

Grokster and Efficiency in Music

SETH ROBERT BELZLEY[†]

ABSTRACT

The recent case of *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd.* presented the Supreme Court with the dilemma that is faced each time copyright law is revised: How are the competing interests of creators, innovators, and the public best balanced? This Article analyzes the dilemma in light of technological advances that have placed the need for music companies in doubt. In an era when musicians themselves can fill the roles previously filled by music companies, the argument for copyright protection, which has never encouraged the production of music anyway, is weakened even further. But even if copyright for music is to be retained, the threat of P2P systems should not be exaggerated since many market developments appear to be marginalizing the technology as a means of piracy at the same time that the technology is being put to more legal and beneficial uses. In the end, the Court was correct in *Grokster* to refuse the temptation to more fiercely protect the music industry.

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I. INTRODUCTION

¶1 On June 27, 2005, the Supreme Court handed down its opinion in one of the most widely followed cases of the summer, *Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.*¹ That decision is the latest in a long battle waged by the entertainment industry to control the proliferation of Peer-to-Peer (“P2P”) software that allows people to easily share copyrighted digital video and music files.² Actually, the software allows people to share more than just music and video files—it is written to allow users to share all kinds of files, from Supreme Court briefs to photos of Great-Aunt Sue, and can be adapted in practically limitless ways.³ But its predominant use, and the use which has by most accounts driven the success of the software, has been the ability of users to obtain copyrighted material easily and with lower costs.⁴

¶2 In an enormous victory for the entertainment industry, the Court in *Grokster* vacated the Ninth Circuit’s ruling, which had affirmed the district court’s grant of

1. 125 S. Ct. 2764 (2005).

2. For background information on P2P technology, see Ranjan B. Kini, *Peer-to-Peer Technology: A Technology Reborn*, INFO. SYS. MGMT., Summer 2002, at 74.

3. *Grokster*, 125 S. Ct. at 2770–71. For more on the uses of P2P, see *infra* notes 130–132.

4. *Grokster*, 125 S. Ct. at 2772 (asserting that the evidence in the case indicates that ninety percent of the material on Grokster is infringing).

summary judgment to *Grokster*.⁵ The lower courts had relied upon long-standing doctrine created in *Sony Corp. of America v. Universal City Studios, Inc.*⁶ to find that the defendants were not liable for the copyright infringement committed by those using their products.⁷ In anticipation of the Court's decision, many commentators had suggested that the time had come for the *Sony* doctrine to be modified.⁸ But the Court resisted such modifications, opting instead to base its decision on a clarification of *Sony*—that secondary liability cannot be found without a showing of intent, which cannot be inferred from the mere production of an article that has non-infringing uses, but which can be shown by active inducement of copyright infringement.⁹ Essentially, the Court carved out an exception to the protection offered to technology innovators in *Sony* to allow liability when “one . . . distributes a device with the object of promoting its use to infringe copyright, as shown by clear expression or other . . . steps taken to foster infringement”¹⁰

¶3 In *Grokster*, the Court recognized the careful balance that copyright law and *Sony* strike between encouraging technological innovation and encouraging the production of creative material:

MGM and many of the *amici* fault the Court of Appeals's holding for upsetting a sound balance between the respective values of supporting creative pursuits through copyright protection and promoting innovation in new communication technologies by limiting the incidence of liability for copyright infringement. The more artistic protection is favored, the more technological innovation may be discouraged; the administration of copyright law is an exercise in managing the trade-off. . . .

The tension between the two values is the subject of this case, with its claim that digital distribution of copyrighted material threatens copyright holders as never before, because every copy is identical to the original, copying is easy, and many people (especially the young) use file-sharing software to download copyrighted works. This very breadth of the software's use may well draw the public directly into the debate over copyright policy As the case has been presented to us, these fears are said to be offset by the different concern that imposing liability, not only on infringers but on distributors of software based on its potential for unlawful use, could limit further development of beneficial technologies.¹¹

¶4 Recognizing this essential tension between protecting creative works and protecting technological innovation, this article argues that the *Grokster* Court got the balance

5. *Grokster*, 125 S. Ct. at 2782–83.

6. 464 U.S. 417 (1984).

7. *Grokster*, 125 S. Ct. at 2774.

8. See, e.g., Jesse M. Feder, *Is Betamax Obsolete?: Sony Corp. of America v. Universal City Studios, Inc. in the Age of Napster*, 37 CREIGHTON L. REV. 859, 910–11 (2004); Douglas Lichtman & William Landes, *Indirect Liability for Copyright Infringement: An Economic Perspective*, 16 HARV. J.L. & TECH. 395, 404–05 (2003).

9. *Grokster*, 125 S. Ct. at 2778–80.

10. *Id.* at 2780.

11. *Id.* at 2775 (citations omitted).

exactly right—that is, they got it right by leaving the market balance alone. The facts of *Grokster* suggested seriously egregious flouting of the copyright laws by a company that had tailored its business model to fall within the protection offered by Supreme Court precedent and essentially believed that this business model gave the company *carte blanche* to encourage the violation of copyright laws without the risk of liability. With such facts, all intuitive senses of justice compel a finding of liability, and the *Grokster* opinion is tailored to reach that result in such cases. But the opinion stops far short of disrupting the balance that has been struck by *Sony* and has for the most part allowed harmonious encouragement of both technological innovation and creative works. In a time when judicial activism¹² is considered a violation of judicial conduct on par with “Lochnerizing,”¹³ the *Grokster* Court should be applauded for its judicial minimalism.

