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Reassessing Damage Remedy to Online Copyright Infringement

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Reassessing Damage Remedy to Online Copyright Infringement

Yang Sun

Submitted to the faculty of Indiana University Maurer School of Law

in partial fulfillment of the requirements

for the degree

Master of Laws

In the Maurer School of Law

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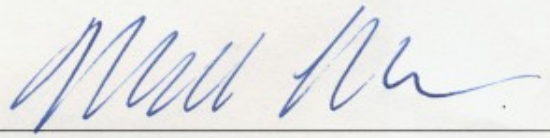
Master's Thesis Committee



Professor Marshall A. Leaffer

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Table of Contents

Chapter I Introduction

A. Overview

To effectively enforce a given right, the right holder needs to focus on two factors: the first factor concerns ex ante precaution, which means making prohibitive rules that aim at any kind of violations. The second one, more importantly, concerns efficient ex post remedies which compensate the losses of right holders as a result of infringements. In the context of copyright, such framework remains the same. Copyright damages, *inter alia*, function as a highly important role in copyright law for enforcement. For one, copyright damages can give prevailing party actual benefits---monetary compensation. Such benefits can preserve sufficient incentives for right holders to continue creation of new works. For another, significant amount of damages no doubt deprive infringers of unjust enrichment and deter future violation.[1] Under the circumstances, copyright damages primarily design for the protection of copyright and maintaining the progress of culture. However, unexpected situation appears when copyright steps into digital age. The scenario below will illustrate the case.

Imagine a popular singer recently publishes several CDs that contain dozens of new songs. He of course wishes to recoup the profits from these songs to the utmost after marketing. Everything goes well until one day he notices that one peer-to-peer platform--"Free Listening"--uploads his songs without authorization and allows online users to download for free. Such action irritates the singer and he accordingly

[1] *See* H.R. No. 94-1476, ¶ 3 "Damages are awarded to compensate the copyright owner for losses from the infringement and profits are awarded to prevent the infringer from unfairly benefiting from a wrongful act."

decides to file lawsuit. The purpose of the filing is self-evident: imposing penalty on infringers who violate the exclusive rights and obtaining compensation. Obviously, the most proper remedy under current copyright law is the damages.

Nevertheless, facing online copyright infringement needs to consider several issues if one decide to rely on such remedy to enforce exclusive rights: Who should be the major targets for imposing damages? The P2P platform may be the target, but it does not directly earn profits through infringement; Individual end-users, on the other hand, primarily seek for non-commercial enjoyment even if they directly infringe copyrighted songs. Both groups do not obtain commercial profits by infringement. So, these situations add difficulty for proving the illegal profits. Then what about the actual damages? One can claim the lost sales of CD because of the P2P file-sharing platform, but speculations still exist: does the dissemination really account for all the lost sales? What if other market elements affect the sales?

Even if one can simply choose statutory damages regardless any proof, the final awarding may still be problematic. First of all, each song can be counted as single work for statutory damages when separately uploaded. So, the final awarding would be astronomical even if courts grant the lower end--$750 per infringed work.[2] Compared with retail price of each CD, such awarding is unjust and departs from compensating purpose. The situation becomes even worse when targeting on individual end-users. *Capitol Records, Inc.* v. *Thomas-Rasset* is the very case in point. A single, household mother had to pay $220,000 --$9,250 per infringed song--to the

[2] 17 U.S.C. § 504 (b).

copyright holder as statutory damages.[3]

To cure these problems, a quick answer is awarding copyright damages under the correct understanding of property rules, and limiting excessive statutory damages. This answer can better achieve purpose of sufficient compensation and effective deterrence. In general, the aforementioned problematic situations are largely due to the impact by digital technologies as well as online environment.

Tracing back of copyright history, new emerging technologies always challenge the perceptions of copyright and arises new problems. Digital technologies bring about speedy and widespread distribution, easy and costless copying, high volume of compression and global accessibility, etc. These advanced features by digital technologies gradually change both the perceptions of copyright and the balance between disparate groups. Each group wants to maximize their interests by exploiting these technologies.

Historically, copyright holders never remain silence when new technologies facilitate infringement and intimidate their business models as well as profit channels. When it comes to digital technologies, right holders react the same. Over the past years, the Recording Industry of Association America (RIAA) struggled to combat against online copyright piracy through digital technologies.[4] The RIAA found the advanced technologies greatly threaten their high-profits industry. Hence, the RIAA

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[3] 579 F.Supp.2d 1210, at 1227 (D. Minn.2008).

[4] Will Moseley, *A New (Old) Solution For Online Copyright Enforcement After* Thomas *and* Tenenbaum, 25 BERKELEY TECH L.J. 311 2010 (stating that RIAA file suits separately against individual end-users who illegal download and distribute musical files and OSP that facilitate unauthorized music sharing).

filed large amount of lawsuits against individual end-users who downloaded, distributed unauthorized music online as well as Online Service Providers (OSPs). They won in several cases such as *A&M Records, Inc. v. Napster, Inc.*[5] and *MGM Studios Inc. v. Grokster, Ltd.*,[6], forced them to shut down or go bankruptcy. The war of litigation to individual end-users, however, proved to be ineffective, costly and even harmful to RIAA's commercial image. At the end of 2008, RIAA announced to cease the seven-year long litigation against individual end-users as a result of the ineffectiveness of statutory damages to online copyright infringement.[7]

Current copyright damages contain two segments. Damages upon actual damages or/and illegal profits; statutory damages. To award damages upon actual damages, the plaintiff needs to prove decreasing sales caused by infringements. Such proof, however, usually tends to be unreliable because of the distinctive features on digital works. As to illegal profits, the problem becomes more complicated because OSPs and P2P platforms rarely gain profits by direct infringements. On the other hand, statutory damages sometimes cause unjust, inconsistent and excessive awarding.[8] Such results do not squarely fits into the requirement of optimal compensation and effective deterrence; ultimately cause chilling effect on technology innovation and culture progress. In addition to practical problems, the rationality of copyright damages is questionable. After all, current framework is designed for copyright

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[5] 239 F.3d 1004 (9th Cir. 2001).

[6] 545 U.S. 913 (2005).

[7] *See* Moseley, *supra* note 4, at 311-312.

[8] Anna Cronk, *The punishment Doesn't fit the Crime—Why and How Congress Should Revise the Statutory Copyright Damages Provision for Noncommercial Infringements on Peer-to-Peer File-Sharing Networks*, 39 SW. L. REV. 181 (2009-2010).

infringements occurred in pre-digital age. Therefore, copyright damages indeed need further consideration and reassessment.

Traditionally, copyright share the features of property. Specifically, copyright holders enjoy highly exclusive rights to exclude others from exploiting their works. In theory, injunction is the representative of property rules. Damages, on the other hand, operate under liability rules because damages primarily design for sufficient compensation. Copyright damages, to the contrary, not only compensate the right holders, but impose additional punishment so as to deprive unjust enrichment. Under the circumstances, the infringers have to resume free-market transaction because of their unprofitable condition. This is similar to the concept of property rules: one who wants to remove an entitlement cannot simply pay the price after the removal.[9] He should negotiate with the owner and reach agreement for the transaction.[10] Therefore, the effect of copyright damages comes closely to property rules.

Stepping into digital age, the conclusion remains the same. Each copyright holder regards their online works as personal property and seeks to effectively enforce their copyright online. They frequently depend on damages for enforcement when infringements occur, yet the high frequency eventually lead to unreasonable results. The reason lies in the misunderstanding of property rules and the application of such misunderstanding to copyright damages. Never a property owner can internalize all positive externalities. So, copyright holders should not rely on damages to internalize

[9] Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1092 (1971-1972).
[10] *Id.*

all positive externalities from their online works so long as they are sufficiently compensated. Theoretically, copyright law is enacted to "promote the progress of science and useful arts".[11] Hence, permitting some free riding online will better achieve the purpose because most copyright creations rely on preexisting works.

Whether copyright damages are efficient lies in how the final awarding affects disparate groups. On one hand, copyright holders need sufficient compensation to preserve incentive for further creation. Lacks of such incentive, no one are willing to continue creation because free riding frustrate their motivation. Under the circumstances, the society will have a gradual narrower public domain and less available resources. On the other hand, copyright damages should deter infringement by make infringers unprofitable. As a result, infringers will choose to obtain license from copyright holders rather than commit infringement. Therefore, copyright damages should both achieve two requirements: sufficient compensation and effective deterrence.

B. Methodology and Research Scope

The method of this thesis is generally literature research. Judicial cases, statutes and legal articles will be used. In addition to the above materials, the thesis also covers some results of surveys with respect to RIAA lawsuits against individual end-users. The reaction by individual end-users will illustrate this problematic strategy. This thesis generally describes online technologies and analyzes the framework of infringement in the context of technology background. The core section of thesis is

[11] U.S. CONST. art.I, §8, cl.8.

the analysis of copyright damages in online environment with relevant problems and the accordingly suggestions. Moreover, since copyright damages strongly correlates to property rules, the thesis also looks into the relation between copyright damages and property rules, trying to clarify a correct guidance for effective damages to online infringement.

C. Framework of Thesis

Chapter II of this thesis contains two sections. The first section focuses on three major features of advanced digital technologies—easy reproduction, speedy distribution and high volume compression. The description denotes how these technologies change the traditional perceptions of copyright. The second section discusses the framework of online copyright infringement in the context of digital technologies. To facilitate the analysis, this section divides infringements into two categories: direct infringement and indirect infringement. Each category focuses on two major groups in online environment: online service providers (OSPs) and individual end-users. These groups are frequently involved in online activities and most likely to be the targets of copyright damages. An analysis from such perspective can facilitate discussion in following chapters.

Chapter III first introduces the basic framework of copyright damages: 1) actual damages or/and illegal profits; 2) statutory damages. Each category concentrates on its respectively operation with accompanied cases for illustration. The second portion analyzes their application in online environment. The analysis based on two categories: damages upon actual damages or/and illegal profits; statutory damages.

For the first category, the analysis focuses more on theoretical aspects; the second category covers recent cases and several surveys for illustration.

Chapter IV temporarily steps back from discussion in the context of online background and traces back the origin of damages: property rules & liability rules. Since property rules are traditionally dominant in copyright law, this chapter emphasizes more on the interaction between property rules and copyright damages. The chapter first describes basic concept of property rules and liability rules, then compares their distinctions. The chapter also describes the dominance of property rules and exception of liability rules in copyright law. Finally, the chapter will discuss whether these perceptions can be squarely fits into online environment. The purpose is to figure out how copyright damages should operate under a correct, updating guidance as a response to current online infringements. This general guidance serves as premise to the analysis in next chapter.

Chapter V first introduces the analysis of effective damages model to online copyright infringement. The model is based on the analysis from last chapter and copyright policies. A general damages model can become a theoretical guideline to problems from current copyright damages. The second part looks into more specific suggestions on respective problems. The suggestions separately focus on the two categories of copyright damages.

Chapter VI is the conclusion. Based on the above analysis, it concludes that current copyright damage are enacted in pre-digital age and thus outmoded for online environment. Moreover, the misunderstanding of property rules worsens the

application of copyright damages to online infringement. Apparently, the application needs to be modified so as to better adapt to the challenges imposed by digital technologies as well as to achieve copyright policies.

Chapter II Evolving Landscape and Emerging Challenge in the New Digital Era

Throughout history, the interesting interplay between copyright law and technologies is particularly similar to a real race: the technologies always keep on emerging and evolving, leading the head of struggling copyright law. The copyright law, to the contrary, tries to chase technologies even though lag behind again and again. Like Justice Stevens stated in the case *Sony Corp. of Am. v. Universal City Studios, Inc.*, "…from its beginning, the law of copyright has developed in response to significant changes in technology…"[12], which denotes the passive position of copyright law in the competition.

Copyright originally correlates with reproducing right. However, the evolving reproducing technologies from printing machine to photography until online "one-clip" e-copy radically reshape the perceptions of copyright holders and users as well as business models. Since new reproducing technologies broaden the media of copyrighted works, right holders are keen on expanding new markets and seeking for broader protection. Such actions result in the modification of copyright law. Similar situation also occurs in other technologies. The emergence of digital technologies challenges the foundation of copyright law again. From fixation requirement to infringement liability, copyright law is undergone substantial debate by commentators, lawmakers and judges before drawing a clear conclusion. As a result, new rules come into play for better copyright enforcement. Every time when a free rider intends to

[12] *See* generally 464 U.S. 417, 430-31 (1984) (stating the interrelation between copyright and new technology).

circumvent penalty by updating technologies, the rules always operate as responses.

Among varieties of new rules, the most notable concerns online infringement liability. Generally, the traditional framework does not fit squarely into online infringement even though the analysis originated from the traditional framework. For example, a line of cases from *Napster, Amister*[13] *and Grokster* gradually changed the standard of secondary liability. Thanks to the timely modification, copyright damages as well as other remedies are able to function in digital era, yet awkwardly.

This chapter will divide into three sections. The first section introduces three major features of new digital technology that change the traditional landscape of copyright system. These features are distinguished from their counterparts in the analog age. Hence, the comparison between the old and new technology will be beneficial to subsequent analysis--the necessity of modifying the existing damage rule. Meanwhile, as the premise of copyright damages, it is essential to clarify the criteria of liability to online infringement. Therefore, the second section discusses how the technologies force copyright law to react accordingly.

A. Breakthrough to Copyright System: Advanced Digital Technology

The origin of modern copyright law was the enactment of Statute of Anne, which was the earliest among common law countries.[14] However, the enactment of such statute was largely due to technology breakthrough. In mid-fifteenth century, the moveable-type Gutenberg machine remarked a milestone in printing technology. It

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[13] *In re Amister*, 334 F.3d 643 (7th Cir. 2003).

[14] Peter K. Yu, *Currents and Crosscurrents in the International intellectual Property System*, 38 LOY. L .A. REV. 323, 330-54 (2004).

greatly reduced the cost of printing process and made reproduction more effectively.[15] Two trends were subsequently triggered by such invention: for one, sharp growth of printing plants came into being and more literary works were created to meet the growing demand. For another, printing industries gradually cared for their profits, which eventually lead to the grant of copyright—limited monopoly on printing. Apparently, technology growth gave birth to copyright and pushed the evolution. As time went on, a variety of inventions came into being: photocopiers, film, radio, cable television, etc. Their contribution concentrated on reproduction and distribution technologies. In general, the cost of communication is greatly reduced, information flows increased, diversity of works are possible and high-quality copies can be expected.

Digital technologies make the progress more reliable and effective. Generally, digital technologies can be defined as digitization. The process transforms analog data into digital formation which can be stored or transmitted by digital device like computer.[16] Almost every kind of works can be digitized, such as an image, sound or text.[17] Due to digitization, digital technologies offer three major features including ease of reproduction, speedy distribution and high volume of compression. However, digitization gradually becomes a double-edge weapon even though it stimulates the creation of works and facilitates dissemination because copyright holders realize that

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[15]Brendan Sccot, *Copyright in a Frictionless World*, FIRST MONDAY, http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/887/796 (last updated Jul. 6, 2006).

[16] Stephen M. Kramarsky, *Copyright Enforcement in the Internet Age: The Law and Technology of Digital Rights Management*, 11 DEPAUL-LCA J. ART& ENT. L. 1, 4 (2001).

[17] *Id*.

their works can be easily access, copy and distribute than ever.

1. Reproduction

Before digitization comes into play, high-quality copy of work is almost unavailable. Copying one work from the original always leads to imperfect result. For example, a photograph will show grains on the surface if enlarged sufficiently; sound will generate some noise when recorded from a microphone into a tape recorder.[18] Digitization, however, creates perfect copies which can be used for further duplication in high quality. For example, a photograph produced from digital camera can be transmitted and stored in personal computer with equivalent definition and rarely degrade the quality. A photocopy, however, gradually blur its image with increasing times of duplication.

Perfect reproduction lies in the operation of machine-readable language. Machine-readable language consists of merely one and zero, which is distinguished from human-readable language. Since almost every kind of information can be turned into machine-readable language, verbatim duplication actually exists. In this case, users can enjoy works in the same quality by reproduction. Moreover, the copying process can be easily completed from several seconds to minutes on personal computer. This situation no doubt becomes the nightmare to copyright holders. According to the demonstration from the plaintiff in *Napster*, at least 87% of the files on the platform were copyrighted and reproduced without authorization.[19] Similar situation occurred in software industry. Business software publishers lose

[18] *Id.*

[19] *Napster*, 239. F.3d, at 1013.

approximately $7 to$12 billion annually due to piracy. They claimed that each purchased software CD could be reproduced for additional three to seven copies within the circle of family or friends.[20] When copyright holders want to enforce their rights by pursuing these people, they may confront with thousands of individual end-users. Under the circumstances, the measurement of actual damages becomes difficult and questionable because no physical copies exist for calculation. Also, the enforcement costs on individual infringement are usually too high for right holders. Even large copyright entities, such as the RIAA, would find the massive lawsuits against individual end-users ineffective.

2. Distribution

The internet and information communication technology (ITC) burgeon a new platform for copyright system. The internet provides users with full accessibility and widespread connection. Over the past decades, the internet gradually became an "advanced high speed, interactive, broadband, digital communications system" and incorporates most current information networks.[21] Early in 1996, the internet connected more than two million computers and over twenty million users worldwide.[22] Until March 2011, the total population of "e-citizens" is more than two billion.[23] Furthermore, disseminating materials does not cost internet users a lot and

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[20] Jayashri Srikantiah, *the Response of Copyright to the Enforcement Strain of Inexpensive Copying Technology*, 71 N.Y.U.L.REV. 1634, 1635 (1996).

[21] *The Report of the Working Group on Intellectual Property Rights: Intellectual Property and the National Information Infrastructure*, USPTO, http://www.uspto.gov/web/offices/com/doc/ipnii/ (last updated Aug.01, 2007).

