in the printing business. That would have been sufficient to argue that because the practice of the manufacturer was illegal, then no IP liability would attach. 187 However, it is submitted here that Static control would most likely fail to show such market power, because, as noted above, printer manufacturing looks like a fairly competitive business. There are at least 6 players and the fact that each of them is behaving aggressively hints at the fact that there is also a strong competition for the market. 188

As a result, the analysis would shift into copyright law. The basic question there would focus around whether the restrictions put in place by Lexmark offended any public policy clearly protected by copyright. Such policies clearly refer to the exclusive rights granted by section 106, but also encompass doctrines that are designed to provide well established and defined public rights, such as the useful article doctrine, the merger/scenes a fair doctrine, and the idea/expression dichotomy. As a matter of fact, it can be argued that in the three cases listed above the public has been granted the right to have enforced those rules which, respectively (1) exclude the so called "useful articles" from the copyright subject matter, (2) circumscribe the scope of copyright protection to elements whose features are not simply responses to functional needs of the marketplace, and (3) are designed to prevent the danger that copyright protection cover ideas, rather than expression of those ideas.

¹⁸⁶ In that case, the Supreme Court declined to apply the *per se* rule to tying and established the need for plaintiffs to prove the existence of market power in the tying product. See Jefferson Parish Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2 (1984).

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¹⁸⁴ Id., at 32. The article does not address the issue of defining those egregious violation of patent law that deserve the per se illegality for a simple reason; the need for crafting a per se rule for patent law has been drastically reduced by the Patent Reform Act of 1988, which requires a showing of market power in order to raise a valid patent misuse defense in case of tying with another product. *See supra* note 160. ¹⁸⁵ *See supra*, Section. 4.1

This would be also in line with the common law doctrine of "unclean hands" that is generally applied in U.S. litigation. The Supreme Court has held in Fieher-Stewart Co. v. Joseph E. Seagram & Sons that such doctrine does not apply to private actions for treble damages. 340 U.S. 211 (1951) However, most Circuits have held that it does apply to injunctive reliefs. See, e.g., John J. & Warren H. Graham v. Triangle Publ'ns, 23 F. Supp. 825, 832 n.24 (E. DPO 1964), aff'd on other grounds 344 F2d 775 (3d Circ. 1965); Hotel Philips Inc. v. Journeymen Barbers Union 175 F. Supp 664, 669 (W.D. Mo. 1961) (dictum), aff'd per curiam 301 F.2d 443 (8th Cir. 1962). ¹⁸⁸ The major players are Lexmark, Hewlett Packard, Kodak, Dell, Epson, and Canon.

In the specific case of Lexmark, it could be argued, as the Circuit Court did, that Lexmark's attempt to protect the Printer Engine Program (PEP) had the effect of circumventing the merger/scenes a fair doctrine, given that the code owned an intrinsic functionality that would impede its protection.

Putting aside the debate on the optimal protection for computer programs, what is important to stress here is that the Court, resorting to the doctrine of functionality to exclude the protectability of Lexmark's PEP, suggested that the main reason why the appellee's arguments were rejected was that Lexmark had violated a public policy of copyright. This means that the Court would have achieved the same result by undertaking the test suggested here, as it would have stopped at the second prong by declaring the practice *per se* illegal.

Where the test gets most tricky is the next step of the analysis: the switch from a *per se* standard to a rule of reason. Although its application may not be so frequently needed, it is important to show how the hypothetical use of this test would enable courts both to maintain the balance stuck by copyright law and to prevent that the copyright holder perceive an unfair advantage from a competitive perspective. As argued above, the Court would have to choose between relying on the assessment of anti-competitive and pro-competitive effects that is proper of antitrust law or undertaking the balancing test that characterizes copyright law (typically in the area of fair use). Such a decision would greatly influence the outcome of the case, as in the former scenario the defendant (in this case Static Control) would have to show that the restriction imposed is aimed at thwarting competition (which could then be rebutted by preponderance of the evidence), whereas in the latter it would only need to present data concerning its use of the copyrighted work, to infer that it falls within the exceptions and limitations to copyright.

In other words, if the court leans towards an antitrust standard, the defendant accused of copyright, DMCA or other IP violations has to make a much harder case, since he will have to speculate on the possible reasons behind the competitor's business choice, with the substantial disadvantage that he lacks perfect information over what the competitor's reasons may be. This would be even more difficult when the defendant is merely a consumer, who is probably not acquainted with the data which are generally known by those working in the same industry. By contrast, if the court embraces a copyright-based analysis, the defendant would know exactly what elements he should look for and what arguments he would advance, for he would be called to bring evidence of facts to which he can speak easily and without intermediary information. This does not mean that the court will necessarily have to give priority to the copyright rule of reason test: the antitrust based test also has its qualities, namely that it allows enterprises to enjoy freedom of contract and exercise their market power unless this is proven to have the sole effect of preventing competition.

How is a court, then, to choose between the two approaches? What is submitted here is that the parameter should be identified in the criteria suggested by Prof. Lipton, originally aimed at identifying strategic uses of IP. Those criteria, based on the commercial significance of the secondary product, place the burden on the IP holder to show by preponderance of evidence that the objective of the restrictions is a purely commercial one, and more specifically one that IP law is aimed to protect. Arguably, it is fair that the burden be placed as such because this compensates for the information gap existing in the opposite scenario. Further, it would also conform to the principle "onus probandi incumbit ei qui dicit", which is a generally accepted principle of international law that puts the burden of proof on the plaintiff.¹⁸⁹

Coming back to the concrete example of *Lexmark*, the Court hypothetically endorsing the test proposed here would have looked at whether the reason why the PEP was incorporated into the printer was based on anything such as the enhanced appeal to prospective purchasers, the proportion of the amount of commercial cost for the PEP as a proportion of the overall cost of designing and manufacturing the printer, the limited amount of time and efforts taken to develop the PEP or the fact that the printer would not be commercially viable without the incorporation of the PEP.