¶5 In deciding the *Grokster* case, the Supreme Court had the opportunity to deliver to the entertainment industry a huge win in its battle to control digital content. Before the digitization of music, the advent of the Internet, and the creation of P2P technologies, music piracy was limited by the constraints of sound degradation and distribution logistics in ways that prevented piracy from seriously affecting the profits in the music industry. But in the P2P era, the problem of copyright infringement has grown so widespread that there is no other issue which so concerns the music industry today. And while suing the direct infringers of copyright, such as those who copied music tapes in their basements and sold them on the street, was a viable, if mostly unnecessary, option before the P2P era, today it would be impossible for the music industry to sufficiently control P2P piracy¹⁴ through targeting infringers themselves.¹⁵ As the Court noted,

[t]he argument for imposing indirect liability in this case is, however, a powerful one, given the number of infringing downloads that occur every day using StreamCast’s and Grokster’s software. When a widely shared service or product is used to commit infringement, it may be impossible to enforce rights in the protected work effectively against all direct infringers, the only practical alternative being to go against the distributor

12. One need only watch a few minutes of any Senate judicial nominee confirmation hearing to notice the importance and taboo nature of judicial activism to Senators.

13. See David E. Bernstein, *Lochner’s Legacy’s Legacy*, 82 TEX. L. REV. 1, 1 (2003) (“The ghost of *Lochner v. New York* haunts American constitutional law. Almost one hundred years after the Supreme Court decided the case, *Lochner* and its progeny remain the touchstone of judicial error.”).

14. Sharing copyrighted music over P2P systems is definitely a violation of copyright. Basic copyright doctrine establishes that a copyright holder has the right to prevent additional copies of content from being made. When a P2P user copies a file from another user, a new copy of the file is made in violation of the copyright. In *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004, 1014 (9th Cir. 2001), defendants claimed that fair use (an affirmative defense to copyright violation) applied in the P2P context. But that claim was soundly rejected by the Ninth Circuit. *Id.* at 1014–19. While the Supreme Court could declare P2P copying fair use, most commentators believe that P2P copying should not be considered fair use, making such a Supreme Court holding highly unlikely. See, e.g., J. Cam Barker, Note, *Grossly Excessive Penalties in the Battle Against Illegal File-Sharing: The Troubling Effects of Aggregating Minimum Statutory Damages for Copyright Infringement*, 83 TEX. L. REV. 525, 531–33 (2004) (explaining the illegality of file sharing copyrighted music and the inapplicability of the fair use doctrine).

15. *Grokster*, 125 S. Ct. at 2776.

of the copying device for secondary liability on a theory of contributory or vicarious infringement.¹⁶

¶6 If the Court had altered *Sony* to allow courts to find secondary liability¹⁷ for Grokster and similar companies whose innovations allow users to violate copyright laws, the entertainment industry would have had a powerful tool for controlling digital content by suing software intermediaries. But such a revision would have also presented software innovators with the terrible dilemma of deciding whether to pursue a new idea and risk liability, or instead to avoid the innovation altogether, since if the innovation could potentially be used to violate copyright law, the innovator could face huge liability for its creation. Imposing such a dilemma on innovators would have caused an obvious chill on innovation.

¶7 This article analyzes the Supreme Court's choice from an efficiency perspective. It argues that the effect that the rise of P2P will continue to have on music will not necessarily lead to a loss for society, even if copyright incentive is decreased by the rise of P2P and similar technologies. In contrast, a Supreme Court decision that introduced the specter of liability for innovators of P2P technology would have significantly retarded the advance of a technology, an advance that has enormous efficiency potential. This article argues that the *Grokster* decision got it right—the Court recognized these competing effects and shaped liability in a way that struck an appropriate balance between protecting copyright and protecting the innovation of useful software technology.

¶8 This article is limited to the effects of the *Grokster* decision on the production of music. While P2P systems also threaten other creative industries, chiefly the movie industry, those industries operate through entirely different compensation and cooperation structures. The effect of P2P and the attendant decrease in copyright incentive on the production of movies must be evaluated separately in light of that structure.¹⁸ Such an analysis must wait for another day.

¶9 Part II begins by briefly describing the rise of P2P technologies as a way of setting the stage for the current conflict. Part III examines the relationship between copyright

16. *Id.* For more on when the imposition of secondary liability is appropriate, see Reinier H. Kraakman, *Gatekeepers: The Anatomy of a Third-Party Enforcement Strategy*, 2 J.L. ECON. & ORG. 53 (1986); Reinier H. Kraakman, *Corporate Liability Strategies and the Costs of Legal Controls*, 93 YALE L.J. 857 (1984). For a modern application of these guidelines to Internet intermediaries, see Ronald J. Mann & Seth R. Belzley, *The Promise of Internet Intermediary Liability*, 47 WM. & MARY L. REV. 239 (2005) (developing a framework for determining which Internet intermediaries are best suited to bear liability in any given transaction), available at <http://papers.ssrn.com/abstract=696601>.

17. By secondary liability I mean either vicarious liability or contributory liability, each of which holds a third party responsible for the conduct of the two parties who are directly responsible for the transaction in question. For an application of the factors involved in these two separate claims, see *Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.*, 380 F.3d 1154, 1160–66 (9th Cir. 2004).