[22] *See* Srikantiah, *supra* note 9, at 1636.

[23] *Internet Usage Statistics: World Internet Users and Population Stats*, INTERNET WORLD STATS, http://www.internetworldstats.com/stats.htm (lase updated Apr. 28, 2012).

does not sorely belong to the publishers any more. A survey conducted in 2003 by Pew Internet and American Life Project pointed out that 44% of U.S. internet users had the experience of uploading materials online.[24] Forty percent of them only have annual income of $30,000 or less.[25] Because each user can easily access and process copyrighted works, the quantities of users imposes heavy burden to copyright holders for their enforcement.

On the other hand, the ITC keeps on evolving from the very beginning of its emergence. A high profile example was the bulletin board. A personal computer with valid internet connection plus bulletin board software can create a platform to exchange information. Such easy operation enables most users to upload or download large amounts of digitized works at low cost such as a text file, a sound recording or an image.[26] As a result, copyright holders suffer from substantial losses. One case in point that happened in 1994 when a college student in Minnesota uploaded thousands of copyrighted software onto his bulletin board and allowed other users to download them freely, which claimed for $1.5 billion losses of software sales.[27]

With the development of digital technologies, online users call for more efficient ITC platform to increase their enjoyment. The peer-to-peer (P2P) platform is the very technology that satisfies their requirement. The P2P technology enables users to upload or download materials in great volume and high speed than ever. The

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[24] Amanda Lenhart, *Content Creation Online*, PEW INTERNET & AMERICAN LIFE PROJECT, http://www.pewinternet.org/Press-Releases/2004/Content-Creation-Online.aspx. (last updated Feb. 29, 2004).

[25] *Id.*

[26] *See* Srikantiah, *supra* note 9, at1636.

[27] Barbara Carton, *Man Charged in Software Piracy*, BOSTON GLOBE, Sept. 1, 1994, at 41.

development of P2P technology had gone through two major phases: centralized indexing and decentralized indexing.[28] Early in the mid-1990, programmers began to design networks that facilitated their clients for internet activities.[29] Such technology only allowed users to retrieve contents from a given network and users could not transmit contents back.[30] Such centralized file-sharing platform, however, can be easily used for online infringements.

To immune from infringement liability, technicians updated their file-sharing platform into a more advanced version—decentralized, user-driven platform,[31] such as the Grokster platform. The mechanism is simple. A user merely need to download and install the P2P software into his personal computer, and then create an account. When he logs onto the account, he can upload or download contents with other users who have different accounts regardless their specific location. Compared with the centralized system, the decentralized system requires less administration by the system providers.

From bulletin board to P2P file-sharing platform, evolving digital technologies greatly reshapes traditional perception of copyright system. Online users now can access and process works costless than ever because of the removal of physical copies. Also, the "first-sale doctrine" becomes meaningless because online users can still retain electronic copies after the distribution online. Moreover, online users can

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[28] Andrew J. Lee, MGM Studios, Inc. v. Grokster, Ltd. & *In re* Amister Litigation: *A Study of Secondary Copyright Liability in the Peer-to-Peer Context*, 20 BERKELEY TECH. L. J. 485, 491 (2005).

[29] *Id*. at 489.

[30] *Id.*

[31] Elizabeth Miles, Note, *In re* Amister & MGM, Inc. v. Grokster, Ltd.: *Peer-to-Peer and the* Sony *Doctrine*, 19 BERKELEY TECH. L.J. 21, 26 (2004).

simultaneously access contents and repeated their actions all the time, which increases the opportunities of illegal use and enhances the difficulty of detection. Therefore, these features can be problematic to each right holder when it comes to enforcement issue.

3. Compression

To be eligible for copyright protection, a given work needs to be fixed on certain media after creation. Before the appearance of digital media, all copyrighted works are fixed on physical media. Physical media usually cannot cover so many contents as digital media. Just image the high volumes of case reporters in a law library compared with popular legal database like Westlaw or LexisNexis. Advanced compression technology now enables extremely large quantity of contents to be stored in small, manageable size. Moving Picture Experts Group's mpeg-1 audio layer 3 algorithm (MP3) was the very example of progressive compression.[32] MP3 is a standard compression unit that allows music files to be compressed in a size of one to twelfth of the original version.[33] Another similar compression device for video is DiVX, which compresses a 5 gigabyte DVD into 650 megabytes CD-R.[34] Furthermore, the popular iPod-Nano exemplifies the feature of high quantity storage in small size. This digital media player was introduced in late 2005 and has gone through six generations. The latest sixth generation have s storage of 16GB with only 1.54 inch square display.[35]

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[32] *See* Kramarsky, s*upra* note 16, at 7.

[33] *Id.*

[34] *Id.*

[35] *IPod Nano*, WIKIPEDIA, http://en.wikipedia.org/wiki/IPod_Nano#Sixth_generation (last updated May.

Compression of huge information laid a good foundation for further dissemination online. An entire uploaded CD with musical files can be downloaded into one MP3 within twenty minutes.[36] Based on the statistics, one can anticipate that the impact on copyright holders by using a 64G IPod for downloading from a P2P file-sharing platform.

Ease of reproduction, speedy distribution and high volume compression challenge traditional copyright system and threaten each copyright holder. Making an electronic copy online simply requires several "clicks" and cost merely several seconds or minutes. The quality of electronic copy can totally fulfill the need of users due to perfect duplication: no noise in sound track or blurring in image. Furthermore, large amounts of users can easily access and process online works simultaneously. Anyone from a CEO to a household wife can become illegal users because of the low costs. Moreover, new and evolving network platforms facilitate the process. Finally, renovated digital devices increase information storage on one hand, facilitates online illegal dissemination on the other hand.

Evolving digital technologies bring about challenging features that can be deemed as double-edge weapons. It stimulates the creation of works, accelerates the dissemination of information and facilitates accessibility of users. However, the threat out of unauthorized use still exists and gradually become rampant on the internet. To make matter worse, online infringements do not share equivalent features as offline infringers. Some online infringers do not fall squarely into the traditional standard of

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19, /2012).

[36] *See* Kramarsky, *supra* note 16, at 7.

liability. Therefore, clarifying a proper standard of liability to online infringement serves as premise to the analysis of copyright damages.

B. Direct Infringement in New Environment

Traditionally, copyright infringement originates from direct infringement. In theory, it occurs when anyone except for the copyright holders exercise the exclusive rights without authorization. This framework fits into almost every jurisdiction in the world. For example, §106 of US 1976 Copyright Act recognizes six exclusive rights to copyright owner: reproduction; adaption; distribution; publicly perform, publicly display and digital audio transmission of sound recording.[37] If an accused commits action that falls within the above enumerated rights without authorization, he infringes the copyright. Therefore, the framework of copyright infringement can be roughly defined as follow: 1) valid copyright and ownership; 2) unauthorized exploitation of statutory exclusive copyright.

Despite digital technology has changed the landscape of copyright system and brought about unexpected side effects, the framework of infringement still remain the same when applied to online environment. Online platform in nature functions for storage and transmission, just as offline media. No distinction exists between a musical website and a physical CD when both are used for storage of pirated songs. Currently there are two types of direct infringements online: 1) infringement by OSPs; 2) infringement by individual end-users. The basic framework of the first type is esay to define. Judge Rakoff in *UMG Recordings, Inc. v. MP3.com, Inc.* pointed out, “the

[37] 17 U.S.C. §106.

complex marvels of cyberspatial communication ay create difficult legal issues; but not in this case. Defendant's infringement of plaintiff's copyright is clear."[38] The second type develops with the emergence of internet and ITC, and embraces its popularization when P2P file-sharing platforms come into being. Two recent cases, *Capital Records, Inc. v. Thomas-Rasset*[39]*and Sony BMG Music Entertainment v. Tenenbuam*[40], cause heated debate on the reasonability of lawsuits against individual end-users.

1. Direct infringement by OSPs

Online Service Providers, known as OSPs, offer variety of services to online users. For example: E-commerce, online entertainment (music, movie, etc.), online communication (e-mail, live-chat, etc.), information search (Google, Wikipedia, Baidu, etc.) Almost every kind of service contains copyright contents. Hence, OSPs can easily infringe copyright by intent or negligent. In offline world, an individual entity can become the source for distribution of pirated copies, such as CD shopping site along the street, flea market, etc. As to online environment, the situation remains the same. A single website can store thousands of pirated works and serve as source for further distribution. The *MP3.com* case is a high profile example.

MP3.com was a professional website which stored and distributed music to its users, and offered relevant information as well as technology support online. In January 2000, the MP3.com launched a new service called "My.MP3.com" which

[38] 92 F. Supp. 2d 349, at 350 (S.D.N.Y. 2000).

[39] 680 F. Supp.2d, 1045 (2010).

[40] 672 F. Supp.2d, 217 (2009).

allowed legal CD purchasers to convert the songs from their CDs to the website. In exchange for the uploading, they could also freely access to songs from other CDs. [41] Soon after the MP3.com converted "tens of thousands of popular CDs" into the MP3 format and stored them on its servers.[42] The only requirement for users to access those songs was to prove either 1) they legally own the CD or 2) purchase a CD from MP3.com affiliate retailers online.[43] Although the operation continued, several record companies sued MP3.com for infringement of their sound recording copyright.

The court held in favor of plaintiffs and stated that the defendant actually copied the converted version of songs from plaintiffs' CDs, and replayed them to its users without permission from copyright owners. [44] This action violated the exclusive rights recognized in §106 of Copyright Act. [45] Though MP3.com argued for "fair use" defense, the court rejected for the following reasons: 1) the defendant was commercial in nature; 2) the copying action harmed the value of plaintiff's work and their potential market; 3) MP3.com copied entire portion of works; 4) the works being copied "close to the core of copyright protection".[46]

Similarly, another OSP in China committed the same action like *MP3.com*. In Dec.2006, Columbia Pictures found the Sohu.com, a popular online service provider, offered its users unauthorized access to online video database. [47] Such video database

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[41] 92 F.Supp.2d, at 350.

[42] *Id.*

[43] *Id.*

[44] *Id*. at 353.

[45] *Id.*

[46] *Id*. at 351-52.

[47] Columbia Pictures v. Sohu.com, Beijing First Intermediate Court, 27 Dec. 2006, Yi Zhong Min Chu Zi No. 11932 (2006).

contained hundreds of copyrighted movies from Columbia Pictures and other studios.[48] The Columbia Picture subsequently filed a suit against Sohu.com, claiming that such unauthorized access and online live playing of those movies committed copyright infringement.[49] The court ruled the Sohu.com had infringed Columbia Pictures' rights of communication through information networks, which is recognized in the 2006 Regulation on the Protection of the Right to Network Dissemination of Information. [50] Specifically, Sohu.com provided unauthorized access of the online video to its users for playing, yet did not get permission from Colombia Pictures. As a copyright holder, Columbia Pictures was entitled to the protection of right to network dissemination. Any performance of the works through information network should obtain permission form Columbia Pictures.[51] Therefore, the court ordered Sohu.com published public apology on its home page for consecutive three days and paid RMB 191,000 (US$23,000) as damage. [52]

Direct infringement by OSPs mostly occurred in early digital age. For one, OSPs offer a higher level of service due to the progressive features by digital technologies so that many online users were attracted by the enjoyment, which increase the opportunity of infringement. For another, such infringement share equivalent features to offline direct infringement, and can be easily defined. Courts among different

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[48] *Id.*

[49] *Id.*

[50] *See* Art. 2, 18 (1) of 2006 Network Regulation. Full texts and English Translation are available at http://bl-law-komodo.ads.iu.edu:2252/display.aspx?id=5224&lib=law&SearchKeyword=copyright&SearchCKeyword=.

[51] *See* Sohu.com., at 1.

[52] *Id*. at 5.

jurisdictions tended to fits traditional standard of liability into cyberspace and expanded the protection of copyright owners so as to enforce their rights. In general, online service providers committed infringement the same as other infringement in offline environment. The transformation of physical works into “one or zero” binary code, though revolutionary, does not change the nature of such infringement. OSPs ordinarily focus on commercial benefits and sometimes cause financial harm to copyright holders. Although such financial harm often serves as a reliable basis to claim for damages, the measurement of such harm is not simple. Next chapter looks into specific problems of the measurement.

2. Direct infringement by individual end-users

Although online service providers play an important role in cyberspace and are still undergone evolution, their infringements are less frequently found in recent judicial practice. This is partly due to the “Safe Harbor” provision that immunes OSPs liability, partly because of technology progress enable OSPs functions more like a bridge than a warehouse. Therefore, copyright holders need to shift their attention to another group who most likely committed direct infringement: individual end-users.

Individual end-users existed since the creation of valid information network on the internet. A personal computer with valid network connection makes private exploitation of online works possible. So, copyright infringement by end-users appeared in the early age of cyberspace. For example, sending an e-mail with copyrighted works committed infringement of distribution right, and the receiving of works leads to the violation of reproduction right. With the emergence and updating

of P2P technology, more and more individual end-users may infringe copyright online.

Direct infringement by individual end-users is distinguished from those by OSPs. Despite the rapid growth of OSPs, the quantities of direct infringements still are less than. The establishment of a valid online service provider demands protocols like TCP/IP and RADIUS, domain name service (DNS), several size service running software (Red Hat Linux), email address, etc.[53] To access the internet, by contrast, one simply need a valid network connection with personal computer. So, the ease of becoming end-users greatly increases the opportunities for online infringement and thus causes harm to copyright holders. In *Napster*, the district court ruled that defendant's users were engaged in wholesale reproduction and distribution of copyrighted works.[54] The plaintiff also submitted a survey by its expert, Michael Fine, to show the irreparable harm caused by illegal file-sharing.[55] The survey indicated that online file-sharing had resulted in big losses of "album" sales around college markets.[56]

Looking into the members of individual end-users, large commercial infringers and non-commercial home-style ones consist of the group. Therefore, complicated structure is another feature. Under the circumstances, rough punishment without discretion would increase the costs of enforcement and lead to unjust results. The

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[53] Boatner Howell, *What do I need to start an ISP?—Essential Items and Industrial Knowledge*, ALLIANCE DATA.COM, http://www.alliancedatacom.com/isp/start_isp.asp (last updated May.24, 2012).

[54] *See* 239 F .3d, at 1004.

[55] *Id*. at 1017-1018.

[56] *Id.*

famous trade organization, Recording Industry Association of American (RIAA), began a legal campaign against individual end-users in 2003.[57] Over the past five years, RIAA had filed lawsuits against approximately 35,000 individual end-users.[58] Since large quantities of end-users were charged without being distinguished, some of them were inevitably imposed unjust punishment. In the verdict of *Thomas* trial, the jury found willfully infringement by the defendant and awarded $220,000 in total for statutory damages, with $9,250 per work.[59] After the defendant filed a motion for new trial, the figures increased to $80,000 per work ($1,920,000 in total), regardless of the fact that defendant is a single, household mother who only infringed 24 songs.[60]

Pursing individual end-users for infringement proves to be costly and ineffective. In the late 2008, the RIAA's announcement of ceasing lawsuits against individual end-users remarked the failure of the five-year campaign. For one, the RIAA spokesman admitted that the record labels had lost money in the campaign.[61] For another, the campaign caused aversions from public and negative comments from courts.[62] As Judge James Otero commented in *Elektra v. O'Brien* [63], "…in these

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[57] *See* Moseley, *supra* note 4, at 311.

[58] *Id*. at 316.

[59] 680 F. Supp at 1049.

[60] *Id*.

[61] Eric Bangeman, *RIAA Anti-P2P Campaign a Real Money Pit, According to Testimony*, ARSM TECHNIA, http://arstechnica.com/tech-policy/news/2007/10/music-industry-exec-p2p-litigation-is-a-money-pit.ars (last updated Oct. 3, 2007).

[62] Ray Beckerman, *Thoughtful decision in 2007 Californian case*, Elektra v. O'Brien, INTERNET LAW & REGULATION, http://recordingindustryvspeople.blogspot.com/2008/01/thoughtful-decision-in-2007-california.html (last visited Jan. 18, 2008).

[63] No. 06-5289 (C.D. Cal. March 2, 2007).

lawsuits, potentially meritorious legal and factual defenses are not being litigated, and instead, the federal judiciary is being used as a hammer by a small group of plaintiffs to pound settlements out of unrepresented defendants…"[64]

C. Indirect Infringement: from traditional liability to new concept

Indirect infringement is not new. Rather, it existed before the emergence of digital technologies and internet. Basically, one can be liable as a related infringer of other's infringement activities.[65] Such concept originated from the liability of tort law because copyright infringement is tort in nature.[66] When it comes to the digital age, however, the indirect infringement causes some confusion to current standard of liability. Under the circumstances, lawmakers and judges have to reexamine the rule and make modification.

Generally, the 1976 US Copyright Act does not provide statutory framework for indirect copyright infringement. The existing framework originated from courts' holding which developed from common law of torts. Traditional indirect liability in tort law covers contributory infringement and vicarious liability. The contributory infringement means that one who directly contributes to other's infringement and should be liable for his action.[67] To establish contributory infringement, the plaintiff needs to prove: 1) actual direct infringement occurs; 2) the accused contributory tortfeasor has actual or constructive knowledge of the direct infringement; 3) the

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[64] *See* Beckerman, *supra* note 55.

[65] MARSHALL A. LEAFFER, UNDERSTANDING COPYRIGHT LAW 438 (5th ed. 2010).

[66] *Id*.