Arguably, Lexmark would have failed to rebut the presumption of strategic use set up by such an inquiry, as it seems difficult for it to prove that the choice was motivated by any of these reasons. And even if it were to succeed

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¹⁸⁹ See Third Report of the United Nations, International Law Commission, on Diplomatic Protection: http://untreaty.un.org/ilc/documentation/english/a cn4 523.pdf

in proving one of the elements, it is highly unlikely that this would by itself offset all the others to determine the legality of the business choice.

Assuming that no *per se* violations were found in the first two prongs, pursuant to the test the Court would then settle in the antitrust context and evaluate pro-competitive and anticompetitive effects under the rule of reason. Lexmark would probably maintain that the restriction is ancillary and necessary to accomplish "third degree" price discrimination (i.e. based on the frequency of use). If the ultimate analysis was focused on this issue, Lexmark would more likely than not win the case, as any possible illegality of price discrimination is limited to the case of dominant companies, which is apparently not the case in the printer manufacturing industry.

VI. CONCLUSION

This article has addressed one of the problems created by the interaction of law and technology. The focus has been on the strategic use of IP and more particularly the strategic use of DRM systems and the legislation (i.e., the DMCA) which, passed with the objective of facilitating the development of the digital platform for copyrighted works, outlawed their circumvention (*sic*).

Seeking a solution that is consistent with both the history of the statute and the relevant case-law, the paper made an *excursus* (Sections I and II) over some of the ways DRM systems have been used by copyright holders, and those found to be abusive under courts' reading of the DMCA. This has led to the fundamental question of whether the doctrine of fair use can be preserved in the digital word. As it turns out, despite an initially over-protective reaction to the enactment of the DMCA, courts have progressively come to reject strategic uses of such legislation. It has been shown how the Federal Circuit, in particular, has forged the so called "fair access" doctrine creating a nexus between DMCA and copyright violations, so as to make it possible to circumvent DRM for non-infringing purposes without risking liability for DMCA claims.

In the second part of the paper (Section III and IV), some solutions have been proposed to prevent the misuse of DRM technologies: (1) crafting a judicial doctrine allowing defendants to raise a misuse defense, specifically for abuse of anti-circumvention provisions; (2) establishing a presumption relieving consumers from the DMCA liability in some appropriate circumstances (see Professor Lipton's criteria, Section III.A); (3) leaving this matter to fair use, but supporting consumers in the phase preceding the transactions by requiring notice of the technical details of DRMs, including interoperability information; (4) implementing symmetric right expression language, capable of satisfying both the needs of users and content providers.

In Section V, it has been investigated whether a solution could be conceived with regard to the more general problem of intellectual property misuse. By giving brief account of the relevant case-law to understand the basic principles of misuse, two different approaches to the problem have been identified: an antitrust-based approach and another kind of approach, referred to herein as "public policy" approach to misuse. After an evaluation of advantages and disadvantages of using either of those, the paper concludes by expounding a three-pronged test, which is essentially a mixture of the two approaches. The test so crafted consists of three steps. First, the court looks at possible *per se* violations of either antitrust or intellectual property law. Second, it makes a determination on whether there has been a strategic use of IP, based on a number of factors which are listed above Finally, it undertakes a balancing exercise in the domain of IP or antitrust, depending on the outcome of the second part of such test.

This way, the resulting test for those imposing DRM or licensing restrictions as a leverage would be more stringent than the canonical test used to determine the legality of refusal to deal in antitrust cases where to infer liability it must be shown that the business choice is dictated by no other possible reason but to harm competition. The inquiry would be much deeper, taking into account a variety of factors including, for example, consumer expectations on the separation of the two products and time and money spent to develop the tied products.

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¹⁹⁰ See Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP 540 U.S. 398 (2004); Aspen Skiing Co. v. Aspen Highlands Skiing Corp., 472 U.S. 585 (1985).

Note that such test would represent a deviation from what has been held by the Federal Circuit in 2000 with regard to the validity of alleging the right to freely exploit one's own IP as a business justification.¹⁹¹ In that ruling, the Court clarified that such a justification is always accepted unless there is knowing and willful fraud on the PTO, the existence illegal tying or the case is frivolous.

A more severe standard to evaluate the legality of refusals to deal in IP cases, at least with regard to copyright, seems appropriate in light of the major ease of engaging in conduct that prevents interoperability which digital technologies have brought about. In fact, the codification of information created a whole new dimension for copyright owners to exploit their creations. As it has been stressed above, the main problem with it is that such enhanced protection is not entirely consistent with the basic principles of copyright law. On the contrary, the provisions regulating enforcement in this new environment are drafted in such a way that they confer entitlements that can be asserted independently from the existence of a justifying legal right.

Such trend of expansion in the enforcement of proprietary interests requires courts called to interpret the DMCA to deter rights owners from potential abuses. A positive sign came from the development of the "fair access" doctrine by the Court of Appeal for the Federal Circuit. However both the operation of such doctrine and its limits are far from settled. Absent the delineation of some guiding factors, the risk exists that courts might approve DRM restrictions, which *de facto* enable tie-in arrangements that are illegal either from an antitrust or from a copyright perspective. And while the proposed three-pronged test is just one possible way to accomplish this objective, failing to find a solution to the common practice of strategic abuse of the DMCA rules would mean approving the shift of copyright toward a "pay-per use" model.

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¹⁹¹ In re Independent Service Organizations Antitrust Litigation ("Xerox"), 203 F.3d 1322 (Fed. Cir. 2000).