18. It should be noted, however, that the concerns of the movie industry may be exaggerated also. For instance, the latest Star Wars movie, *Revenge of the Sith*, was released onto P2P networks the day before the movie opened in the theaters. Joshua Chaffin & Scott Morrison, *Star Wars Prequel Feels Force of Online Pirates*, FIN. TIMES, May 20, 2005, at 29. Nevertheless, the movie broke box office records. Sharon Waxman, *'Star Wars' Breaks Box-Office Records*, N.Y. TIMES, May 23, 2005, at E3.

and the production of music. The digital revolution in music has had a profound effect on the industry. Increasingly, musicians are less dependent on the industry for the creation and distribution of music. This is an extremely important development that must be recognized when one weighs the value of protecting copyright in music. Part IV examines the changes in copyright protection that have taken place over the last decade. These changes include increases made by Congress, as well as the advancement of technological means of protecting copyright, which have been spearheaded by the industry. The effect that P2P technologies may have on reducing copyright should be analyzed in light of these other recent increases in copyright protection, not in isolation from them. Part V analyzes the normative approach that one should take to music. Music cannot be considered a good in itself. Rather, we must analyze how music contributes to society through the creation of welfare. We must remember how music contributes to society when we craft rules to protect it. Part VI describes the wealth and welfare effects of P2P systems. Again, it is vital to understand the value of P2P technologies when we design liability rules that could threaten the existence of those technologies. Part VII examines the potential for creating a legal system that will allow the music industry and P2P systems to co-exist. Because the market seems able to reconcile the competing interests of creative content and technology itself, the minimalist approach of the Court in *Grokster* is appropriate. Part VIII briefly serves as a synopsis and conclusion.

II. THE RISE OF PEER-TO-PEER

¶ 10 Little has panicked an industry so much as the rise of file sharing over the past five years has panicked the entertainment industry. P2P file sharing technology was brought to consumers with the release of Napster in 1999.¹⁹ Napster quickly became hugely popular among the technologically sophisticated and musically inclined because it allowed individual users to share music files quickly and easily.²⁰ The allure of Napster lay not only in the fact that music was available for free through Napster but also in the ease with which individuals could access music.²¹ Instead of driving to the nearest music store, music lovers could sit in the privacy of their own homes and download music to their computers.²² Thus, Napster both created an environment of free culture and revolutionized the way music was delivered to listeners.

¶ 11 Napster also piqued the interest of the music industry, which saw the increase in music sharing as a direct threat to its business model. Understandably, the entertainment industry was scared by the power of file sharing technologies. Music and movie companies make money by controlling content.²³ If a person wants to listen to music, he

19. *How to Pay the Piper*, *ECONOMIST*, May 3, 2003, at 62.

20. *A&M Records, Inc. v. Napster, Inc.*, 114 F. Supp. 2d 896, 901–02 (N.D. Cal. 2000).

21. *Id.*

22. *Id.*

23. See LAWRENCE LESSIG, *FREE CULTURE: HOW BIG MEDIA USES TECHNOLOGY AND THE LAW TO LOCK DOWN CULTURE AND CONTROL CREATIVITY* 216–18 (2004) (explaining the value of a copyright extension, and extension of the right to control content, to the hypothetical estate of poet Jack Frost).

has several options, but each option involves some sort of payment. Either the listener can wait for the music to be played on the radio, in which case payment consists of the nuisance involved in being targeted by advertisements, or he can pay to purchase a CD of the music. Likewise if a person wants to watch a movie, he can wait for it to come on television, where he will again pay by being subjected to advertisements, or he can pay to watch the movie either in a theater or on video. With P2P technologies, viewers have another option: they can download content onto their computers without paying entertainment companies for the content. This process of cutting the entertainment industry out of the transactional loop threatens the industry's ability to maintain the status quo. And when the status quo changes, there is always a strong chance of creative destruction.²⁴ The rulers of the old kingdom will not always be the rulers in a changed world.

¶ 12 As far as the music industry was concerned, transferring files over Napster was simply a technologically advanced form of theft. The industry had no doubt that Napster facilitated the copyright infringement of its users, which occurred every time a music file was copied without authorization.²⁵ Thus, the industry set out to destroy file sharing. But how? Targeting individual filesharers seemed to be both practically difficult and a potential public relations disaster.²⁶ Luckily, Napster was a perfect target for a lawsuit. The design of Napster, which utilized a central database to facilitate the transfer of files,²⁷ meant that by knocking Napster offline, all file sharing through Napster would stop. Thus, the industry targeted Napster itself and convinced a federal district court²⁸ and the Ninth Circuit²⁹ that Napster was liable for vicarious copyright infringement because it benefited financially from the copyright infringement and had the ability to supervise the infringing activity. Facing huge liability, Napster reached a settlement with the music industry, thus ending unbridled music file sharing through Napster.³⁰

¶ 13 Only months after the demise of Napster, two other file sharing technologies rose to replace the failed father of file sharing. These file sharing technologies, Grokster and Morpheus, were designed so that no centralized database was necessary, thus removing the ability of any single company to monitor the infringing activity and precluding Napster-style liability.³¹ In response to these new P2P networks, the entertainment industry pursued a number of different strategies. First, it targeted individual copyright

24. "Creative destruction" is a term coined by Joseph Schumpeter to explain the process that occurs when innovation creates a new paradigm and in the process destroys the old one. JOSEPH A. SCHUMPETER, *CAPITALISM, SOCIALISM AND DEMOCRACY* 83 (3d ed. 1950).

25. See *supra* note 14 and accompanying text.

26. Of course, the industry eventually decided that targeting individual copyright infringers was necessary notwithstanding the public relations effects. See Amy Harmon, *Subpoenas Sent to File-Sharers Prompt Anger And Remorse*, N.Y. TIMES, July 28, 2003, at C1. But these efforts were in response to the failed pursuit of systems like *Grokster*. See *infra* notes 35–39 and accompanying text.

27. *Napster*, 114 F. Supp. 2d at 906.

28. *Id.* at 921–22.

29. *Napster*, 239 F.3d at 1024.