[67] *Id.*

accused causes or materially contributes to the direct infringement.[68]

On the other hand, vicarious liability functions differently. The concept was developed from the extension of agency principles by Second Circuit.[69] Specifically, when one has the power to supervise or control the direct infringement, and simultaneously has financial benefits from such action, one is liable for vicarious liability, regardless his knowledge of direct infringement.[70] To prevail in a vicarious suit, plaintiff must show: 1) direct infringement occurs; 2) the accused vicarious tortfeasor has the right or power to control or supervise the direct infringement; 3) the accused gain direct financial benefit out of the direct infringement.[71]

One of the earliest case containing both contributory infringement and vicarious liability was *Religious Technology Center v. Netcom*.[72] The Netcom was an online service provider that allowed internet news group to make copy of the plaintiff's copyrighted work through bulletin board service (BBS) without authorization.[73]

The court ruled that Netcom was not liable for vicarious liability since neither Netcom nor the BBS received direct financial benefits from the posting action.[74] As to contributory infringement, the court reasoned that Netcom was liable for such liability because of the fact that it had actual knowledge of the direct infringement.[75]

The *Netcom* case is a high profile example of successful applying traditional

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[68] *NCR Corp. v. Korala Assocs., Ltd.*, 512F.3d 807, at 816 (6th Cir. 2008).

[69] *See* LEAFFER ,*supra* note 58, at 445.

[70] *Gershwin Publ'g Corp. v. Columbia Artists Mgt., Inc*., 443 F.2d 1159 (2d Cir. 1971).

[71] *Id.* at 1166.

[72] 923 F. Supp. 1231 (N. D. Cal. 1995).

[73] *Id*. at 1238-41.

[74] *Id*. at 1244-45.

[75] *Id.* at 1373-76.

secondary liability into online environment. Such application, however, does not always squarely fit into specific cases. As aforementioned, the evolution of digital technologies continuously reshapes the perception of copyright. Within a line of cases, the *Napster*[76] was the most famous and influential one.

Napster was a P2P file-sharing platform and distributed free software through its homepage. Once the software was installed, the user could access Napster system and create an account.[77] The user then could upload MP3 files in correct format onto the platform through his account and enabled others to download.[78] Napster platform did not keep MP3 files on its centralized indexing system, but merely facilitated the distribution.[79]

The plaintiff, music industry, admitted that Napster did not committed direct infringement due to the technology design. Rather, the plaintiff claimed contributory infringement and vicarious liability of Napster. As to contributory infringement, the Ninth Circuit reasoned that Napster had actual knowledge of direct infringement by its end-users. The internal company e-mails with the list of 12,000 infringing files provided by RIAA sufficed as evidence. Moreover, Napster materially contributed to the infringing actions because it offered platform and software to users primarily for illegal file-sharing. [80] Therefore, Napster actually committed contributory infringement.

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[76] 239 F.3d 1004, (9th Cir. 2001).

[77] 239 F.3d, at 1011.

[78] *Id.* at 1012.

[79] *Id.*

[80] *Id*. at 1020.

When considering vicarious liability, the court upheld the lower court's finding that Napster had the ability to control infringing actions because it could "block" access of users to the system.[81] With regard to direct financial benefits, the court reasoned that Napster "acted as a 'draw' for customers", because the revenue directly related to the frequency of advertisement viewed on the platform.[82]

The *Napster* case is highly influential because it denotes the application of traditional secondary liability into online copyright infringement is operable. However, technologies never stop the pace. The centralized indexing Napster is merely a prototype of P2P file-sharing platform. The next generation of P2P, decentralized indexing system, makes the analysis of secondary liability outdated. This time, however, the US Supreme Court created a new theory called "inducement liability" borrowed from patent law to address the troublesome issue.[83]

As aforementioned, the Grokster platform differs significantly from that of Napster. Unlike centralized indexing system, the Grokster system created decentralized indexing modes, which enabled its users to retain index of files for future sharing.[84] The Grokster cannot control its users' conduct after they install the software.[85] The inability of control actually circumvented the finding of vicarious liability.

In Ninth Circuit, the court rejected the finding that Grokster had actual or

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[81] *Id*. at 1027.

[82] *Id*. at 1023.

[83] 545 U.S. at 937-38.

[84] *Id*. at 920.

[85] *Id.*

constructive knowledge of its users' infringement.[86] The court based on the *Sony* doctrine and reasoned that Grokster was capable of substantial non-infringing use.[87] The Supreme Court, however, held the Ninth Circuit misapplied *Sony* doctrine by omitting the business mode of Grokster, "One who distributes a device with the object of promoting its use to infringe copyright, as shown by clear expression or other affirmative steps taken to foster infringement, is liable for the resulting acts of infringement by third party."[88]

Judging from the aforementioned, traditional standard of liability can mostly applied to online infringement. In general, online secondary liability develops from existing case. To summarize, indirect liability consists of the following elements: 1) involved in the direct infringement either by control or just as facilitator; 2) knowledge of infringement action; 3) derive financial benefits from infringement.

Technologies keep on evolving, and no one can predict the future. Digital technologies, as a double edge weapon, bring about convenience yet threaten the foundation of copyright system. Ease of reproduction, widespread distribution, and high volume compression remarkably reshape the process of creation and dissemination. As a response, lawmakers and judges refer to rules within or beyond copyright field to fit digital technologies squarely into current framework. Generally, the framework works well when applied to known and mainstream technologies, but future breakthroughs still intimidate copyright holders and force copyright law react

[86] 380 F.3d 1154 (9th Cir. 2004).

[87] *Id.*

[88] 545 U.S. at 919.

actively.

The finding of infringement liability is merely the first step. The second and more important step, effective and equitable remedy, is the only way that cures the harm suffered by copyright holders and deters illegal actions. Copyright damages, as the only monetary relief in copyright law, generally function well as *ex post* remedy in offline practice. When it comes to online environment, however, copyright damages gradually become ineffective.

Chapter III Response to New Challenges: Copyright Damages in Online Environment

Because intellectual products share the features of public goods, government grants limited monopoly to copyright holders so as to rectify market failure. Relying on such monopoly, copyright holders should be able to exploit their works and gain substantial benefits. The reality, however, sharply departs from the theory. Copyright infringement intervene copyright holders' normal exploitation of works. Under the circumstances, copyright remedies become the last resort for copyright holders to effective enforce their rights.

Among varieties of copyright remedies, damages are the only monetary relief which recoup copyright holders with financial benefits. Financial losses caused by infringements call for damage as *ex post* solution, because copyright establish on utilitarian concept. Copyright infringements are torts in nature and cause financial harm to right holder. Hence, copyright damages primarily design to fully compensate copyright holders' actual damages. In theory, the damages should be equivalent to the losses of copyright holders. Following the compensation, the next step should be the deprivation of unjust enrichment: illegal profits of infringers. The underlying purpose is to deter infringement and make infringers unprofitable. Basically, copyright damages function well when both compensation and deterrence can be achieved.

Entering into the digital age, copyright damages confront with advanced technologies. As a whole new platform, the online environment challenges the operation of damages and questions the effectiveness. Evolutionary digital

technologies significantly change the process of creation. Copyright damages, by contrast, existed long before the emergence of digital technology and were primarily design for offline infringements. Obviously, current damages framework is outmoded. For example, the measurement of damages upon actual damages is unreliable and difficult. Sometimes it is impossible to make the damages proof beyond speculation. Moreover, online infringements rarely generate profits, which cannot meet the standard of proof either. To make matter worse, more problems triggered when statutory damages applied to online infringements. With gradual updating copyright law, it is unpersuasive to remain damages framework alone intact.

This chapter primarily discusses copyright damages in online environment. In the first section, the chapter looks into basic framework of copyright damages: actual damages or/and illegal profits and statutory damages. The second section analyzes the problems of applying copyright damages to online infringement.

A. Fundamental Mechanism of Copyright Damages

1. Actual damages or/and profits

Generally, Awarding damages upon actual damages or/and illegal profits is the earliest and major damages in most jurisdictions. The purpose of awarding damages in this category is to compensate copyright holders. The degree of compensation determines whether such kind of damage preserves sufficient incentive to copyright holders after infringements occur. Sufficient compensation can eliminate financial harm by infringement as if no infringements occur. Under the circumstances, copyright holders will continue their creation in the future, and the public will benefit

from abundant cultural production. On the other hand, granting damages on infringer's profits chiefly deters and punishes unjust enrichment. Disgorgement of illegal profits makes infringement meaningless because infringers are not better off financially.

In theory, a plaintiff in a copyright dispute can recover both his actual damages or illegal profits of infringers, or the combination of the two. §504(b) of US Copyright Act provides that "the copyright owner is entitled to recover the actual damages suffered by him or her as a result of the infringement, and any profits of the infringer that are attributable to the infringement and are not taken into account in computing the actual damages."[89] When choosing illegal profits, a plaintiff cannot recoup profits that have already been converted into the calculation of damages in order to preclude double recovery.[90] In practice, plaintiff often choose either actual damages or illegal profits provides that most plaintiff can prove financial harm and meet the standard of proof, while the possibility of gaining the two exists.[91] For example, an author markets his science fiction but the fiction is pirated by an infringer. Because of the infringement, the author can claim either lost sales as actual damages or infringer's sales as profits, given that the infringing copies are equivalent in quality to original works. On the contrary, if the infringing copies prove to be inferior in quality and diminish the copyright owner's ability to market the fiction in the future, the profits

[89] 17 U.S.C. §504(b).

[90] *Id.*

[91] *See* LEAFFER, *supra* note 65 at 459; *See* also *Abeshouse v. Ultragraohics, Inc*., 754 F.2d 467 (2d Cir 1985)(held that §504(b) was designed to compensate the copyright owner's actual damages, yet recognizing the possibility of cumulative damages in addition to profits).

can be awarded as well as lost sales.

Both actual damages and profits require proof without speculation. Courts in copyright dispute are entitled to reject plaintiff's claim for damages if the proof is speculative.[92] In some situations, courts might ease the burden of proof. The court in *Deltak, Inc. v. Advanced Sys., Inc*.[93] held that once the fact of actual damages was proved, the degree of harm did not need to be proved to exact certainty.[94] Despite the easement, actual damages are not easy to prove. Generally, actual damages are based on the consideration that whether infringements lead to diminution of market value of works, and the degree has a final voice on the amount of awarded damages. When infringements occur, the depreciated market value is often measured as actual damages to copyright holders.

The measurement of decreasing market value requires several considerations. The first step is to decide the fair market value: an estimate of market price on a given work which depends on what a knowledgeable, willing, and unpressured buyer would pay to similar level seller in the market.[95] Usually, the fair market value can refer to market precedents. However, sometimes there is not existing market for a given work. On that condition, courts would measure the fair market value as the amount that a plaintiff would reasonably have received or a defendant would reasonably have paid.[96] After the determination, the subsequent step is to calculate the lost sales as the

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[92] *See Stevens Linen Assocs., Inc. v. Mastercraft Crop*., 656 F.2d 11, 14 (2d Cir. 1981).

[93] 547 F.Supp.400, (N.D. Ill.1983).

[94] *Id*. at 411.

[95] *Fair Market Value*, WIKIPEDIA, http://en.wikipedia.org/wiki/Fair_market_value. (last updated Apr. 30, 2012).

[96] *Aitken v. Empire Construction*, 542 F. Supp. 252 (D. Neb. 1982).

result of infringement. The plaintiff has several methods to prove the actual damages: he can establish actual sales during pre-infringement period and use such figure to predict lost sales during infringement period. Also, he can use infringers' sales of infringing copies as lost sales. Furthermore, he can compare sales of infringing copies with the sales of remaining copyrighted works and use the difference to calculate the lost sales.[97] The final step is to prove causation. This issue closely relates to lost sales. Briefly summarize, the factors that affect the measurement in copyright dispute include: (1) the distinction of marketing efforts between plaintiff and defendant; (2) different prices of works and pirated copies; (3) varying competition levels between plaintiff and defendant; and (4) cost that affecting profits between plaintiff and defendant.[98]

Because of the complication and difficulty, plaintiffs are more willing to choose illegal profits instead of actual damages. §504 (b) provides that: "in establishing the infringer's profits, the copyright owner is required to present proof only of infringer's gross revenue."[99] After proving the gross revenue, the burden of proof is shifted to defendant of proving deductible costs due to factors other than infringement.[100]The primary purpose of profits recovery is to deprive defendants of unjust enrichment. The 1976 US Copyright Act, however, does not specify how to calculate deductible costs. Several cases indicated that costs correlate to infringing activities with

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[97] Wade R. Keenon, *Monetary Recovery Under the Copyright Act: Calculation of Damages*, 65 OR. L. REV. 809, 812 (1986).

[98] *Id.* at 817.

[99] 17 U.S.C. §504 (b).

[100] H.R. REP. No. 94-1476, at 161 (1976).

reasonable and certainty proof can be deductible, such as taxes, royalties to authors, overhead and production costs.[101] On the other hand, courts would favor plaintiff and grant gross revenue as damages when defendant cannot meet the standard of proof.

Another concern to profits issue is the apportionment. A plaintiff can only claim and recover profits attributable to infringement, and is not entitled to profits without connection to infringing action.[102] Frequently, several situations complicate the process. One situation is that non-infringing factors sometimes contribute to the profits of defendants, like the success of an infringing novel is due to effective advertising campaign rather than the novel itself. Another one is the collaboration of works. For example, the composer of a song incorporated into a popular movie cannot claim for the whole profits of that movie. Despite of the difficulty, a defendant can effectively reduce available profits to plaintiff by proving such profits are not attributable to infringement. One case in point is *Sheldon v. Metro-Goldwyn Pictures Corp.*[103] In this case, the Court approved only twenty percent of profits in the motion picture were attributable to plaintiff's copyrighted play. The Court held that some aspects of the success to the motion picture were unrelated to plaintiff's work, "The testimony showed quite clearly that in the creation of profits from the exhibition of a motion picture, the talent and popularity of the 'motion picture stars' generally constitutes the main drawing power of the picture…Here, it appeared that the picture

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[101] *See e.g., Cream Records, Inc. v. Jos. Schlitz Brewing Co.,* 754 F.2d 826 (9th Cir 1985) (stating that advertising cost should be deductible from gross revenue claimed by plaintiff); *Kamar Int'l v. Russ Berrie & Co.*, 752 F.2d 1327 (9th Cir. 1984) (stating overhead expenses by infringer that contributed to infringement cannot be accounted into profits).

[102] 17 U.S.C. §504(b).

[103] 309 U.S. 390 (1940).

did not bear the title of the copyrighted play and that it was not presented or advertised as having any connection whatever with the play."[104]

2. Statutory damages

Statutory damages are another branch in copyright damages system. Although not typical, statutory damages gradually become the indispensable component. The existence of statutory damages is largely due to the fact that the first kind of copyright damages, actual damages or/and profits, is speculative and difficult to prove. The history of statutory damages, however, can dates back to eighteen century England when copyright disputes were brought in the courts of equity with discretion upon awarding.[105] Therefore, statutory damages share some equitable features from common law jurisprudence—"high degree of flexibility; regardless of actual proof; functions due to the failure of other damage."[106] On the other hand, the framework of statutory damages is simple: the awarding of statutory damages substitutes actual damages or/and profits at the discretion of courts within a statutory range. The range is determined by legislation and courts award specific amount according to the culpability of infringement and justice.

Statutory damages accompanied with US copyright law ever since its first enactment. Early in 1790, the first federal copyright act provided that: "…then such offender or offenders shall…forfeit and pay the sum of fifty cents for every infringing

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[104] *Id.* at 408.

[105] Kate Cross, David v. Goliath: *How the Record Industry is Winning Substantial Judgments against Individual for Illegally Downloading Music*, 42 TEX. TECH L. REV. 1031, 1039 (2009-2010).

[106] *See F. W. Woolworth Co. v. Contemporary Arts, Inc.*, 344 U.S. 228, 233 (1952).

sheet which shall be found in his or their possession…"[107] The 1909 Act actually made statutory damages the prominent component in copyright law. Under 1909 Act, a plaintiff can choose statutory damages in place of actual damages or/and profits when "such damages as…the court shall appear to be just."[108] Meanwhile, infringers under such provision should be liable for every infringement activity—"two separate infringements of the same copyrighted work result in two separate claims for minimum damages."[109] This was the basic framework of statutory damages on multiple infringements, which increased both the burden of infringers and the amount of damages. As to the statutory range, US Congress set minimum $250 and maximum $5,000 to each infringement and granted courts discretion to award damages between the two.[110]

Despite the simple structure, statutory damages cause some unpleasant results in practice. Some courts required the plaintiff to prove actual damages resulting from infringement before considering statutory damages.[111] Courts also doubt whether they had to award actual damages or elect to award statutory damages under 1909 Act.[112] Moreover, the 1909 Act did not clearly address the issue of innocent infringers. Commentators argued that the statutory minimum, $250 per infringed work, imposed harsh penalty upon innocent infringers, because innocent infringers did not

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[107] *See* §2 of 1790 Copyright Act (repealed 1947) (note that such statutory damages only applied to works that had been previously published).

[108] *See* §101(b) of 1909 Copyright Act.

[109] *Id.*

[110] Priscilla Ferch, Note, *Statutory damages Under the Copyright Act of 1976*, 15 LOY. U. CHI. L.J. 485, 490 (1984).

[111] *Id*. at 491-492.

[112] *Id*. at 492.

aware and had no reason to know that they conduct infringements.[113] Such situation may deteriorate when innocent infringers conduct multiple infringements without awareness.

Facing with more and more negative comments, the 1976 Act modified the statutory damages provision and presented a departure from the framework in 1909 Act. §504 (c)(1)(B) generally provided that statutory damages are one of the copyright damages in 1976 Act.[114] The revised version primarily focused on several controversial issues in 1909 Act, such as when statutory damages could be awarded; how to measure multiple infringement cases[115]; and how to deal with harshness of minimum award to innocent infringers.[116]

The first and most prominent modification under 1976 Act was the right of a plaintiff to freely elect statutory damages in lieu of actual damages or/and profits at any time prior to the final judgment.[117] It was an absolute right regardless of the sufficiency of evidence to actual damages or profits.[118] The House Report further indicated that a plaintiff might intentionally elect statutory damages even though adequate proof existed.[119]

The second improvement of new provision was regarding the minimum $250 award. §504(c) alleviated the harshness to innocent infringers by introducing $100

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[113] *See* Cross, *supra* note 105, at 1040; also *see* Ferch, *supra* note 110, at 497-98.