30. *Key Events*, DALLAS MORNING NEWS, Dec. 20, 2003, at 9A.

31. *Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.*, 259 F. Supp. 2d 1029, 1041 (N.D. Cal. 2003).

infringers,³² a strategy that proved only marginally successful.³³ The industry also began to recognize the Internet as a powerful medium for distributing content and invested in new digital rights management (DRM) technology.³⁴ Finally, the industry sued Grokster and the other new P2P services, arguing that even if traditional vicarious liability principles did not apply to the new networks, liability should nonetheless be found in order to prevent the demise of the music industry.³⁵ The industry argued that such liability could be found under several theories, including the theory that the networks were designed to be used for copyright infringement while being immune from traditional liability and that such animus should not be protected by the courts.³⁶ These arguments were not successful in the district³⁷ or circuit³⁸ courts. The Supreme Court, however, opened the door, but only a little, to liability for companies that actively encourage the use of their products for infringing purposes.³⁹ While the standard for “intentional inducement”⁴⁰ of copyright infringement must still be clarified, early evidence suggests that the standard will allow for liability in the most egregious cases while protecting innovators whose products can be used for infringing purposes so long as those innovators do not promote their products for such uses.⁴¹

III. COPYRIGHT AND THE PRODUCTION OF MUSIC

¶ 14 *Grokster* presented a case in which the justification for copyright is particularly vulnerable to attack. The plaintiff music companies in the case argued that without protection against P2P, the music industry would collapse, musicians would no longer produce music, and society would suffer. But this argument inherently claims, without analysis, that the music industry is essential to the creation and distribution of music. This Part challenges that assertion. If in fact the music industry is not necessary for the creation of music, then there is less reason to be alarmed by the risk that P2P technologies pose to the industry.

A. Justifications for Copyright Protection of Music

¶ 15 Copyright protection imposes a deadweight loss on society by creating a limited

32. See Harmon, *supra* note 26, at C1.

33. See Brian Hindo & Ira Sager, *Music Pirates: Still On Board*, BUS. WK., Jan. 26, 2004, at 13 (reporting the limited impact of the RIAA lawsuits on music downloading activities).

34. See *infra* notes 83–100.

35. *Grokster*, 259 F. Supp. 2d at 1046. For two good primers on the development of the legal issues surrounding P2P systems, see Jeffrey G. Knowles, *The Debate over Sony-Betamax and Peer-to-Peer File Sharing: Will the Supreme Court Settle It in MGM v. Grokster?*, COMPUTER & INTERNET LAW., Mar. 2005, at 1, and Elizabeth Miles, Note, *In Re Aimster & MGM, Inc. v. Grokster, Ltd.: Peer-to-Peer and the Sony Doctrine*, 19 BERKELEY TECH. L.J. 21 (2004).

36. *Grokster*, 259 F. Supp. 2d at 1046.

37. *Id.*

38. *Grokster*, 380 F.3d at 1166.

39. *Grokster*, 125 S. Ct. at 2780.

40. *Id.*

41. See *Monotype Imaging, Inc. v. Bitstream Inc.*, 376 F. Supp. 2d 877, 883-84, 892 (N.D. Ill. 2005) (applying the *Grokster* standard and refusing to find secondary copyright infringement liability for a software company whose software had been used to infringe the copyright of a font designer).

monopoly.⁴² This deadweight loss is highly inefficient if it is not justified by its incentive effect on the creation of music. Music, like all information goods, has the attributes of a public good—it is non-rivalrous and non-excludable.⁴³ The creator of a public good cannot, in the absence of legal protection, extract the full value of his creation because the good will be freely consumed by some (because it is non-excludable) without diminishing the rest of the world's ability to consume the good (because it is non-rivalrous).⁴⁴ Thus, conventional justifications for copyright in music argue that if society wants musicians to create music, we must offer the incentive of a limited monopoly and pay the attendant cost of the deadweight loss.

¶ 16 This public goods justification for copyright protection has been applied to all different types of creative work without closely analyzing the relationship of the financial incentives created and the production of the creative material. Academics typically think of copyright as a direct incentive for those who produce creative works. In music, however, it is essential to realize that while copyright may provide an incentive for music companies to enter the market, it does not provide an incentive for musicians themselves to create music. In fact, some sources find that the average musician today who produces music for a record label does not receive any of the copyright revenue from the music sales.⁴⁵ So why do musicians produce music? There is a dearth of research on the motivations of musicians to produce music. Certainly many musicians produce music out of a passion for their art.⁴⁶ This explanation is underscored by the hundreds of musicians who continue to produce music and offer it to the world despite the dearth of realistic opportunities to strike it rich. And other musicians, despite knowing that the prospects of making money from copyright are slim, may produce music in pursuit of the possibility that their music will top the charts,⁴⁷ thus allowing them to make money from sales of collateral products and touring.⁴⁸ Copyright itself does not function as a significant, direct enticement for musicians to produce music.

¶ 17 Direct incentive or not, throughout the history of the music industry, copyright incentives were essential for the production of music because they were necessary to entice rational businesses to invest in the production of music. Traditionally, the music

42. See William W. Fisher III, *Restructuring the Fair Use Doctrine*, 101 HARV. L. REV. 1661, 1700–05 (1988) (describing the justification for copyright, the deadweight loss imposed by copyright, and the search for the optimal level of copyright).

43. *Id.*

44. *Id.*

45. DIGITAL MEDIA PROJECT, CONTENT AND CONTROL: ASSESSING THE IMPACT OF POLICY CHOICES ON POTENTIAL ONLINE BUSINESS MODELS IN THE MUSIC AND FILM INDUSTRIES 23, available at http://cyber.law.harvard.edu/media/files/content_control.pdf (Jan. 2005) [hereinafter DIGITAL MEDIA PROJECT]; Raymond Shih Ray Ku, *The Creative Destruction of Copyright: Napster and the New Economics of Digital Technology*, 69 U. CHI. L. REV. 263, 306–08 (2002).

46. See WILLIAM W. FISHER III, PROMISES TO KEEP: TECHNOLOGY, LAW, AND THE FUTURE OF ENTERTAINMENT 80 (2004) (“[M]ost of our great musicians—from Mozart to Coltrane to Clapton—seem to have been motivated more by love of the art, devotion to the music culture, or hunger for recognition than by dreams of great wealth.”).

47. Michael Abramowicz, *An Industrial Organization Approach to Copyright Law*, 46 WM. & MARY L. REV. 33, 100 (2004).

48. See DIGITAL MEDIA PROJECT, *supra* note 45, at 22 (describing the prospects for musicians of earning money from ancillary products).

industry was essential to the creation of music. While musicians often survived hand-to-mouth by playing in bars and small venues, the music industry plays a necessary role in bringing popular music to the masses by finding talent, fostering and guiding that talent, and recording and promoting albums.⁴⁹ While musicians may have continued to create music without incentives, the music industry, which was essential to the creation and distribution of quality music, would not invest money without the prospect of financial payoff. Thus, copyright protection ensured that the music industry stood to benefit enough from the creation and distribution of music that it would continue to participate in those activities.

B. Changing Relationships

¶ 18 The digital revolution in music brings the traditional relationship between copyright and the production of music into question. In the past, music labels were necessary for the production and distribution of high quality music. And copyright was necessary to incentivize record labels to fill these roles, which required an enormous investment of money. By syllogism, copyright was necessary for the production of quality music.

¶ 19 Today, however, musicians themselves can fill some of the roles that were previously filled by the record labels. Advances in digital technology allow musicians to record music using little more than a few microphones and a computer.⁵⁰ Home recording studios can be built fairly inexpensively, perhaps for as little as \$30,000, and can produce music of a very high quality.⁵¹ By contrast, recording labels typically charge artists hundreds of thousands of dollars to record a single album.⁵² With such a divergence in the costs of recording, the status quo smacks of inefficiency at best and outright thievery at worst.

¶ 20 Traditionally, music companies were essential to the distribution of music. In an offline world, distribution required producing thousands of physical copies of the music, shipping that physical media to stores, and running stores to sell media to the public. In an online world, distribution of music is as easy as loading one copy of an MP3 onto a website. This process is in fact how many musicians distribute their music today.⁵³ Of course, the efficiency gains of online distribution speak for themselves.

C. Continuing Contributions of the Music Industry

¶ 21 The digital revolution has certainly decreased the dependence of musicians on record labels, and therefore called into doubt the need for copyright, which exists almost

49. *Id.* at AI-1 (describing the traditional relationship between musicians and record labels).

50. FISHER, *supra* note 46, at 22 (noting that “a laptop and less than \$1000 worth of additional hardware and software” may be sufficient).

51. Ku, *supra* note 45, at 306 (“[A] competitive professional home recording studio can be built for approximately \$30,000, giving artists even greater flexibility to record their own music.”).

52. *Id.*

53. See, e.g., The Jacob Fred Jazz Odyssey, Music, <http://www.jfjo.com/info.php?i=1054> (last visited Nov. 17, 2005).

entirely to entice record labels to help produce music. In light of these changes, some commentators have claimed that record labels are now entirely unnecessary.⁵⁴ Such a claim borders on the disingenuous and is certainly an oversimplification. Record labels continue to contribute something to society even if a large justification for their existence has been severely undercut by the digital revolution.

¶ 22 While musicians can record music themselves, professional recording studios certainly do add some additional quality to recordings. The basic economic theory of specialization seems to have been forgotten in the zeal to claim independence from record labels. The professional recording process entails several steps that are accomplished not by computers, but by talented professionals who are not only technically proficient, but also add an element of art to the process. Mastering, one stage in the process, deals with minor editing such as fades into and out of songs.⁵⁵ And while this stage would seem to be quite simple, an entire industry has emerged to fill the role,⁵⁶ testifying to the difference quality mastering can make to a discerning ear.

¶ 23 Record labels also continue to serve a signaling function for consumers, making the selection of music easier. For example, if a person knows that he likes the sound of Dr. Dre and Eminem, both of whom are signed by Interscope Records, then that person might also like 50 Cent, who is also signed by Interscope Records.⁵⁷ In the past, this signaling effect may have been more important than it is today. That an artist is signed to a particular label still does a great deal to indicate the quality of the music, but the Internet can do a much better job of directing consumers to different types of music. Websites that review music abound,⁵⁸ and listening to small samples of music is easy on programs such as iTunes or on websites such as Amazon.com. Nevertheless, the signaling effect of record labels may still provide some benefit.

¶ 24 Another benefit of record labels may be the aggregation of copyright licenses. Typically, when a musician signs to a label, it gives that label the power to license the music for distribution. This aggregation makes it much easier for a company like iTunes to collect copyright licenses so that it can sell music through the iTunes interface. The job would be much more difficult if iTunes had to negotiate with each individual musician, though it is foreseeable that in the absence of record labels as we know them, other companies might rise to perform this same function.

¶ 25 Record labels also continue to find and develop young talent, though by most accounts this function has suffered recently in light of the current struggle of the

54. See Ku, *supra* note 45, at 307.

55. Man Alive Music Productions, CD Mastering & Audio Restoration, <http://www.manalivemusic.com/master/> (last visited Nov. 17, 2005).