[114] 17 U.S.C. §504 (c)(1)(B).

[115] *See* H.R. REP, *supra* note 115, at 162.

[116] *Id*. at 162-163.

[117] *See* Leaffer, *supra* note 65, at 467.

[118] *See* Ferch, *supra* note 110, at 504.

[119] *See* H.R. REP, *supra* note 115, at 162.

minimum award in case innocent infringement was proved.[120] Since innocent infringers did not aware or had no reason to know that they infringed copyright, they should not become the major target of detergence. Awarding statutory damages against innocent infringers should only compensate copyright holders. The minimum $100 amount could avoid the negative impact upon innocent infringers and stroke a balance between copyright holders and users.

Awarding statutory damages upon multiple infringements also presented a whole new structure. §504 (c) entitled a plaintiff to recover only a single statutory damages regardless of how many times a defendant infringed the work or whether the infringing acts are separated, simultaneous, or occurred sequentially.[121] The amount of single award depended on the number of infringements; market value of the work; revenue losses by infringement; the culpability of infringement; and the defendant's fault.[122]

Because the award focuses on single work, the definition of "work" is substantially important in copyright dispute, especially when collaborative works become popular with the development of multimedia technologies. For example, a CD that contains 24 songs will be deemed as a single work under statutory damages. In *MP3.com*, the court rejected plaintiff's argument that statutory damages should be awarded on each sound track in a CD uploaded into infringer's website because of "individual economic value" of every sound track.[123]

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[120] 17 U.S.C. §504 (c).

[121] *See* H.R. Rep. *supra* note 115, at 162.

[122] *See N.A.S. Imp. Corp. v. Chenson Enters., Inc*., 968 F.2d 250, 252 (2d Cir. 1992).

[123] 109 F. Supp. 2d 223, at 224-25.

One noteworthy feature of US statutory damages is the varying statutory range. The 1909 Act provided that courts could award statutory damages no less than $250 and no more than $5,000.[124] The 1976 Act increased the maximum amount to $10,000 against ordinary infringements.[125] When it comes to willful infringement, the maximum amount could be $50,000. If the infringement is found to be innocents, the amount decreased to $100.[126] In 1988, US Congress passed the Berne Convention Implementation Act and doubled the statutory range so as to comply with the Act.[127] The minimum increased to $500 and the maximum became $20,000.[128] Additionally, the amount to willful infringements increased to $100,000 and the amount for innocent infringements became $200.[129] Eleven years later, US Congress changed the range again. The Digital Theft Deterrence and Copyright Damages Improvement Act set out the statutory range from $750 to $30,000 within ordinary infringements.[130] The maximum award to willful infringement increased to $150,000, while remained the $200 to innocent infringements.[131] The Congress primarily intended to deter and punished all future infringers by increasing the penalty.[132]

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[124] §101 (b) of 1909 Act.

[125] 17 U.S.C. §504 (c).

[126] *Id.*

[127] Stephanie Berg, *Remedying the Statutory damages Remedy for Secondary Copyright Infringement Liability: Balancing Copyright and Innovation in the Digital Age*, 56 J. COPYRIGHT SOC'Y U.S.A. 265, 301 (Winter/Spring 2009); *see also* Pub. L. No. 100-568, 1988 H.R. 4262.

[128] *Id.*

[129] *Id.*

[130] Pub L. No.106-160, 1999 H.R. 3456.

[131] *Id.*

[132] *See* H.R. Rep. *supra* note 115, at 162; *see also* Shelia B. Scheuerman, *Due Process Forgotten: The Problem of Statutory damages and Class Actions*, 74 MO. L. REV. 103, 111 (2009) (stating that potential infringers are deterred because even the minimum awarding increases the cost of defendants.)

B. Copyright Damages in Online Environment: Problems

Copyright damages are the indispensable instrument to right holders for enforcement. As the scope of copyright gradually broadens and new subject matters keep on emerging, copyright damages hereby are awarded broader than ever as a response. Digital technologies, however, always challenge the framework and operation of copyright damages. As the mainstream in copyright remedies, damages upon actual damages or/and profits seems outmoded in online environment and are used in a relatively low frequency. On the other hand, statutory damages become a more attractive choice, but give rise to problems in practice. After eleven years of entering into new century, it is time to reexamine that whether the framework and rationale of copyright damages still squarely fits into online infringements.

1. Damages upon actual damages or/and profits

a) Actual damages

To claim damages upon actual damages, a plaintiff should prove the losses without speculation. This standard does not change in online infringement. Hence, the first step is to question whether there are actual damages to copyright holders as a result of online infringements. The answer seems self-evident: digital technologies enable easy reproduction and widespread distribution online which means several clicks and seconds can complete copyright infringement. Moreover, every act of infringement causes some harm to the copyright holder because lack of such infringement, the infringer would have to purchase the work for use. [133] So, copyright

[133] Roger D. Blair & Thomas F. Cotter, *An Economic Analysis of Damages Rules in Intellectual Property Law*, 39 WM. & MARY L. REV. 1585, 1652 (1997-98).

holders will be recouped by such payment. Equipped with advanced digital technologies, the situation deteriorates. Such argument is often used by RIAA when they justify their lawsuits against individual end-users on P2P file-sharing platform. They posted on their website an array of statistics to illustrate the harm and damages due to this kind of infringement: "(1) in the decade since peer-to-peer (p2p) file-sharing site Napster emerged in 1999, music sales in the U.S. have dropped 47 percent, from $14.6 billion to $7.7 billion; (2) from 2004 through 2009 alone, approximately 30 billion songs were illegally downloaded on file-sharing networks; (3) NPD reports that only 37 percent of music acquired by U.S. consumers in 2009 was paid for."[134] By presenting these horrible astronomical figures, RIAA wish to force the public to believe online infringements indeed cause actual damages to them.

Suffering damages by infringements is not enough to prevail in a copyright dispute. To prevail, the plaintiff needs to prove it beyond speculation. This second step is determinative to the final awarding. Unfortunately, online copyright infringements usually give rise to great difficulty to copyright holders on providing certainty proof. As aforementioned, the most difficult mission for a plaintiff is to prove the causation link between actual damages and infringements.[135] Currently some debates still exist on how illegal P2P file-sharing affect legal copyright sales. A survey conducted by researchers from Harvard University and University of Kansas revealed that illegal downloads through P2P platform only accounts for 0.7 percent of reduction on CD sales, and argued that actual damages to record industry may be

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[134] *For Students Doing Reports*, RIAA, http://www.riaa.com/faq.php (last updated Nov.2, 2011).

[135] *See* Keenon, *supra* note 97, at 816.

trivial.[136] Even the RIAA admitted on its website that "…calculating lost sales for online piracy…is a difficult task…" and cannot provide the public with even an approximate figure.[137] In *Thomas-Rasset*[138], the head of Sony BMG's litigation department testified that they had no idea of the actual damages they suffered due to illegal downloading.[139] Without certainty proof of causation link, RIAA could not meet the standard of proof and obtained support from courts to the awarding damage upon actual damages. Similar situation occurs in two Chinese cases. In *Chen Xingliang v. Digital Library,*[140] HaiDian district court rejected the plaintiff's claim of RMB 400,000 as actual damages due to infringement by defendant. The court reasoned that the plaintiff did not provide any convincing evidence to the causation link between the amount of his actual damages and infringement action.[141] Also, the court in *Zhang ZhiCheng v. 21 ViaNet.Com* [142] did not support the plaintiff's claimed amount of actual damages due to his failure to provide certainty proof.[143]

Proving actual damages beyond speculation is not the only obstacle for copyright holders. The criteria of calculation also call for consideration. Online commercial platforms emerged later than offline markets, and major offline merchants do not keen on exploring the online markets even if such markets may be more profitable. For

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[136] Felix Oberholzer-Gee & Koleman Strumpf, *The Effect of File Sharing on Records Sales: An Empirical Analysis*, 115 J. POL. ECON. 1, 36 (2007).

[137] *See* RIAA, *supra* note 134.

[138] 92 F. Supp. 2d 349 (S.D.N.Y. 2000).

[139] *See* Bangeman, *supra* note 61.

[140] Beijing HaiDian District People's Court, 2002 No.5702, Hai Min Chu Zi Di 5707 Hao.

[141] *Id.*

[142] Beijing First Intermediate Court , Yi Zhong Min Chu Zi No.1217 (2001).

[143] *Id.*

example, RIAA did not enter into digital market for music until 2004.[144] Distinctions exist between online commercial websites and offline physical markets, like different business models and the sales channels. Awarding damage based on offline market statistics can either underestimate or over-evaluate online copyright works, resulting insufficient compensation or over compensation. Therefore, unambiguous guidance is instrumental for courts in calculation. For example, the 2005 China's Guiding Opinions set forth some specific instructions on the calculation of damages to online copyright infringement. Article 26 provides that the amount of damages can be determined pursuant to the author's remuneration as prescribed by State in case of distributing literary works.[145] Furthermore, Article 32 allows courts to increase the amount of final damages from three to five times.[146] However, the author's remuneration is prescribed by State before the invention of internet. The distinctive features of digital technologies on creation and dissemination had not been taken into consideration: the costs of making a copy are far less than producing a physical one; and distribution of copies online saves the costs of offline dissemination. Therefore, the factors that affect offline markets pricing do not similarly exist in online environment. Even if legislators take these factors into consideration, the law still cannot keep the pace with progressive technologies and eventually become outmoded. Hence, statutory standard of calculation cannot solve problems in practice.

b) Illegal profits

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[144] *See* RIAA, *supra* note 134.

[145] *See* Art.26 of 2005 Opinions.

[146] *See* Art.32 of 2005 Opinions.

Compared with proving actual damages, seeking for infringer's profits can be much easier, at least in theory. Generally, copyright holders in a dispute merely need to present the proof of gross revenue by infringements and leave infringers to deduct costs. The ease on burden of proof, however, does not aid copyright holders too much. Currently, online infringements conducted either by online intermediary like OSPs or individual end-users. It is obvious that copyright holders can only claim profits as damages from the two groups.

Online service providers offer varieties of services, many of these services are free to online users. For example, Google Map does not charge when one locate favorite restaurants. Profits to OSPs usually come through two channels: some OSPs charge for their services and users are required to pay subscription fees in order to access contents or information. In addition to subscription fees, OSPs gain more financial benefits by charging advertisement posted on their websites. Interesting contents attract more users and create better opportunities for advertisement. As a result, OSPs can charge more for increasing advertisement on their websites. Since digitization enables all kind of copyrighted works to be processed and uploaded onto the internet, online users choose the network platforms that best fulfill their requirement. Making copyrighted works available and free for access become a good business strategy to OSPs even if the strategy may be illegal. For example, the court in *Napster* found the platform committed the vicarious liability by reasoning that "it acted as a 'draw' for consumers".[147]

[147] *See Napster,* 239 F.3d at 1023.

However, none of these profits can be reasonably deemed as illegal profits under the framework of copyright damages. The subscription fees are legal revenues earned by OSPs for offering specific services. As to profits earned by charging advertisement, someone may argue it is indirect profits out of infringement. They cited *Frank Music Corp v. Metro-Golden-Mayer, Inc*.[148] as an illustration. In *Frank*, the defendant used several copyrighted songs of plaintiff in a show without authorization.[149] The court held that the plaintiff could recover indirect profits as damages, because the show had promotional value to the defendant's commerce.[150] This argument erred because in *MGM* the defendant used copyrighted works in the show for promotion and earned profits, whereas OSPs infringe copyright for attraction of more viewers, not earn profits through the unauthorized posting.

On the other hand, individual end-users are not the most suitable target for copyright holders to impose this king of damages. Unlike OSPs which provide services for users and gain commercial profits, individual end-users primarily pursue for non-commercial enjoyment through the use of works. Even committing direct infringements, they rarely generate profits from the infringing activities. They do not charge others for downloading when they upload files, music, or video online. Under the circumstances, copyright holders cannot expect high amount of damages by pursuing non-commercial individual end-users.

2. Statutory damages

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[148] 772 F.2d 505 (9th Cir. 1985).

[149] *Id*. at 510.

[150] *Id.* at 517.

Damages upon actual damages or/and profits prove to be problematic on one hand, indicate the necessity and importance of statutory damages on the other hand. As Paul Goldstein explains, statutory damages exist "because actual damages are so often difficult to prove, only the promise of a statutory award will induce copyright owners to invest in and enforce their copyrights and only the threat of a statutory award will deter infringers by preventing their unjust enrichment."[151] Usually, the majority of online infringements end with the award of statutory damages, because the advantages of such damages are obvious in online copyright disputes: the flexibility accelerates judicial procedure; the statutory range leaves enough space for judgment to specific cases; disregarding the proof on actual damages or/and profits alleviate the burden on both parties; etc. Despite these strengths, however, statutory damages gradually present unexpected problems and weaknesses in practice.

a) Targeting the wrong party

Began in 2003, the RIAA initiated to file lawsuits against individual end-users who illegally distributed copyrighted music through P2P file-sharing platform.[152] According to the RIAA, the legal campaign was to both raise public awareness of illegality of unauthorized downloading and distribution, and force online users to legally purchase music.[153] Eventually, the RIAA filed lawsuits against individual end-users in the amount of approximately 35,000 during the five-year period.[154]

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[151] PAUL GOLDSTEIN, GOLDSTEIN ON COPYRIGHT, Vol.II §14.2, at 14:41 (3rd ed. 2005).

[152] *See* Moseley, *supra* note 4, at 315.

[153] *Id.*

[154] Sarah McBride & Ethan Smith, *Music Industry to Abandon Mass Suits*, WALL ST. J., Dec.19, 2008, at B1.

Regardless the ultimate goal, the legal campaign between wealthy plaintiffs and poor, non-commercial defendants in the context of digital file-sharing proved to be unfair. The groups of individual end-users, ranging from pre-teenagers to college students till the elderly, are obviously less wealthy than RIAA and cannot easily afford to litigate in federal courts.[155] As the result of unbalancing position, most of the targeted defendants chose to cease "war" with the RIAA. Among the thousands of lawsuits since 2003, only twelve have resulted in litigation.[156]

Even if individual end-users are willing to fight with the wealthy RIAA, they need to face unpredictable monetary penalty. Given the difficulty in proving actual damages and profits, the RIAA tends to choose statutory damages as the best solution. One recent well-known case, *Thomas-Rasset*[157], indicated how unreasonable the damages could be when RIAA targeted on individual end-users.

The *Thomas-Rasset* became the first P2P file-sharing case that reached a jury verdict. Early in 2006, the plaintiff filed a complaint against Jammie Thomas, alleging that she illegally downloaded and distributed twenty-four songs through a P2P platform: Kazaa.[158] The jury found defendant willfully infringed all twenty-four songs at issue, and awarded the plaintiff $9,250 per infringed song, which amounts to

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[155] Anthony Ciolli, Lowering the Stakes: *Toward a Model of Effective Copyright Dispute Resolution*, 110 W. VA. L. REV. 999, 1003 (2007-2008).

[156] Ray Beckerman, *How the RIAA Litigation Process Works*, BLOGGER, http://recordingindustryvspeople.blogspot.com/2007/01/how-riaa-litigation-process-works.html(last updated Jan.11, 2008)(stating that twelve defendants in the lawsuits have filed motions to dismiss, for summary judgment, or made challenges to pretrial discovery).

[157] 579 F.Supp.at 1210 .

[158] *Id.* at 1213-14.

$220,000 in total.[159] Following the judgment, Thomas filed a motion for retrial based upon the unconstitutionality of the excessive awarding.[160] She argued that the songs were typically available online for one dollar each, and the plaintiff made the price of seventy cents per song online. Hence, the actual damages to the plaintiff based on twenty-four songs should be $16.80.[161]In addition, the total damages were a thousand times than actual damages even if the court awarded based on the minimum $750 per infringed work.[162]

Although the court did not grant a new motion, it addressed the issue that the relevant jury instruction was a misstatement of law.[163] The court reasoned that "the defendant is an individual consumer and a single mother. She is not a business. She sought no profit from her acts…Thomas's conduct was motivated by her desire to obtain the copyrighted music for her own use…it would be farce to say that a single mother's acts of using Kazaa are equivalent, for example, to the acts of global financial firms illegally infringing copyrights in order to profit…"[164]

Moreover, the court calculated the amount of damages to Thomas compared with actual damages claimed by her. The court assumed that the twenty-four infringed songs were equivalent to approximate three music CDs, which were in the price of $54.[165] The final awarding, by contrast, was $220,000. Such figure was "more than

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[159] *Id*. at 1227.
[160] *Id*. at 1212-23.
[161] *Id.*
[162] *Id.*.
[163] *Id*. at 1215.
[164] *Id*. at 1227.
[165] *Id.*

five hundred times to the costs of buying 24 separate CDs and more than four hundred times to the costs of three CDs."[166] After the calculation, the court concluded that Thomas simply wanted to access free music as a non-commercial infringer, and her actions should not be treated the same as commercial infringers, for their potential gains distinguish enormously.[167]

The *Thomas-Rasset* functions more like a warning to individual end-users. The awarding of horrible statutory damages may still be possible in future litigation. Despite most defendants eventually settled, litigation end with statutory damages is still the major strategy for the RIAA to fight against individual end-users. Although the RIAA claimed success of the strategy on increasing public awareness of illegality of file-sharing and forcing users back to legal markets, some surveys indicated the opposite results by such kind of litigation.[168] For example, a study indicated that the number of people sharing music on P2P platform increased between 2006 and 2007.[169] The International Federation of the Phonographic Industry (IFPI) Digital Music Report 2009 also found that "around 95 percent of music tracks are downloaded without payment to the artist or the music company that produced them."[170] Furthermore, the lawsuits against individual end-users by the RIAA raised general resistance from the public, especially among college students.[171] In summary,

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[166] *Id.*

[167] *Id.*

[168] *See* Moseley, *supra* note 4 at 332.