56. For example, the author's brother, Jonathan Belzley, works for a company called The Mastering Lab, located in Hollywood, California. See The Mastering Lab, <http://www.themasteringlab.com> (last visited Nov. 17, 2005).

57. See Interscope Records, Artists, <http://www.interscope.com/artists/> (last visited Nov. 17, 2005).

58. See, e.g., Rolling Stone, Reviews, <http://www.rollingstone.com/reviews> (last visited Nov. 17, 2005).

recording industry.⁵⁹ To the extent that record labels develop new talent, the labels are adding to the amount of music available to society.

¶26 Finally, record labels promote the musicians they have signed. Musicians may be motivated by the promise of fame. Promotion helps to make musicians famous. And with fame comes the opportunity for musicians to make money through the sale of collateral materials or through high profile tours. For the record label, however, promotion is necessary because of the financial investment the labels have made in the production of music. Musicians working independently might invest much smaller amounts in promotion than do record labels. So while the interests of musicians coincide with the interest of record labels in this area, there is a divergence in the intensity of that interest, which may lead to an inefficient level of promotion.

¶27 While the music industry continues to contribute to society in the ways described above, it should be noted that each of these functions could be performed by other actors in the marketplace. If record labels no longer existed, musicians could easily hire marketing firms to assist in marketing. And to make it easier for musicians to sell their music, musicians might contract with intermediaries who could aggregate copyright licenses to negotiate with companies like iTunes. When the Supreme Court considers the need to protect copyright revenue, it should recognize that the end of copyright probably would not lead to the end of the production of music; rather, it would lead to the end of the music industry as we know it today. While the industry does continue to contribute to society, it is important to carefully consider the extent of that contribution.

IV. THE CHANGING FACE OF COPYRIGHT

¶28 Without a doubt, the music industry should view the increase in P2P use as a threat to its revenue stream and consequently to the profitability and viability of its companies. But many commentators and the industry itself have gone much further than simply recognizing P2P as a threat, instead treating P2P systems as though they spell the end of copyright.⁶⁰ This is hyperbolic rhetoric. The more reasonable assessment views P2P as one of many recent changes in the incentive system. This Part will first address the recent increases in copyright protection and then attempt to make a realistic assessment of the impact of P2P on copyright. The recent developments in the incentive system should be seen as essentially offsetting one another, thus reducing the cause for panic over P2P.

59. See MUSIC WK., Jan. 22, 2005, at S8 (“The problem major [labels] have is that they can’t think in the long term, or even the medium term—they can only think quarter to quarter, so *there is no artist development to speak of.*”) (quoting record executive Martin Heat) (emphasis added).

60. Steve Heckler, a Vice President at Sony, responded to Napster in August 2000 by stating: The industry will take whatever steps it needs to protect itself and protect its revenue streams. It will not lose that revenue stream, no matter what . . . We will develop technology that transcends the individual user. We will firewall Napster at its source—we will block it at your cable company, we will block it at your phone company, we will block it at your ISP. We will firewall it at your PC.

TREVOR MERRIDEN, IRRESISTIBLE FORCES: THE BUSINESS LEGACY OF NAPSTER AND THE GROWTH OF THE UNDERGROUND INTERNET 36 (2001); see also Robert A. Heverly, *The Information Semicommons*, 18 BERKELEY TECH. L.J. 1127, 1129 (2003) (“Peer-to-peer file sharing appears to shred [copyright] . . .”).

A. Recent Increases in Copyright

¶ 29 The past decade has seen two major efforts to increase the protection afforded by the copyright laws. The first attempt involved extending the limited period of protection that is given to copyrighted materials. The second criminalized circumventing technological protections of copyright. Both of these increased the control that copyright owners exert over copyrighted materials, and consequently the money they can extract through that control.

1. Sonny Bono Copyright Term Extension Act

¶ 30 In 1998, Congress passed the Sonny Bono Copyright Term Extension Act (“CTEA”).⁶¹ This act was the latest in a series of eleven acts in forty years⁶² that increased the duration of copyright protection from a renewable fourteen-year term to a term equal to the life of the author plus seventy years after the author’s death.⁶³ One interesting feature of CTEA was its retroactive applicability—even works that had already been created were given extended protection.

¶ 31 This retroactivity spurred Professor Lawrence Lessig to engineer the challenge brought by Eric Eldred to the constitutionality of the act.⁶⁴ In *Eldred v. Ashcroft*,⁶⁵ Lessig argued that the CETA’s retroactivity essentially established a moratorium on allowing works to fall into the public domain,⁶⁶ thus extending the deadweight loss associated with the copyright monopoly borne by society without affecting the incentive for the production of those works, which had already been created. Lessig locked onto the theory that applying the extension to works that had already been created offered no new incentive to create the works.⁶⁷ Since Congress is authorized by the Constitution to “secur[e] for limited times to authors . . . exclusive right to their . . . writings” only in order “to promote the progress of science,” Lessig argued that Congress had acted without constitutional authority in passing the CTEA.⁶⁸

¶ 32 The Supreme Court rejected Eldred’s challenge to the CTEA, upholding Congress’s power to extend the copyright term in this instance.⁶⁹ The CTEA thus stands as one recent increase in copyright protection.

61. Sonny Bono Copyright Term Extension Act of 1998, Pub. L. No. 105-298, 112 Stat. 2827 (amending, *inter alia*, 17 U.S.C. § 302(a) (2000)).

62. Lawrence B. Solum, *The Future of Copyright*, 83 TEX. L. REV. 1137, 1165 (2005) (book review).

63. Ben Depoorter, *The Several Lives of Mickey Mouse: Expanding Intellectual Property Law*, 9 VA. J.L. & TECH. 4, ¶10 (2004).

64. Solum, *supra* note 62, at 1139; LESSIG, *supra* note 23, at 221.

65. 537 U.S. 186, 193 (2003).

66. Solum, *supra* note 62, at 1139–40.

67. LESSIG, *supra* note 23, at 215–16.

68. *Id.*

69. *Eldred*, 537 U.S. at 204.

2. Digital Rights Management and the Digital Millennium Copyright Act

¶ 33 Analog music files—those contained on vinyl records or cassette tapes—could be copied, but with each copy, the quality of the sound was degraded, eventually degrading to a point where copying no longer produced an acoustically pleasing result.⁷⁰ Digitized music, on the other hand, can be copied almost limitlessly without any degradation in sound quality.⁷¹ This feature of digital music, combined with new sampling and compression techniques that significantly decreased the size of music files, led to the widespread distribution of unprotected MP3 music files. Digital Rights Management (“DRM”) was the music industry’s response to this development.

¶ 34 DRM allows the person who initially digitizes content to define how that content may be used.⁷² For example, iTunes⁷³ uses the M4P format. The M4P format allows a user to play the file on up to five computers, to play the file on an unlimited number of iPods, and to burn an unlimited number of CDs. These rights are quite liberal, but unlike MP3s, there are limits to the rights.

¶ 35 While DRM significantly increases content owners’ power to control the way content is used, DRM is only powerful to the extent that the DRM controls cannot be circumvented.⁷⁴ And when the culture of computer programmers views technological protections as a challenge to be conquered, it is simply a matter of time before circumvention technology emerges in response to new DRM.⁷⁵ With DRM on one side and hackers on the other, there was a serious danger that the digitization of music would lead to a wasteful technological arms race, with content owners creating new DRM formats in an effort to stay one step ahead of the hackers, who would race to be the first to crack the new DRM code.

¶ 36 To prevent this wasteful technological arms race, Congress passed the Digital Millennium Copyright Act (“DMCA”), which included provisions making it illegal to distribute technology intended to circumvent DRM.⁷⁶ With the DMCA preventing the distribution of circumvention software, DRM has become extremely powerful. Not only can DRM prevent people from using content in ways that violated copyright protections, but DRM also prevents people from engaging in activities that would be considered fair

70. Matthew James Fantaci, Note, *Digital Dilemma: Could the Digital Millennium Copyright Act Have Inadvertently Exempted Napster and Its Progeny from Liability?*, 62 LA. L. REV. 643, 643 (2002).

71. *Id.*

72. For background on DRM, see Brett Glass, *What Does DRM Really Mean?*, PC MAG., Apr. 8, 2003, at 66.

73. Apple, iTunes Music, <http://www.apple.com/itunes/store/> (last visited Nov. 17, 2005).

74. DIGITAL MEDIA PROJECT, *supra* note 45, at 9–10.

75. For an example of recent hacking, see John Borland, *iTunes Hack Disabled by Apple*, CNET NEWS.COM, Mar. 21, 2005, http://news.com.com/Apple+disables+iTunes+hack/2100-1027_3-5628616.html (reporting on a program that allowed users of iTunes to download music without copyright protections).

76. 17 U.S.C. §§ 1201–1204 (2000).

use.⁷⁷ Fair use is an exception to copyright protection that allows certain transformative users of copyrighted material to make use of the copyrighted material without the consent of the copyright holder.⁷⁸ For various reasons, most content owners do not appreciate fair use exceptions to the copyright laws.⁷⁹ And DRM, coupled with the DMCA, has increased content owners' ability to unilaterally cut out fair use exceptions without regard to the impact of the loss of fair use on creative society. This is an increase in copyright protection.

B. Decrease in Copyright Because of Peer-to-Peer

¶37 P2P is responsible for the loss of copyright revenue every time a P2P user downloads a copyrighted song from a P2P service instead of paying for the song. It is a mistake, however, to assume that every P2P user who downloads songs would have otherwise purchased the song. There are several categories of P2P users who use P2P systems for different reasons. To understand the true impact of P2P on copyright revenue, we must first understand why people use P2P systems. The first section of this subpart will address this topic. The second section will explore ways in which the market is reacting to P2P systems to win back some P2P users.

1. Why Do People Use P2P

¶38 Attempting to explain all the reasons that P2P users prefer P2P systems over conventional methods of acquiring music would be virtually impossible. But it is useful to consider some of the reasons that P2P users favor those systems. There are at least three broad categories of people who download music through P2P systems: (1) "new users" who won't pay for music no matter how cheap it is; (2) "protestors" who might buy offline but who see using P2P systems as a cultural stand against paying monopoly rents to music companies; and (3) "lost buyers" who would purchase in the offline world but find P2P systems less expensive.⁸⁰

¶39 The first category, new users, is largely irrelevant to music companies. For whatever reason, these users will not purchase music, but they will acquire music over

77. See *Universal City Studios, Inc. v. Reimerdes*, 111 F. Supp. 2d 294, 319–20 (S.D.N.Y. 2000) (holding that fair use is irrelevant to a charge of violating the DMCA); LESSIG, *supra* note 23, at 160 ("Using code, copyright owners restrict fair use; using the DMCA, they punish those who would attempt to evade the restrictions on fair use that they impose through code. Technology becomes a means by which fair use can be erased; the law of the DMCA backs up that erasing."); GARTNERG2 & THE BERKMAN CENTER FOR INTERNET & SOCIETY AT HARVARD LAW SCHOOL, COPYRIGHT AND DIGITAL MEDIA IN A POST-NAPSTER WORLD 47, available at <http://cyber.law.harvard.edu/media/files/wp2005.pdf> (2005);. See generally Marshall Leaffer, *The Uncertain Future of Fair Use in a Global Information Marketplace*, 62 OHIO ST. L.J. 849, 859 (2001).