[169] *Id.*

[170] *Digital Music Report 2009: New Business Models for A Changing Environment*, IFPI, http://www.ifpi.org/content/section_resources/dmr2009.html (last updated Jan.16,2009).

[171] Kim F. Natividad, *Stepping It Up and Taking It to the Streets: Changing Civil & Criminal Copyright Enforcement Tactics*, 23 BERKELEY TECH. L. J. 469, 477 (2008).

pursuing individual end-users by imposing statutory damages is not an effective choice for online copyright enforcement.

b) Abnormal amount of awarding

Awarding statutory damages is under the discretion of courts within the statutory range. Such framework enables flexibility and adjustability in copyright dispute and eases the burden to courts on calculation. However, it also gives rise to unexpected, results: unprincipled, inconsistent and arbitrary awarding.[172] Several online infringement cases, including the aforementioned *Thomas-Rasset*, fully illustrate the anomaly.

Our first example is the *MP3.com*[173], which can be deemed as predecessor of *Thomas-Rasset* in the context of statutory damages. The trial court held that the defendant had willfully infringed copyrights and awarded statutory damages of $25,000 per infringed CD.[174] Given the fact that there were less than 47,000 CDs at issue, the total amount was approximately $118,000,000.[175] This amount was unreasonable based on the fact that no actual damages caused by infringement, because MP3.com actually did not operate its service prior to trial and had not charged fees to its subscribers.[176] Moreover, MP3.com merely streamed CDs that its users originally purchased, which means copyright holders of sound recordings had

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[172] Pamela Samuelson & Tara Wheatland, *Statutory damages in Copyright Law: A Remedy In Need of Reform*, 51 WM. & MARY L. REV. 439, (Nov. 2009).

[173] 92 F. Supp.at 349.

[174] *See* 2000 U.S. DIST. LEXIS 13293, at *18.

[175] *Id.*

[176] 92 F. Supp. at 351.

already obtained some remuneration.[177] William Party commented the awarding in *MP3.com* was "hardly necessary as a detergent for a defendant who had not made a penny in profits off its use, and where plaintiff had conceded that it could not prove any actual damages…"[178]

Regardless of the correlation between statutory damages and actual damages, it seems the amount of $25,000 is a modest figure because it still falls within the range from $750 to $30,000. One recent case, however, has directly linked to the maximum end. In *Macklin v. Mueck,* the defendant operated a poetry website and posted plaintiff's two poems online without authorization.[179] The plaintiff subsequently filed lawsuit against the defendant and moved for award of maximum statutory damages due to willful infringements after the defendants defaulted by not answering the complaint.[180] The trial court ruled for the plaintiff and awarded $30,000 per infringed poem.[181] Obviously, such awarding was plainly punitive and highly excessive compared to the need of compensating copyright holders and deterring future infringement, because the defendants was unlikely to recoup profits from the infringement and the actual damages tends to be modest under the circumstances.[182]

Similar disproportional awarding also imposed to the defendant in *Los Angeles Times, Inc. v. Free Republic*.[183] The defendant, Free Republic, was a "bulletin board"

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[177] *Id*. at 352.

[178] *See* 6 Party on Copyright §22:181, at 22-434 (2009).

[179] 24 F. 3d 1307, 1308-09 (11th Cir. 1994).

[180] *Macklin*, 2005 U.S. Dist. LEXIS 18026, at *3. (S.D. Fla. Jan. 28,2005).

[181] *Id.*

[182] *Id*. at *5-6.

[183] 2000 U.S. Dist. LEXIS 5669 (C.D. Cal. Apr. 2000).

website which enabled their members to comment the news articles posted on its webpage.[184] The plaintiff, Los Angeles Times, contented the defendant facilitated copyright infringement by routinely posting entire copyrighted news articles, and charged for "archive fees" to members for accessing these works.[185] After addressing fair use argument proposed by Free Republic, the court rejected and ruled $1 million amount of statutory damages to the defendant.[186] However, the lawsuit was finally settled between LOS Angeles Times and Free Republic. The amount of their settlement was $10,000, which constitutes the ration of 1:100 to the statutory damages.[187] Compared with the two figures, statutory damages sometimes can be unreasonable.

Needless to say, excessive amount of awarding generates chilling effect on the development of digital communication technology and online platform. Soon after the trial finding of *MP3.com*, the total amount of statutory damages was $53.4 million.[188] Such awarding forced MP3.com into bankruptcy and its scribers could no longer enjoy its online service.[189] Under the circumstances, statutory damages in *MP3.com* in fact removed a multifunctional network platform from the internet and shut down valuable online service, ignoring the need of non-infringing users and future potentiality of that service.[190] After all, a new product or service needs time to

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[184] *Id*. at*1.

[185] *Id.* at* 1-2.

[186] 2000 U.S. Dist. LEXIS 20484, at *6 (C.D. Cal. Nov. 2000).

[187] *See* Samuelson & Wheatland, *supra* note 172 at 462.

[188] *See* 2000 U.S. Dist. LEXIS 17907(S.D.N.Y. Nov.14, 2000).

[189] John Carreyrou & Anna Wild Matthews, *Vivendi Universal to Buy Mp3.com for $372 Million in Cash and Stock*, Wall St. L., May 21, 2001, at A3.

[190] *See* Berg, *supra* note 127 at 270-71.

evaluate the strengths and weaknesses when it enters into market in the early age. More importantly, rarely a device is primarily designed for infringing use. However, excessive statutory damages potentially eradicate innovation without considering its ultimate benefits to society.[191] By awarding disproportional statutory damages, court actually act as an arbitrator on the issue that whether an emerging technology should be remained or removed, which is more suitable for policy makers to determine.

c) Doubtful statutory range

Statutory damages are known for its unique feature compared to other kinds of damages: the statutory range. In theory, courts can award certain amount within the range according to specific cases. Given that the frequent reference to the range in copyright dispute, its importance can be seen from two perspectives. For one, it acts as an indispensable guidance to judges in the calculation of awarding. For another, it becomes a strong signal to all users with respect to their potential liability. However, the statutory range does not present rationality when one looks deeply into the history.

The earliest origin of statutory range can date back to 1895, when advanced printing technology made print physical copies more easily.[192] The newspaper publishers sometimes unconsciously printed millions of infringed copies with subsequent infringement charges against them. As the result, they pushed Congress to set forth an upper end of statutory damages to ease their liability.[193] So, the 1895 Act provided that the amounts from $100 to $5,000 to infringement of copyrighted

[191] *Id.* at 320.

[192] *Id* at 277.

[193] *Id.*

photograph; and $250 to $10,000 to painting, drawing, engraving, printing, etc.[194] Although specially designed to certain types of works, it could still be treated as prototype of the statutory range.

The formal statutory range appeared in 1909 Act, which provided that statutory damages could be awarded no less than $250 and not more than $5,000 as the courts consider just.[195] Such figures were the result of the conference during May 1905 till Mar. 1906, which primarily dealt with the issue of drafting a new copyright law to be presented for next Congress session.[196] In the second session from Nov 1-5 of 1905, an attorney named Samuel Elder from Massachusetts specializing in copyright law proposed his suggestion as to the upper end of statutory damages: "The suggestion I made…purely tentative… is that we have some statutes…with regard to public service corporations, stream railways, where there is a penalty to be enforced by an action in court…finding the road, in case of death, a maximum being established, in our state $5,000…"[197] It was unclear how persuasive his words to other delegates, yet the groups of attendees almost unanimously voted to decide that the upper end of statutory damages should be $5,000.[198] As to the lower end, The Photographers' Copyright League argued that they at least need $250 to enter into litigation and paid for the lawyers.[199] Obviously, such amount has no connection to compensation of

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[194] *See* Act of Mar. 2, 1895, Chap. 194, §4965, 28 Stat. 965, as reprinted in Copyright Enactment, 1783-1906.

[195] *See* Cross, s*upra* note 105, at 1040.

[196] *See* Bergs, *supra* note 127, at 278.

[197] *See* 2 Legislative History of 1909 Copyright Act, pt. D, at 70-1.

[198] *See* Berg, *supra* note 127, at 285.

[199] *Id.*

copyright holders, but merely a basis for initiating a law suit.

The initial version of statutory range in 1976 Act remained the lower end of $250, yet increased the upper to $10,000.[200] However, subsequent amendments enhanced the amounts and did not bear much link to the actual market value of copyrighted works. The Berne Convention Implementation Act of 1988 doubled the statutory range to $500 and $20,000 respectively.[201] The primary goal under such enhancement was to stimulate copyright owners to register their works, because copyright owners need to register their copyrights to file lawsuits and claimed for statutory damages. The possibility of recover doubling damages served as an incentive to copyright owners.[202] The legislative did not show any sign that the enhancement accompanied by the consideration of the actual damages, and such enhancement made statutory damages depart from the primary purpose of damages: sufficient compensation and effective deterrence.

Eleven years later, the Congress passed "The Digital Theft Act" which increased the range to $750~$30,000.[203] This time, Congress justified the enhancement by a different argument: "to provide an effective deterrent for copyright infringement facilitated by advanced digital technology." Instead of compensating copyright holders, the enhancement was intended to make infringements more expensive to infringers.[204] Despite the modified one took deterrence into consideration, it still

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[200] 17 U.S.C. §504(c) (2) (Jan.1978).

[201] *See* Pub L. No. 100-568, 102 Stat.2853 (1988).

[202] *See* S. REP. No. 100-352, at 46-47.

[203] *See* Pub. L. No. 106-160, 113 Stat. 1774 (1999).

[204] *See* H.R. REP. No. 106-216, at 3 (1999).

disregarded the perspective of compensation to copyright holders.

Concluding from aforementioned, the statutory range did not relate to the market value of copyrighted works and the compensation to copyright holders, but to other considerations: initiating a lawsuit; serving an incentive to register; and deterring infringements. Basically, effective copyright damages should not omit sufficient compensation to copyright holders in order to preserve sufficient incentive for future creation. Sufficient compensation requires the damages fully reflect actual damages according to the fair market value of works. Such range, however, did not meet the requirement. Given that the different nature between online websites and offline markets, the range may weaken the effect of compensation to copyright holders. So, statutory range generated from considerations without regard to compensating requirement is unpersuasive and inefficient.

According to all the above mentioned, applying copyright damages to online infringements presents problematic and ineffective results. It is often difficult for a plaintiff to prove their actual damages on one hand, and unlikely to recoup compensation from online infringer's profits on the other hand. The statutory damages, though flexible and costless to implement, tends to be "grossly excessive, unprincipled, and arbitrary."[205] The situation becomes even worse when certain plaintiff, like the RIAA, targets on individual end-users with disproportional awarding. By targeting wrong groups, the RIAA raises negative comments from the public and potentially lost its supporters. Moreover, the statutory range did not take

[205] *See* Samuelson & Wheatland, *supra* note 172, at 441.

compensating requirement into consideration, which can eventually leads to inefficient enforcement.

Chapter IV Rethinking the Foundation of Copyright Remedy: Property rules & Liability rules

Copyright is indispensable component of intellectual property. As distinctive property exploited by right holders, copyright as well as other intellectual property naturally relates to traditional perception of physical property. For one, copyright have static value, which means right holders can exploit copyrighted works for profits after creation. For another, copyright share dynamic feature as physical property because lots of derivative works that seek for future benefits are based on original creation. Under the circumstances, property rules traditionally possess dominant position in the development of copyright law. Specially, copyright holders enjoy highly exclusive rights to exclude others from exploiting the works. Once infringements occur, right holders can enforce their rights to the extreme by requiring courts to impose injunction over infringers. Such kind of remedy makes copyright holders enforce their rights similar to land owners with regard to their lands.

Despite the dominance of property rules, exception still exists in copyright law. Various kinds of compulsory licenses indicate the existence of liability rules. Unlike property rules, liability rules act more like complements in copyright law. Generally, they function better than property rules when personal transaction and enforcement in copyright become expensive and inconvenient. Since liability rules negate voluntary transaction to some extents and usually do not reflect accurate value, copyright holders usually do not prefer to such rules. Copyright users, to the contrary, are willing to support such rules which create more convenience to them. Basically,

liability rules in copyright law mainly design to facilitate transaction due to market failure, and offer ex post compensation. Copyright damages, in theory, are the best examples for ex post compensation which function similar to compensatory damages in contracts.

Remedies in copyright law are critically important to each right holder for effective enforcement. Whether to impose injunction or award damages depends on the option between property rules and liability rules. If copyright holders can easily protect their works like land owners in real world, then injunction should be the better choice because this kind of remedy exercises absolute exclusion and fulfills copyright value greater than damages.

However, the situation significantly changes when it comes to online environment. The evolving landscape indicates distinctive features between online copyright infringement and offline tort of physical property. Unlike infringements of physical property, online “taken” action is costless and time-saving. The progressive, advanced digital technologies facilitate reproduction and distribution. One can infringe copyright easily in his home, which is distinguished from steal of a car. Moreover, high volume compression enhances the value potentially taken by copyright infringers. Since injunctions are too absolute to clearly distinguish infringements from non-infringing use and thus preclude all valuable online exploitation when imposed, imposing injunction upon online infringement gradually becomes less effective. Under the circumstances, awarding damages gradually play a more important role in online copyright remedy. Nevertheless, current copyright

damages over online copyright infringements prove to be problematic and ineffective, especially the statutory damages. Some awarding of statutory damages in case law reflects certain degree of confusion on the nature of damages.[206] Should copyright damages remain intact in online environment? A negative answer is highly possible.

This chapter analyzes property rules, liability rules and their connection to copyright damages as well as the application to online infringements. The first section briefly describes property rules, liability rules and remedies. This description serves as a premise to the following analysis. In the second section, this chapter looks into the interaction between property rules and copyright. The third section analyzes the application of traditional property rules into online environment. In summary, the analysis in this chapter acts as guidance to possible solutions upon current problematic, ineffective online copyright damages.

A. Property rules, Liability rules and Remedy

Property rights are exclusive rights that the holder of certain property can control, use, and recoup benefits from the exploitation. The right holder can exclude anyone from exploiting the property without permission.[207] Such exclusion disregard whether social benefits are enhanced by unauthorized use.[208] For example, an owner has property rights to a house. A buyer who wishes to buy the house needs to negotiate with the owner to get the entitlement, and the value of the house will be increased after the transaction because the house is more worthy to the buyer. Just as

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[206] *See Thomas-Rasset*, 579 F.Supp.at 1210; also *see MP3.com*, 92 F. Supp. at 349.

[207] WILLIAM M. LANDES & RICHARD A. POSNER, THE ECONOMIC STRUCTURE OF TORT LAW 29 (1987).

[208] *Id.*

Calabresi and Melamed mentioned: "…the entitlement protected by property rules that someone wishes to remove the entitlement from the holder must buy from him in a voluntary transaction in which the value of the entitlement is agreed upon by the seller…"[209] Since property right grant substantial power for owner to exclude others, rarely can a third party intervene the owner's exploitation. Property rights in fact create the least extent of external intervention: The owner decides the value and marketing of a given property.[210] Although each buyer is able to set forth how much the property is worthy to him, the seller can simply reject if both parties do not reach satisfactory agreement.[211]

The liability rules, to the contrary, create rights that do not generate excludable power on right holders, but granting them a chance to claim damages for certain injury caused by tortfeasors.[212] For example, one injured in a car accident cannot prevent a car from striking him down before the accident, but can claim damages from the driver according to the extent of harm after the accident. Under the circumstances, liability rules operate only when harmful actions occur, and the injured do not have right to block certain actions. In other word, a person can remove certain entitlement from the initial owner by simply paying an objective price determined by a third party, like the court.[213] The price usually determined based on the hypothesis that how much an initial holder would have sold it. The holder, by contrast, complains

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[209] Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089, 1092 (1971-1972).

[210] *Id.*

[211] *Id.*

[212] *See* Landes & Poser, *supra* note 207, at 30.

[213] *See* Calabresi & Melamed, *supra* note 209, at 1092.

that he would have demanded for a higher price than the hypothetical one.[214] Distinguished from property rights which exclude most external intervention, liability rules actually allow the third party intervention.

One regular issue of remedies is whether it is preferable to protect certain entitlements by means of property rules or liability rules. In general, a property owner prefers to injunction rather than damages because injunction under property rules maximizes the value of a given property. An injunction can impose exclusive effect over the tortfeasor, which cannot be achieved by damages.[215] Such exclusive effect by injunction is highly important to the property owner. It forces all persons who interests in a given property back to the private voluntary transaction, which is under the control of property owner.[216] To the contrary, the damage-only remedy becomes a weaker protection and equivalent to *ex post* forced licensing if the owner is denied injunctions.[217] Because the dynamic nature of property demands for future investment and creation on existing property, lack of exclusive control would likely weaken such incentives to a property owner. Thus, the owner may be less inclined to produce and invest more on his property.

Damages remedy, on the other hand, aims at compensating losses after the transferring of certain entitlement. Based on aforementioned, the taker of certain property often value more than the owner, and is much likely to input more

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[214] *Id.*

[215] Jake Phillips, *eBay's Effect on Copyright Injunctions: When Property Rules Give Way to Liability Rules*, 24 BERKELEY. TECH. L. J. 405, 406 (2009).

[216] *Id*. at 413.

[217] *Id*. at 409.

investment. From societal utility-maximizing perspective, such transferring creates higher social welfare than remain the entitlement intact. A case in point is the creation of derivative works in copyright. Basically, strong copyright protection by injunction promotes innovation. However, excessively broad protection actually leads to counterproductive effects upon copyright creation, because the public rely on original works to create derivative works. According to Judge Pierre Leval, exclusive effects by certain injunction in creative works would prevent references to prior works or the building innovative ideas out of older one and "would strangle the creative process."[218]

The choice between injunction (property rules) and damages (liability rules) usually depends on given situation. Based on Calabresi and Melamed's framework, transaction costs play a determinative role on whether it is more effective to set the price by private transaction or by a third party.[219] Transaction costs often determine whether parties will reach an efficient outcome through bargaining over certain property.[220] Generally, high transaction costs can be prohibitively expensive which produce barriers for parties to eventually reach an agreement on market. Under the circumstances, courts should depend on liability rules and award damages so as to ensure an efficient outcome in the absence of consensual bargaining.[221] Low transaction costs, on the other hand, make bargaining process simple and costless, which enable parties to complete satisfactory transaction on market.

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[218] Pierre N. Leval, *Toward a Fair Use Standard*, 103 HARV. L. REV. 1105, 1109 (1990).

[219] *See* Calabresi & Melamed, s*upra* note 209, at 1106.

[220] R.H. Coase, *The Problems of Social Cost*, 3 J.L. & ECON.1, 15-19 (1960).

[221] *See* Calabresi & Melamed, s*upra* note 209, at 1119.

Transaction costs usually contain two considerations: 1) the expenses and barriers to negotiate with multiple parties and 2) strategic behaviors engaged by property owners.[222] The first consideration can be easily understood: transaction costs would be low when only two parties can readily arrange time and place for negotiation. The more parties involved, the more negotiations need to conduct. Thus increase expenses and barriers for sellers and buyers to reach satisfactory agreement. Basically, liability rules would prevail over property rules when multiple parties engaged in transaction.

The second consideration, strategic behaviors, is more often used for arguments on the advantages of liability rules. Once property owner is granted property-like protection on certain entitlement, he can exercise this power to refuse any access in order to artificially inflate the price. Thus, from the standpoint of transaction, both parties lose the opportunity to enlarge the value of the entitlement. From the perspective of social welfare, the failure of transaction deprives the public of opportunities to enjoy more benefits. Under the circumstances, applying liability rules can effectuate transaction and maximize social value.

B. Property & Copyright

1. Dominance of property in copyright

Law and economics communities have long been considering whether it is preferable to protect copyright by means of property rules or liability rules.[223] Copyright is indispensable component of intellectual property and the term,

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[222] Mark A. Lemley &Philip J. Weiser, *Should Property or Liability rules Govern Information*? 85TEX. L. REV. 783, 786 (2007).

[223] *See* Blair & Cotter, *supra* note 133, at 1613.

"intellectual property", seems to denote that copyright closely connect to property rules.[224] The vogue to define copyright, as one part of intellectual property, belongs to another species of physical property gradually place property rules in dominant position in copyright.

Transaction costs are one of the considerations which incline to property rules in copyright. The dominance of property rules lies in the following advantages: (1) only two parties involving in transaction that are easy to identify; (2) transaction costs are low; and (3) each copyrighted work share distinguished feature and market in different business environments. The pricing decision should be left to both parties in transaction rather than the third party so as to avoid expensive, time-consuming and often inaccurate process.[225] The representative of liability rules in copyright, compulsory license that operated under some statutory rate, is less efficient than property rules.[226] The compulsory license scheme is primarily designed to specific situation when transaction costs are high so that efficient transfer of copyright resource cannot be available. However, such scheme omits market value and may become fallacious premise for copyright damages.

In addition to the consideration of transaction costs, some courts and commentators tend to agree the idea that copyright holders should be entitled to capture full social value out of their exploitation, fearing that free riding by copyright infringements would weaken the incentive for future copyright creation. Their

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[224] *Id.* at 1614.

[225] *Id.*, at 1615.

[226] *Id.*

perception indicated the conclusion that the growth of property rhetoric in copyright is not closely identified with general concept of common law property, but with the very standpoint that property owner should internalize or recoup all social value of said property.[227] Such conclusion originates from the essence of private ownership as solution to "tragedy of commons".[228] The "tragedy of commons" denotes the danger of negative externality to property. For example, a non-private grass land would be over grazed by herds because each shepherd does not care the sustainability of the grass land, eventually make the grass land desolate. Hence, granting private property right over certain entitlement is the solution to reduce negative externality.

Among a variety of negative externalities, free riding is the major problem emphasized by scholars. Free riding refers to a person who obtains benefits from someone else's investment, which undermine the externality-reducing function and goals of property system.[229] The danger lies in that property owner would not further invest sufficient resources in his property if others can easily free ride on the investment. In copyright, free riding usually occurs. Image individual end-users freely download music made by record company without paying a dime; college students upload latest movie in campus network for sharing without permission; P2P file-sharing platform facilitate distribution of copyrighted works without authorization; etc.

In an effort to eliminate free riding, copyright law had been gradually modified to

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[227] Mark A. Lemley, *Property, Intellectual Property, and Free Riding*, 83 TEX. L. REV. 1031, 1037 (2005).

[228] Garrett Hardin, *the Tragedy of the Commons*, 162 SCI. 1243, 1244 (1968).

[229] *See* Lemley, s*upra* note 227, at 1040.

impose more property-like protection over works. Terms of protection have been extended; the scope of rights has been expanded; the number of copyrightable works increases and it is easy to qualify for copyright protection; penalties become harsher.[230] In addition to legislation, courts sometimes awards damages with property-like feature. The result of such awarding, nevertheless, causes counterproductive impact upon copyright enforcement. The *Thomas*[231] and *MP3.com*[232] are exemplary cases which indicate the grossly excessive awarding of statutory damages in online copyright infringement. Reprehensibility in both cases cannot be said high because proof of willfulness was weak. Also, none of the defendants were repeated infringers for which enhanced statutory damages were targeted. The ratio of awarded statutory damages to actual damages was also disproportional.[233]

2. Liability rules: exceptions to copyright

In general, liability rules exist as statutory exceptions in copyright law. For example, §115 provide compulsory licensing of musical compositions for use in phonorecord.[234] § 118 provide compulsory licensing of works for use by public broadcasting entities.[235] §119 provide compulsory licensing for satellite retransmission.[236] All these statutory exceptions usually targets on potential barrier in

[230] *Id*. at 1044.
[231] 579 F. Supp. at 1210.
[232] 92 F. Supp. at 349.
[233] *See* Samuelson & Wheatland, *supra* note 172 at 480.
[234] 17 U.S.C. § 115.
[235] 17 U.S.C. § 118.
[236] 17 U.S.C. §119.

private transaction which increase transaction costs. Under these exceptional circumstances, the third-party price decision can reduce cost and remove barrier more efficient than personal pricing decision.

Theoretically, copyright transaction usually involves a relatively small number of parties, sometimes merely the buyer and the seller. Such situation reduces barriers and expenses in negotiation and facilitates price decision, eventually leads to more optimal outcomes through successful transaction. From comparative perspective, property rules operate more efficient than liability rules under low transaction costs. Liability rules, to the contrary, often promote efficiency when it is relatively easy to determine the price of a given transaction by reference to an objective market value.[237] Under the circumstances, courts can promote efficiency if accurately assess the harm due to infringements imposed upon right holders and apply liability rules that allow the infringing use so long as damages are equivalent to the actual harm.

Contracts cases provide high profile examples. Often courts can easily calculate approximate damages as compensation to injured party based on the objective market value. The underlying purpose is to encourage the efficiency of breach: such compensatory damages both remedy the injured party and transfer the entitlement for more valuable use, because the breaching generates a substitute transaction with someone who values the entitlement more.[238] When considering copyright, nevertheless, the case is different. The actual damages by unauthorized use of

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[237] *See* Calabresi & Melamed, s*upra* note 209, at 1106-08.

[238] Robert P. Merges, *Of Property Rules, Coase, and Intellectual Property*, COLUM. L. REV. 2655, at 2665 (1994).

copyrighted works often lead to inherent confusion. Un-copyrightable idea and copyrightable expression usually merge together, and the line is not clear enough for even judges to differentiate. The subjective merging situation denies the reference to objective market, and courts have difficulty in calculating equivalent damages used for promoting efficiency. So long as the injured party is not sufficiently compensated, the anticipated value of transferring the entitlement is greatly reduced.

As to remedy issue, the preference for property rules by courts makes liability rules less popular in litigation. Injunction, on behalf of property rules, often granted as a matter of course upon proof of copyright infringements.[239] The benefit of granting injunction is to force both parties in litigation back to private negotiation in order for optimal outcomes. Damages-only remedy, as hallmark of liability rules, is equivalent to third-party price decision. According to Professor Merges, damage remedy functions as "ceiling on the amount the right holder can collect".[240] Under the circumstances, if courts set the ceiling lower than expected level, the economic incentives of copyright holders will be undermined. The best way to avoid such situation is "set the price equal to the holder's valuation in separate case, which is of course more efficiently accomplished by a property rules."[241] Accordingly, the holders of copyright protected by property rules often have more incentives than those in liability rules to invest valuable creation. In summary, either to facilitate private transaction or to stimulate the motivation of creation, liability rules are less preferable

[239] 17 U.S.C. §107.

[240] Robert P. Merges, *Contracting into Liability Rules: Intellectual Property Rights and Collective Rights Organizations*, 84 CALIF. L. REV. 1293, 1306 (1996).

[241] *Id.*

than property rules in copyright.

3. Rethinking property in copyright

Although the dominance of property rules in copyright has long been a tradition, the application into remedy issue gives rise to problematic and ineffective results. The assumption that copyright holders should be entitled to capture all social value out of their works stimulates excessive awarding of damages. Actually, none of economics literature denotes that producers can capture the full social value of their products, or owners of certain property can internalize all positive externalities.[242] From free market perspective, producers are entitled to earn sufficient return to cover their costs, including reasonable profits.[243] So long as the price covers marginal costs the producers would continue their production. Fully internalizing positive externalities, on the other hand, will leads to a monopoly world. Monopoly increases returns to producers and brings them closer to all social value, and eventually overwhelm competition in free market.[244] Fearing the danger of monopoly, people design antitrust law to make sure positive externalities are not fully captured by producers, but left to increase social welfare.[245]

Property law never directly recognizes the idea that owners are entitled to capture all positive externalities. Imagine one cultivates scent flowers in his front yard, he cannot charge from passengers-by by claiming they smell the good from his flowers. Property law does not give him such right to expand the control of positive

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[242] *See* Lemley, *supra* note 227, at 1046.

[243] *Id.*

[244] *Id* . at 1048.

[245] *Id.*

externalities. Even if the passengers-by seems to free ride the benefits out of scent flowers, the idea to eliminate such kind of free riding is irrational. After all, positive externalities exist everywhere and producers should not demand to fully internalize them. If free riding means merely acquiring benefits from another's investment, the law should not prohibit such action so long as producers can earn sufficient returns and reasonable profits that cover their marginal costs.[246] In summary, unless effective exploit certain property demand high returns which is equivalent to the full positive externalities, complete internalization must be denied.

The fear and enmity to free riding among property owners largely come from the features of physical property. Firstly, rivalrous uses by multiple parties cause "tragedy of commons" to a given property. Secondly, physical property is finite and can be depleted eventually. The more exploitation, the faster it will be depleted. Copyright, however, do not share the same features as physical property. Consumption of intangible goods is nonrivalrous, which means the use of an idea does not impose any costs on another user and one cannot easily exclude others.[247] The uses by everyone on intangible assets do not preclude others from using the asset or lead to depletion. Therefore, the "tragedy of commons" on physical property disappears when intangible property is taken into consideration. Under the circumstances, the concern and danger of free riding in copyright are substantially weakened.

Free riding on intangible goods occur ubiquitously. The use of certain expressions in copyright does no harm to creators. To the contrary, such use is one of the goals

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[246] *Id.* at 1049.

[247] Mark A. Lemley, *What is Different about Intellectual Property?* 83 TEX. L. REV. 1097, 1099 (2005).

that copyright law intends to promote: copyright protection is essentially designed to maximize societal welfare by promoting literary and artistic progress as well as enrich the public. The only concern under copyright law is that a creator may risk the danger of insufficient compensation to cover their costs, and deprive him of incentives for creation. Since copyright creations always build on pre-exiting works, creators should neither internalize the full value nor seek to monopolize his products in order to leave enough positive externalities for future creation.

Another difference between copyright and physical property is the boundary of rights. In general, both physical and legal boundaries of physical property are clear. One can figure out the boundary of a house by looking at fences that surround it, and the owner can fully understand what kind of rights he can exercise over his house by referring to property law. Under the circumstances, transaction between potential buyers and the house owner is effective because both parties know clearly what they can obtain from the transaction. Protection of this house can also be easy and efficient because all rights are listed under black-letter law. In summary, a clear boundary of rights creates certainty to both private transaction and legal protection.

Considering copyright, however, the situation is significantly different. Intangible creations do not have physical boundary that can be clearly defined. It is impossible to locate “fences” to certain intangible goods like that in real property. A user may know a particular work is copyrighted, but he may have no idea of what kind of use is legal or not. He may comply with the reproduction right while violating public performance right due to his misunderstanding. Moreover, the highly theoretical concept of fair use

doctrine, idea/dichotomy and merger doctrine greatly blur the boundary of legal protection. Most people cannot confidently tell the difference and figure out the boundary except for judges and scholars. Under the circumstances, the boundary of rights either makes enforcement of copyright insufficient to right holders, or overly expands the protection which disproportionately internalizes positive externalities.

Based on the above analysis, copyright actually does not share so much analogy and relevance to the physical property even though copyright traditionally fall within the scope of property. The major concern in property, free riding, does not justify the overly expanded protection of copyright. For one, free riding under copyright promotes underlying goal of copyright law. For another, the improper introduction of such idea into online copyright damages leads to problematic and ineffective results. Moreover, the uncertain boundary of rights worsens copyright enforcement to a great extent. Obviously, copyright damages should not operate under the misunderstanding of property rules.

C. New landscape emerges: online environment

Digital technologies not only create new challenges to copyright law, but question the application and reasonability of property rules for online copyright enforcement. The landscape of creation and dissemination of copyrighted works has significantly evolved due to revolutionary technological progress.[248] Duplicating an electronic copy online saves time with the aid of personal computers. Such updating, compared to photocopy machine, efficiently reduces marginal costs of mass production so that

[248] *See supra* contents in Chapter II.

increases potential profits to copyright holders by lowering their costs. On the other hand, a user with personal computer can easily upload a perfect and high quality copy of works onto internet for sharing. Such practice means unauthorized distribution online becomes easier than disseminating pirated copies in an offline flea-market because of the efficiency, quality and low costs by digital technologies.

The underlying rationale of property-like remedy in copyright is to effectively deter infringers so as to force them back to private transaction, eventually make the price close to the fair market value. Under the circumstances, both copyright holders and users should satisfy with the result on private negotiation, because they obtain what they need and the negotiation engenders the least costs.

When it comes to online environment, the underlying goal remains the same. In general, most copyright holders regard their works valuable personal property online and seek to exclude other online users from accessing or exploiting their works without authorization. In addition to explore online market and establish new business models, they also resort to copyright law to enforce their digital copyright. All their actions focus on eliminating any sort of free riding facilitated by advanced technologies and internalizing all positive externalities, just as they do in offline world. Such actions, however, depart from the basic concept of property rules and cause problematic situations to online copyright enforcement.

These problematic situations are largely due to the misunderstanding of property rules, and the results often give rise to counterproductive effects. To illustrate, consider the issue of injunction imposed on online search engines. As is known to all,

search engines depend on special software to categorize websites and download specific web-pages for indexing. When a search engine is charged for engaging copyright infringements by making given copies, it is difficult to enjoin it from making given infringing copies while simultaneously allowing it to make non-infringing ones.[249] Such requirement will leads to shutdown of that search engine. Eventually, such property-like remedy negates legal users' accessibility and reduces efficiency by the search engine.

A case in point is *Perfect 10 v. Google, Inc.*[250] Perfect 10 owned copyrights on pornographic photos and sued Google for copyright infringement because some of the websites indexed by Google contained unauthorized copies of its photos, and Google also displayed some low-resolution "thumbnail" photos which infringed Perfect 10's copyright.[251] The district court held that the website caching and linking to infringing websites were not copyright infringement considering the basic nature of search engine,[252] but concluded that the "thumbnail" photos in Google infringed copyright because these copies might interfere with the sales of low-resolution photos for downloading to cell phones.[253]

The problem to Google was that it was nearly impossible to stop only the display of infringed "thumbnails" photos without interfering other legal operation of search engine. From the standpoint of Perfect 10, an injunction that prevented all photos by

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[249] *See* Lemley & Weiser, *supra* note 222, at 800.

[250] 416 F. Supp. 2d 828 (C.D. Cal. 2006).

[251] *Id.* at 832-34.

[252] *Id*. at 844.

[253] *Id*. at 849.

Perfect 10 in Google was more preferable and effective to make sure no infringement occurred anymore. As a matter of fact, reliable methods that Google could comply with such an injunction would either be to shut down the photos search image altogether, which blocked enormous amount of non-infringing content for access; or to check specific content for infringement by hand, which slowed down the process significantly and increased expenses to Google.[254] Realizing the difficulty to Google, the court imposed a preliminary injunction upon Google.[255] Instead of totally enjoining Google, the court offered a highly flexible standard which was similar to the DMCA "notice and takedown" provision.[256] In adopting such limited injunction, the court departed from the absolute exclusion under property rules and accepted certain degree of free riding online in order to maintain normal operation of the search engine.

In addition to search engines, P2P file-sharing platforms offer a high profile example. Generally, an injunction upon P2P platforms covers non-infringing materials as well as infringing ones and forces those platforms to shut down. In the context of *Napster*[257], such an injunction did not give rise to many losses to online users because nearly 99% of uploading materials were infringing.[258] When it comes to *Grokster*, however, the injunction made nearly 10-30% non-infringing materials unavailable online.[259] Obviously, the enforcement by injunctions online often results in shutting

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[254] *See* Lemley & Weiser, *supra* note 222, at 801.

[255] *Perfect 10*, 416 F. Supp. at 851.

[256] *Perfect 10*, No. CV 04-9484AHM (C.D. Cal May 8, 2006).

[257] *Napster, Inc*., 239 F.3d 1004.

[258] *Id*. at 1021.

[259] *Grokster*, 545 U.S. at 1158.

down of P2P file-sharing platform and depriving online users of fair opportunities to access to non-infringing materials. The decision by Supreme Court on *Grokster* actually denoted inappropriate understanding of property rules in online environment.

Based on aforementioned, one can conclude that property-like remedy, injunction or current copyright damages, function well when the scopes of property rights are well defined. In the context of physical property, this does not add up to difficulty and problems, because one can easily differentiate exact scope of certain physical property and the impact of such remedy usually does not exceed the scope. However, copyright are ill-defined, not only because one cannot accurately know whether a work is protected but because the statutes sometimes are ambiguous so that one cannot figure out whether certain aspect of a work is protected.[260] Moreover, it is difficult to judge whether a particular use is infringing or not, and imposing such remedy will lead to unreasonable intervention to normal use.

Internalizing all positive externalities online without distinguishing the nature will exclude both infringing and non-infringing use of works, and deprives online users of potential opportunities for fair use or transformative enhancement. Thus narrows the public domain for future creation. Not all free riding online are counterproductive. Unauthorized use of protected works, though sometimes infringed copyright, often leads to the creation of more valuable derivative works. From the perspective of social welfare, permitting certain degree of unauthorized use in exchange of more broaden public domain is better than monopolizing intellectual

[260] *See* Lemley & Weiser, *supra* note 222, at 794.

product by individuals so long as the creators still have incentives to invest their production. Obviously, such incentives do not demand all positive externalities as compensation. Therefore, the idea of internalizing all positive externalities is no longer appropriate to the enforcement of online copyright.

Chapter V We should be on the right track: Suggestions and Solutions

Current copyright damages to online infringements prove to be problematic and ineffective. As Chapter III indicates, damages upon actual damages or/and profits cause difficulty for both parties to implement in litigation, and the calculation and apportionment cause uncertainty and speculation. Statutory damages, on the other hand, mainly designs to ease the difficulty for courts in judgment. However, frequent use of such damages leads to unexpected results: excessive amount of awarding, targeting wrong people, and unreasonable statutory range. The endeavor by copyright holders to enforcement do not raise much public awareness of online copyright protection among social groups, but trigger negative comments to their enforcement strategies. Moreover, such strategies denote that copyright holders still seek for eliminating all free riding and try to internalize all positive externalities. Under the circumstances, the implementation of statutory damages seems gradually contain the feature of property-like remedy even though such damages should normally operate under liability rules in theory.

According to the analysis in last chapter, property rules are generally more likely to promote efficiency then liability rules when implemented by copyright holders for enforcement. It seems that imposing injunctions over infringements should be the most approximate choice with regard to promoting effeciency. Such kind of remedy, to the contrary, depart from the correct idea that property owner should not internalize all positive externalities. When considering online environment, injunctive remedy

become more problematic.[261] Compared with injunctions, damages can preclude such problems because damages primarily focus on sufficient compensation to injured copyright holders. So long as the compensation is sufficient to cover the losses, copyright holders should not claim for additional benefits. Therefore, part of positive externalities will be freely left to use and the public domain will be expanded.

Since copyright damages can potentially become more efficient then injunctions to online infringements, developing an effective damages model is indispensable. Sufficient compensation is not the only perspective that effective copyright damages should take into consideration. In theory, copyright law aims at maximizing social welfare by promoting cultural production, increasing valuable creation and enriching public available resources. Therefore, an efficient model of copyright damages should cover all the underlying considerations from social perspective as well as individual perspective. For one, lack of sufficient compensation deter potential authors from creating. So, the number of cultural production will be less than the optimal requirement.[262] As a result, the public domain will be narrower and less works can be used as "building blocks" for future creation. For another, overcompensation to copyright holders is almost equivalent to allowing they monopolize all social value, leading depletion of the public domain. The critical point of damages model lies in the balance of interests between each online player.

This chapter explores the efficient model of copyright damages to online copyright infringements, and uses such model as general principle to specific

[261] *See supra* contents in Chapter. IV.

[262] *See* Phillips, *supra* note 215, at 408.

problems. The first section discusses the basic framework of efficient copyright damages. This discussion serves as a premise to the following analysis. In the second section, this chapter specifically discusses solutions to given problems analyzed in former chapters. The solutions largely focus on statutory damages which cause major problems and debate as well as looking into solution of damages upon actual damages or/and illegal profits.

A. What is efficient copyright damages model?

How do effective copyright damages work? Basically, two perspectives need to be considered: incentives and deterrence. Incentives primarily relate to the action and choice of copyright holders. In theory, ideal incentives can trigger copyright holders to create valuable works and invest more on future creation. As a result, the society is able to benefit from the cultural progress. Insufficient incentives, equivalent to ineffective copyright protection, usually force the number of works far from the optimal requirement. Since other free riders will take advantages of efforts by creators and publishers, copyright holders have to cease their cultural production because they cannot recoup their investment from exploitation. However, insufficient incentives do not follow that high level of incentives is the best choice. High level of incentives often demands strong protection of copyright, which otherwise deter the creation of derivative works that build upon preexisting works.[263]

At the same time, deterrence chiefly targets on the actions and choices of free riders: copyright infringers. Generally, effective deterrence can control the frequency

[263] *See* Blair & Cotter, *supra* note 133, at 1606.

and harm of infringements, and thus preserve benefits of creation to copyright holders. Copyright holders usually treat these benefits as directive incentives, and their actions will be affected by benefits. They will continue their creation If the benefits satisfy them. Otherwise they would rather be free riders than keep on creating. From the standpoint of infringers, their actions and choices depend on whether their profits affected by deterrence. They often continue infringements if they perceive the deterrence is slight compared to their available profits. To the contrary, infringers generally are willing to stop infringements if deterrence adds up the costs to a point that legal transaction can be more profitable.

1. Preserving the incentives

Copyright holders seek to maximize their benefits by creating valuable works. Before they decide to formally invest the creation, they need to consider several uncertainty issues that may affect the final outcomes: how much costs will be incurred of the creation; whether such creation will be successful; how much the profits will be if the work is successful; etc. The first consideration is the opportunity of success. In theory, copyright holders are unlikely to invest an unsuccessful creation because they cannot recoup benefits from such investment. In reality, almost every specific creation, novel, movie or music, must depend on *ex ante* market survey in order to anticipate potential costs/benefits and reach a success. Therefore, analysis that focuses on expected profits upon success of creation is more reasonable, because the failure of creation does not generate incentives to copyright holders.

After the analysis of initial stage, the second consideration is the costs of creation.

Basically, the costs of writing a text book or other expressive works (i.e. drama; novel; music composition, etc.) contains two categories. The first category is the costs of producing actual copies.[264] The costs vary according to specific features of available technologies. Considering reproducing a book: a printer machine increases the costs with the increasing number of physical copies; an electronic copy, on the other hand, saves more costs than a physical copy. In addition, distributing and restoring physical copies also add costs of creation.[265]

On the other hand, the costs of producing actual copies can be detected and anticipated even though the differences exist in every technology. Imagine one copyright holder writes a novel online and seeks to make profits through his creation. He can negotiate with other online users; reach an agreement on the amount of payment; and send an electronic copy of his novel to the user. Under the circumstances, the cost of producing actual copies to the copyright holder is significantly low. All he need is a personal computer and valid network connection, and all the transaction can be finished between potential buyers and sellers. Thus copyright holders can eliminate the need to negotiate with professional intermediary, such as publishers, to facilitate reproduction and distribution. This eventually save substantial amount of costs and in turn increase available benefits.

The second category is the costs to create a work. Unlike the costs of producing actual copies, the costs to create closely relates to subjective elements. The costs

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[264] WILLIAM M. LANDES & RICHARD A. POSNER, THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW 37 (2003).

[265] *Id.* at 37.

primarily consist of author's efforts and time plus publishers and editors' efforts to soliciting and editing.[266] Such costs may vary from person to person because each creator has personalized method of creation and inequivalent capability in the process of production. For example, writing a drama is much easier and less costless to a professional writer than an amateur.

Despite the uncertainty, the costs to create still have certain theoretical grounds to measure. The degree of copyright protection would affect the costs to create. Basically, the less copyright protection is, the easier a derivative creator can borrow from preexisting work.[267] Thus significantly reduce the costs to create a new work. On the other hand, if copyright protection add up to a high level, then subsequent creator has to either engage in costly search to look for resources in public domain or seek for licensing by costly negotiation from copyright holders. Both actions increase the costs to create. As a result, such costs reduce the incentives for creators to invest and lower the optimal number of works. Therefore, copyright damages as *ex post* protection should be adjusted to maintain sufficient incentives and optimal output of creation.

The costs of creation indirectly affect the incentives to copyright holders. Only the expected profits can directly trigger copyright holders to continue their creation. To calculate the expected profits, one needs to use actual profits minus costs of creation. The final amounts are the available benefits to copyright holders. So, every copyright holder strives to maximize the amount of expected profits by enhancing the quality of works, promoting the sales, and reducing costs. The more profits there are,

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[266] *Id.*

[267] *Id*. at 68.

the more incentives will be, eventually leads to optimal number of production.

Such ideal situation, however, rarely exists because of the rampant free riding: copyright infringements. Infringers do not incur the costs to create, and even the costs of producing actual copies by infringers can be significantly less than creators. The costs of creation to infringers are greatly lower than that of copyright holders. Under the circumstances, infringers can drive the price close to or lower than marginal costs to compete with copyright holders in market. Such situation no doubt distorts normal copyright transaction, and reduces expected profits to copyright holders. To preserve enough incentives, copyright damages should be devised to maintain the expected profits to copyright holders unchanged.[268] One way is to sufficiently compensate copyright holders so that they are not worse off as a result of infringements. So long as the compensations cover costs of creation plus reasonable profits, copyright holders will continue to invest on creation.[269] Another method is to deter infringements so that infringers are not better off so that expected profits can be largely left unchanged.

2. Deterring infringement

From the standpoint of effective deterrence, the ideal copyright damages should render infringers unprofitable. An infringer can be profitable either when he conducts an infringement without being detected; or, the final damages imposed on the infringer are much less than his profits. In reality, an infringer can either be detected or not. The probability lies in whether a right holder is willing to invest in detection,

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[268] *See* Blair & Cotter, *supra* note 133, at 1619.

[269] From free market perspective, producers are entitled to earn sufficient return to cover their costs, including reasonable profits. So long as the price covers marginal costs the producers would continue production; *also see supra* contents in Chapter. IV.

which increases enforcement costs. Such action reduces expected profits of creators because additional enforcement costs are incurred. To maximize expected profits, creators should minimize or avoid all potential costs.

To invest in detection can be one option, yet not a reasonable one. A more rationale option is to update copyright damages so that such remedy can make infringers worse off. When an awarding of damages that is equivalent to profits by infringement makes an infringer no better off, the infringer will be indifferent to the choice between infringement or not.[270] When the damages exceed the profits, the infringer will be deterred because he suffered mush losses than legally obtaining license from a copyright holder. After all, most individuals take all possible outcomes into consideration before they make decisions. People choose the object that provides the greatest reward at the lowest cost.[271]

How to calculate the amount of damages according to the probability of detection? Basically, the damages should be multiple to the profits because the probability ranges from zero to one (a hundred percent).[272] A general principle is that the optimal multiple should be the reciprocal to the probability of detection.[273] Imagine that regular damages to parking violators are $30, and the probability of being caught is 0.5 (50%). Since only half of violators can be caught and subsequently pay the damages, the rest will still commit violation. To effectively deter the violation, the

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[270] *See* Blair & Cotter, *supra* note 133, at 1620.

[271] *Rational choice theory*, WIKIPEDIA, http://en.wikipedia.org/wiki/Rational_choice_theory (last updated May.23, 2012).

[272] *See* Blair & Cotter, *supra* note 133, at 1620.

[273] *Id*. at 1621.

amount of damages should be $60.

The probability of detection, however, is more approximate than accurate. The probability is the numbers of detected infringements divided by total number of infringements. The problem lies in that undetected infringements affect the accurate number of total infringements.[274] Moreover, even if one can accurately calculate the probability, the measurement of profits is complicated. Only the profits attributed to infringements can be treated as infringer's profits for calculating the optimal damages. Due to the inaccuracy and complication, optimal amount is difficult to calculate, yet the baseline exists: a low probability of detection favors high amount of award.

B. The Solutions: Two perspectives for problems of copyright damages

1. Solutions targets upon statutory damages

a) Limit the excessive amount of statutory damages

The widely negative comments of current statutory damages should be the "frequently unprincipled, arbitrary, and excessive amount of awarding."[275] Such awarding not only imposes unjust burden upon individual online users who merely want to gain personal enjoyment, but on some OSPs that have persuasive fair use arguments. Obviously, it needs to be limited.

To ease the problematic situation, judges should exercise their discretion over statutory damages wisely and prudently to avoid excessive awarding. §504 (c) of 1976 Act clearly provides that "…as the court considers just…"[276], which indicates

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[274] *Id.*

[275] *See* Samuelson & Wheatland, *supra* note 172, at 439.

[276] 17 U.S.C. §504(c).

judges should award statutory damages within appropriate amount. Specifically, judges should take precedents into consideration when judging online copyright infringements. These precedents showed that some awarding of statutory damages proved to be quite moderate, while others are equivalent to actual damages of copyright holders.[277] Even when judges enhanced the awarding, the amount usually tended to be two or three times of actual damages.[278]

The rationale in the precedents can be meaningful instructions to statutory damages. For example, when judges believed that defendants infringed copyright with a fair use argument, they sometimes award the minimum statutory damages. In *Infinity Broadcasting Corp. v. Kirkwood*, the defendant unauthorized transmitted copyrighted radio through telephone line that made its customers view the advertisement.[279] The court awarded minimum statutory damages upon defendant because the fair use claim was plausible to court, and no actual damages existed to the plaintiff.[280]

Courts also award minimum statutory damages when infringements merely caused little damages to copyright holders and generated minimal profits to infringers.[281] In *Quinto v. Legal Times of Washington, Inc.*, the court awarded minimum statutory damages against the defendant who unauthorized duplicated the plaintiff's articles.[282] The court reasoned that $250 could sufficiently compensate the plaintiff and deterred

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[277] *See* Samuelson & Wheatland, *supra* note 172, at 474.

[278] *Id.*

[279] 63 F. Supp. 2d 420, 421 (S.D.N.Y. 1999).

[280] *Id*. at 427-28.

[281] *See* Samuelson & Wheatland, *supra* note 172, at 474.

[282] 551 F. Supp. 579 (D.D.C. 1981).

the defendant because the article was written by a law school student published on the school journal, and did not seek for commercial benefits.[283] Similarly, *Doehrer v. Caldwell* provided a closely analogous rationale. The defendant reproduced the plaintiff's cartoon in his political campaign without permission.[284] The court rejected maximum statutory argument by the plaintiff, because the infringement only caused harm to plaintiff's reputation without actual financial damages.[285] The court further noted that "…rigid application of statutory damages leads to absurd results…its deterrence should not be converted into a windfall where plaintiff only suffered nominal damages…"[286]

Although the above precedents mostly occurred in the pre-digital age, some analogous features exist in online environment. First of all, online infringements by OSPs always have certain degree basis of fair use. For example, commentators argued that MP3.com should have a plausible fair use argument: It only streamed CDs originally purchased by subscribers, so copyright holders already have recouped financial benefits.[287] Moreover, MP3.com did not begin its service completely and no evidence showed the plaintiff had suffered any actual harm due to the infringement.[288] As for OSPs, their profits do not bear direct connection to online infringements. Their profits either come from fees charged from advertisement or subscription fees of

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[283] *Id.* at 582.

[284] 207 U.S.P.Q. 391, 393 (N.D. Ill. 1980).

[285] *Id.*

[286] *Id.*

[287] *See* Garfield, *supra* note 314, at 18.

[288] *Id.*

certain services. None of the two can be attributable to infringement.[289] Apparently, these facts should be squarely fit into the framework of awarding minimum statutory damages.

Take individual users into consideration, the analysis should be the same. It is doubtful to conclude that Thomas gained substantial financial benefits by simply downloading twenty-four copyrighted songs in her home. Furthermore, Thomas action was due to "her desire to obtain music for her own use".[290] Obviously, individual end-users like Thomas do not seek for commercial gains. Non-commercial online infringers like Thomas hardly cause substantial damages to copyright holders. Their actions primarily concentrate on enjoying online music for personal comforts. Though they indeed commit direct copyright infringements, their culpability should not deserve harsh penalty. Modest amount of statutory damages should be a reasonable option.

Another analogous feature is that the impact on copyright holders by online infringements. Currently no direct, convincing proofs indicate that online copyright infringement account for the major portion of lost sales on content industry. The ratio ranges from 0.7 percent to over fifty, varying according to specific circumstances.[291] Sometimes the actual damages to content industry are nominal, given that they have different markets and can shift benefits from one to another so as to make up for the losses.

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[289] *See supra* contents in Chapter. III.

[290] *See Thomas*, 579 F. Supp. at 1227.

[291] *See* Oberholzer-Gee & Strumpf, *supra* note 136, at 12-13.

Efficient copyright damages should deter infringement by proper degree of monetary punishment. Proper amount of damages can make infringers worsen off because infringers cannot make any profits by infringements. Since most individual users rarely obtain financial benefits through infringements, reasonable amount of damages are enough to make them unprofitable and deter future infringement. Accordingly, the disproportional amount of awarding in *Thomas-Rasset* was extremely improper.

Someone may argue that the number of online users is astronomical and the probability of being caught is trivial compared to the total amount. Although individual users largely do not financially benefits from infringements, the probability of detection demands excessive damages awarding to deter online infringement. Lack of harsh financial penalty, online copyright free riding cannot be terminated. Such argument is highly popular among copyright holders because they sometimes realize the difficulty to trace all unauthorized use of their online works. The costs of detection impose heavy burden on them and make it an impossible mission.

It is true that the probability of detection to individual users is relatively small, yet not impossible. Remember the RIAA initiated to file lawsuits against individual end-users who illegally distributed copyrighted music through P2P file sharing platform in the beginning of 2003.[292] Approximately 35,000 users were sued during the five-year period.[293] Technological advance made the RIAA capable of detecting individual online users. Copyright holders now actually have the capability to detect

[292] *See* Moseley, *supra* note 4, at 315.

[293] *See* Mcbride & Smith, s*upra* note 154, at B1.

infringement. The chance of being caught of online infringers substantially increases. Under the circumstances, a relative high probability of detection favors modest amount of award.

On the other hand, the important consideration lies in whether deterrence to online infringement only depends on harsh monetary penalty. Among all the caught users, only twelve went to litigation.[294] Most disputes result in settlement. The settlements between the RIAA and online users usually amounted to thousands, which were much less than the disproportional award in *Thomas-Rasset*. Obviously, the RIAA did not rely on copyright damages for deterrence. Their purpose was to raise public awareness of protecting online copyright and "educate fans about the law and the consequences of breaking the law."[295] Therefore, effective deterrence does not require high amount of damages to online copyright infringement.

Modest amount of statutory damages can still preserve sufficient incentives to copyright holders. As aforementioned, online creators can easily copy, store or distribute electronic copies through the internet in costless way. Progressive digital technologies greatly reduce the costs of producing actual copies. Meanwhile, copyright holders nowadays can either individually manage their works online or conduct transaction with the aid of collective society, like ASCAP or BMI. These new business models also lower the costs of creation. Moreover, P2P file-sharing platform, though sometimes illegal, indirectly increase the quantity of available resources and expand the public domain. As a result, the costs to create are reduced and in turn

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[294] *See* Ciolli, *supra* note 155, at 1003.

[295] *See* RIAA , *supra* note 134.

stimulate the production of optimal output.

b) Targets on correct party

Online copyright infringements committed either by OSPs or individual online users. So, copyright holders have to target either one or both. Current practices, filing lawsuits against individual end-users by the RIAA, prove to be problematic and costly. From the standpoint of effective enforcement, OSPs are more suitable than individual users for copyright holders to target on.

OSPs conducted either direct or indirect infringement online. As for direct infringement, OSPs naturally should be the targeting party due to their culpability. When it comes to indirect infringement by OSPs, secondary liability, the situation needs further examination.

Online service providers, as the intermediary on the internet, are not greatly distinguished from their offline predecessors, given that they can both easily to monitor and control copyright wrongdoing.[296] The intermediary, like flea market owners, can supervise the market at low costs and exclude persons who commit copyright infringement from his market.[297] Considering online environment, the situation is highly similar. Despite American Online once had hard time to differentiate unlawful transmission of copyrighted music from legitimate transmission, [298] recent advanced technologies enable OSPs to monitor users

[296] Douglas Lichtman & William Landes, *Indirect Liability for Copyright Infringement: An Economic Perspective*, 16 HARV. J. L. & TECH. 395, 404 (2003).

[297] *Id.*

[298] *Id*. at 404-05.

increasingly in cost-effective methods.[299] Since monitoring activities become more inexpensive, OSPs can actually control infringing actions online. For example, OSPs can suspend internet service to a given accused infringer or even terminate his account on its website as penalty. Because social benefits partly lie in more sufficient protection of online copyright, OSPs should bear the burden to exercise their duty in order to facilitating enforcement.[300] So, targeting on OSPs with the menace of penalty can better force them to perform their duty.

Even if digital technologies in the near future make OSPs difficult to monitor copyright infringements, OSPs still are capable of making them under control. An OSP can increase the rate for services and shift the costs back to users. Such strategy though seems unfair to legal users, will smooth down the burden to OSPs. The increasing benefits can be resources to afford high amount of damages on the one hand and discourage illegal use on the other hand. Such discouragement would eventually decrease the quantities of online infringement on a given OSP. After all, infringers want to exploit online works at low or no cost. They become legal users if they are willing to pay for the use, and are more sensitive to price increasing than legal users.[301] In summary, targeting on OSPs is a reasonable option for copyright holders to enforce their rights.

Pursuing intermediary rather than direct infringers had already been proved as a cost-effective method before the emergence of OSPs. Early in the 1980s, many

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[299] Ronald J. Mann & Seth R. Belzley, *The Promise of Internet Intermediary Liability*, 47 WM. & MARY L. REV. 239, 268 (2005).

[300] *See* Lichtman & Landes, *supra* note 297, at 404.

[301] *Id* at 405.

companies sold software tools that facilitated computer users to pirated copyrighted games.[302] The copyright holders of the games could either sue these companies for indirect infringements or users for direct infringements.[303] Due to expensive costs of detection and litigation upon millions of culpable computer users, copyright holders eventually choose to sue a handful companies due to the relatively low costs.[304]

Based on above facts, copyright holders online should pursue OSPs rather than targeting on millions individual infringers. A lawsuit against an OSP like Napster or Grokster can give rise to positive benefits that not only protect copyright holders but enhance public awareness of online protection, and meanwhile cut off the channel for future distribution online by forcing these OSPs shut down or go bankruptcy. Suing individual users, by contrast, do not generate the above benefits but merely rise resistance and negative comments.

Some commentators argue that suing OSPs eventually leads to over-deterring innovation and block future benefits brought by technology progress.[305] However, technology communities did not show much concern like these commentators. Shortly after the Ninth Circuit pointed out that Napster were liable for secondary liability in online music piracy, new online services arose to substitute Napster.[306] Some of them established their operations outside US territory in order to avoid any liability.[307]

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[302] *Id*. at 408.

[303] *Id.*

[304] *Id.*

[305] *See* Berg, *supra* note 127, at 317-21.

[306] *See* Lichtman & Landes, *supra* note 297, at 408-09.

[307] Todd Woody, *The Race to Kill Kazaa*, WIRED, http://www.wired.com/wired/archive/11.02/kazaa.html (last updated Feb.2,2003).

Others updated their technologies so that no clear party would be liable for infringements even if it was uncertain how effective the updating would be.[308]

c) Clarifying the guidance

Most of the problematic situations we have discovered in statutory damages actually arise from the merger of two policy requirements in a single framework without clear guidance. As Paul Goldstein explains, "statutory damages are justified because actual damages are so often difficult to prove, only the promise of a statutory award will induce copyright owners to invest in and enforce their copyrights and only the threat of a statutory award will deter infringers by preventing their unjust enrichment."[309] In other words, statutory damages operate to compensate copyright holders when damages and profits are difficult to prove on one hand, and deter egregious infringers by high level of awards on the other hand. In general, compensation aims at preserving incentives to copyright holders, and deterrence focus on reducing infringer's profits. These two requirements, nevertheless, can be separated. Preserving effective incentives does not demand high level of awards, so long as the compensation is sufficient to cover the costs as well as reasonable profits. On the other hand, modest level of award can still deter infringements when infringers are not profitable. Therefore, a possible suggestion is to legislatively modify current provisions of statutory damages by separating into two subsections. Each subsection can be given more detailed guidance and focuses on specific purposes.[310]

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[308] Douglas Litchman & David Jacobson, *Anonymity a Double Edged Sword for Pirates Online,* THE CHICAGO TRIBUNE, http://www.law.uchicago.edu/news/lichtman041300(last updated Apr.13, 2000).

[309] *See* Paul, *supra* note 151, at 14:41.

[310] *See* Samuelson & Wheatland, *supra* 172, at 509.

As to enhanced damages, the related subsection can contain guidance that describes specific egregious conditions that justify the high level of awards according to relevant precedents. For example, willful and repeat infringes with constructive knowledge of infringements should be imposed enhanced damages.[311] Such guidance should be treated more like exception when courts award statutory damages, and cautiously exercise so as to avoid unjust and inconsistent results.

Current maximum end is $150,000 per infringed work. The amount multiply the accused quantity of infringed online works often leads to astronomical figures, which is disproportional to actual damages of copyright holders. Therefore, the discretion of courts upon awarding enhanced damages should be limited, especially in online infringement. Another complementary modification is to change current maximum end from $150,000 to two or three times of actual damages as in other intellectual property damages. Basically, awarding two or three times of actual damages can both sufficiently compensate copyright holders and punish egregious infringers. However, such modification depends on reliable calculation of actual damages of copyright holders, which is sometimes difficult.

On the other hand, conditions regarding innocent infringements should better be modified so that courts can have flexible discretion to lower the minimum awards accordingly. A defendant becomes an innocent infringer only when he proves that "his infringing conduct was made in a good faith belief of his innocence, and he was reasonable in holding that good faith belief."[312] Such requirement essentially is

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[311] *Id.*

[312] MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT §13.03 [A][1][b] (Matthew

difficult for individual infringers to prove given that most of them have the intent to free ride online works. However, the point lies in whether individual users cause great harm and make many profits by online infringement. The fact, as discussed above, indicates the opposite conclusion. Individual users rarely financially benefits from unauthorized actions and cause much harm to copyright holders. As in P2P file-sharing cases, even the statutory minimum $750 per infringed work is still disproportional to individual users and impose unduly burden on them.

Lack of guidance also means prospective online users of copyrighted works have little basis to predict whether they would pay enhanced amount of damages or minimum amount if their actions are found infringement.[313] Such unpredictability, in turn, leads to chilling effect upon potential users who need to build on available resources for creation under the menace of harsh damages even if they have persuasive fair use basis.

2. Solutions to damages on actual damages/profit

Effective copyright damages should sufficiently compensate copyright holders in order to preserve incentives for creation. In theory, the amount of damages should be above the actual damages in order to achieve that purpose. However, exact measurement of actual damages can rarely be accurate in copyright dispute, and the situation exacerbates in online environment. As a result, most copyright holders prefer to statutory damages as monetary remedy to enforce their rights. Such preference, in

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Bender ed. 2009).

[313] Alan E.Garfield, *Calibrating Copyright Statutory damages to Promote Speech*, 38 FLA. ST. U. L. REV. 1, at 42-43 (2010).

turn, causes frequent use of statutory damages as well as relevant problems.

In addition to the solutions that focus on current statutory damages, an alternative to ease the situation is finding reliable criteria for damages calculation. A high profile example exists in US patent law: reasonable royalty as damages. §284 of US Patent Act provides that the court may award "damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer…"[314] The provision expressively indicates the primary purpose of reasonable royalty is to compensate patentees and function as the bottom line of patent damages which offers the least amount to patentees, given that the licensing royalty approximate the fair market value to the use certain invention.[315] The US Supreme Court defined reasonable royalty in patent damages as "the difference between the patentee's condition and after infringement, and what his condition would have been if infringement had not occurred."[316] When a patent infringement does not distort sales of a patentee, the patentee can still claim for the royalty fees that he could have reasonably charged from the infringer for a license to use the patent at issue. Under the circumstances, patentees can always recoup compensation to cover their costs.

In theory, the calculation method focuses on a hypothetical private transaction between the plaintiff and the defendant. It does not matter whether there is an actual transaction between the two parties. The strength of the methods is self-evident: it

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[314] 35 U.S.C. §284.

[315] Brian J. Love, *The Misuse of Reasonable Royalty Damages as a Patent Infringement Deterrent*, 74 MO. L. REV. 909, 915 (2009).

[316] *Aro Mfg. Co. v. Convertible Top Replacement Co*., 337 U.S. 476, 507 (1964).

makes the calculation of actual damages easier and more plausible, because the licensing fee is pre-determined by the seller. The amount of royalty based on fair market transaction and best reflect the value of works. So, using reasonable royalty as damages can better compensate copyright holders than awarding inaccurate statutory damages.

Considering the application in patent law, reasonable royalty can be proper standard for calculation actual damages. The purpose of reasonable royalty is to make right holders not worse off as the result of infringements. As discussed in Chapter IV, copyright holders are willing to continue to create works so long as the costs of creation are covered. As rational persons in market, copyright holders must set the price of work above the costs of creation in order for profits. Under the circumstances, reasonable royalty as damages can make copyright holders profitable. On the other hand, reasonable royalty is determined by copyright holders based on all market elements, and originated from private transaction between copyright holders and users. Hence the price comes closely to real value of works. By introducing reasonable royalty into damages, copyright holders would not be worse off due to infringements. Therefore, reasonable royalty as damages preserve the incentives for creation.

Awarding damages on reasonable royalty decreases costs in copyright litigation. Judges can save time by simply refer to the reasonable royalty, rather than ordinary time-consuming calculation of actual damages. Moreover, by narrowing possible references to damages, the final awarding will be more predictable to both plaintiffs and defendants. Based on predictable results both parties may settle their copyright

dispute rather than litigation. This also increases the efficiency of litigation.

Someone may questions the deterrent effect on infringers by reasonable royalty as damages. Because of its predictability, an infringer may not be deterred when he can earn profits after paying the damages. Under the circumstances, infringements still occur. Moreover, copyright holders who filed the claim burden litigation costs. Even though reasonable royalty can cover the costs of creation, the litigation costs still impose heavy burden on them. According to a survey conducted by American Intellectual Property Law Association (AIPLA) in 2003, the median costs of copyright litigation were $298,000 upon discovery stage and $499,000 upon trial and appeal stage.[317] Under the circumstances, they may be less likely to pursue infringement due to such burden. Their unwillingness, in turn, eventually stimulates online copyright infringement. To ease the concerns, a relative proper solution is to give courts discretion to enhance the amount of damages two or three times to actual damages in order for deterrence.

Another controversial issue is how to determine the appropriate royalty to online copyrighted works. Setting the reasonable royalty by governmental bodies can be one of the options, just like compulsory license in copyright law. However, such rates are debatable and usually outdated, because the governmental bodies do not participate in private market transaction thoroughly and the rates cannot reflect the supply and demand curve in online environment. Moreover, reasonable royalty functions when infringed works circulate in market under a uniform licensing framework. For most

[317] *See* Natividad, *supra* note 171 at 478.

individual creators, however, a uniform online licensing framework is difficult to negotiate. Each creator can claim a specific price based on his own perception on his works. Lack of such standard, courts would be trapped in complicated proof procedure.

To be reasonable and reliable, the standard can rely on existing online business models given that each kind of online work targets on different users groups and reflect the market demands. The success of online business models can best reflect true value of works on the internet. For example, In addition to selling hardware, Apple Company offers online business service: the iTunes. The iTunes online store provides downloading, managing and buying games, music and media.[318] The mechanism is "pay per-use", that is, users pay for the works they access. Different works have respective price on its online store: songs are charged for $1.29 per-use, TY shows for $1.99 or $2.29, and movies for $14.99.[319] The prices are acceptable by most online users and create huge financial benefits to the Apple. The company generates revenue at the rate of $100 million a year with 10 percent growth annually.[320] Therefore, when awarding damages based on reasonable royalty, courts can take such price into consideration.

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[318] Steve Lohr, *the Power of the Platform at Apple*, THE NEW YORK TIMES, http://www.nytimes.com/2011/01/30/business/30unbox.html (last updated Jan.29, 2011).

[319] The prices listed are not thorough to each kind of works. To view detailed information, visit http://www.apple.com/itunes/charts/songs/.

[320] *See* Lohr, *supra* note 319.

Chapter VI Conclusion

Current copyright damages, *inter alia*, are primarily designed for copyright infringements in the pre-digital age. With the emergence of digital technologies, online copyright infringements function in a way quite different from offline infringements and impose great difficulty to right holders for enforcement. Ease of reproduction, widespread distribution, and high volumes compression significantly challenge traditional perceptions of copyright. These revolutionary progresses change the production and distribution of our culture. In response to such challenge, the standard of liability had been updated in order to fit online infringement into legal regulation.

On the other hand, copyright damages as final remedy still remain intact. Recent online cases have showed problematic and unjust results because of the implementation of copyright damages, regardless the very nature of digital technologies. Specific problems are as follows: difficulty in proving actual damages; no plausible profits can be found; targeting on individual end-users who are less culpable; excessive, inconsistent awarding of statutory damages compared to actual damages of plaintiffs; and questionable statutory range under statutory damages. These problems not only depart from the original purpose of copyright remedy, but cause negative comments and resistance from the public.

The problematic results are largely due to the misunderstanding of property rules in copyright damages. Property rules traditionally are dominant in copyright because remedy under property rules can force infringers back to transaction, which eventually

adds up efficiency. Nevertheless, the idea of internalizing all positive externalities of works is deeply rooted in almost every copyright holder. From offline physical world to online electronic realm, such idea does no change. Based on such idea, copyright holders always wish to recoup all externalities by *ex post* damages when infringements occur. Copyright damages, as a remedy under liability rules in theory, gradually contain effects of property rules when awarded in practice. In fact, property rules do not require the owner internalize all positive externalities. Therefore, copyright damages should functions under the idea of optimal remedy: sufficient compensation to copyright holders so as to preserve incentives for further creation; make infringers worse off and effectively deter them. So long as the above purposes can be achieved, no more awards need to be granted.

It is time to reassess current copyright damages to online infringements: Limit the excessive awarding of statutory damages, and cautiously determine the amount according to actual damages and deterrent effect; target on large online entity rather than individual end-users in order to enforce right just and effectively; and clarify the guidance of statutory damages both to the willful and the innocent infringements in order to add predictability to statutory damages. On the other hand, difficulty in calculation of actual damages online still exists. To ease the problem, introducing reasonable royalty as measurement standard can be one plausible option. Although the deterrent effect may be weaken under such damages, courts can save time in calculation and make the final awarding more predictable to parties involved in dispute. In summary, Current copyright damages should be modified in order to better

adapt to advanced technologies in online environment.

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