78. See generally Note, *Gone with the Wind Done Gone: "Re-Writing" and Fair Use*, 115 HARV. L. REV. 1193, 1197 (2002).

79. One common reason for this is that parodies are considered fair use, and most content owners don't like to be parodied. See Mark A. Lemley, *The Economics of Improvement in Intellectual Property Law*, 75 TEX. L. REV. 989, 1024–28, 1060–61 (1997) (explaining fair use and some reasons that authors might not want to be parodied).

80. For a similar approach to grouping P2P music downloaders, see Solum, *supra* note 62, at 1154–59 and LESSIG, *supra* note 23, at 67–73.

P2P systems. From a social-welfare perspective, we should prefer that these users be allowed to continue downloading music because their downloading does not affect music companies while it undeniably increases social welfare by allowing the users to gain utility from the music.⁸¹

¶ 40 The second category of P2P users, protestors, are those who see P2P use as a form of social disobedience and empowerment of individuals above the entrenched media companies.⁸² Beyond merely acquiring music, these users derive utility from the affect P2P use has on their psyche. This is admittedly an intangible benefit to the users, but those who feel the benefit will continue to download music through P2P systems so long as the costs of doing so do not exceed the benefit they derive from a combination of the music they obtain and the personal benefit they receive from their P2P protesting.

¶ 41 The final category of P2P users, lost buyers, uses P2P systems because they find that the cost of using those systems is less than the cost of music available through other channels. The motivations of the people in this category are quite simple—they obtain their music at the lowest cost possible.

2. Market Solutions Are Decreasing the Attractiveness of P2P

¶ 42 The main concern of the music industry should be capturing protestors and lost buyers—those people who prefer to use P2P for social reasons or because of the lower cost. Market solutions are beginning to arise that will increase the cost of using P2P services at the same time that the cost of obtaining music through more conventional channels will decrease. As these two processes proceed, the number of protestor and lost buyer P2P users should decrease.

3. Emergence of Alternatives to P2P Will Decrease Losses

¶ 43 The emergence of P2P as an alternative means of distributing music has awakened the music industry to the power of the Internet, and to the need to create new, more efficient ways to distribute music to their customers. Today there are several alternatives to P2P systems that offer consumers access to music at substantially reduced costs. These alternatives can be grouped into three different, loosely defined categories based on their business models.⁸³ The first business model, typified by iTunes and Napster 2.0,⁸⁴ works essentially like an offline store except that music is delivered in digital format directly to users' computers from the service's website.⁸⁵ The second model,

81. Solum, *supra* note 62, at 1155.

82. For an example of this attitude, see a recent opinion letter published in *Billboard Magazine*. Brett Orlanski, *Readers Ask Labels: "Think of Consumers' Needs,"* BILLBOARD, Oct. 11, 2003, at 14.

83. DIGITAL MEDIA PROJECT, *supra* note 45, at 10–11.

84. iTunes and Napster 2.0 use essentially the same business model, though iTunes charges on a per song basis while Napster 2.0 charges a subscription fee for which users can download unlimited music and use that music so long as the user continues his subscription. For more on iTunes, see Apple, iTunes Overview, <http://www.apple.com/itunes/overview/> (last visited Nov. 17, 2005). For more on Napster 2.0, see Napster, All the Music You Want, http://www.napster.com/using_napster/all_the_music_you_want.html (last visited Nov. 17, 2005).

85. DIGITAL MEDIA PROJECT, *supra* note 45, at 11–15.

typified by Weed,⁸⁶ is similar to the first in that users pay for music based on the amount of music they download, but the music is delivered to users' computers through P2P networks.⁸⁷ The final model employs an entirely different method for charging customers—the blanket license.⁸⁸ This model abandons altogether the idea that music files can be controlled.⁸⁹ Instead, it levies taxes on the equipment or services, such as MP3 players or computers and Internet access, which are required to download music.⁹⁰ The blanket license model cannot emerge from the private market like the other two models have. Instead, congressional action would be required for the realization of this vision.

¶44 These alternatives to P2P programs offer users distinct advantages over traditional means of purchasing music. For present purposes, it should be sufficient to concentrate only on the iTunes business model, which is currently the most popular of all these services⁹¹ and therefore serves as a good example of the attractiveness and success of these new online alternatives.

¶45 The first major advantage of these services is cost. Songs can be purchased on iTunes for \$.99 per song; album prices vary, but are typically between \$8.99 and \$11.99.⁹² The cost of a blank recordable CD is about \$.25 and a standard computer now comes with a recordable CD drive. In late 2003, the average cost of a CD ranged from \$16.98 - \$18.98.⁹³ So buying a CD costs at least fifty percent more than downloading the music from iTunes and burning it to a CD. iTunes thus represents a substantial cost savings. Many think that as competition between music stores continues, prices will continue to decrease. Walmart, for instance, runs its own digital music store where it sells songs for \$.88 each.⁹⁴ And RealNetworks responded to the rise of iTunes by offering songs for \$.49 each.⁹⁵ If the price of music continues to decrease,⁹⁶ the lure of P2P services will also decrease.

¶46 A second major advantage of online music stores is convenience. A major

86. For more on Weed, see Weed, Weed Fundamentals, <http://www.weedshare.com/help/fundamentals/> (last visited Nov. 17, 2005).

87. DIGITAL MEDIA PROJECT, *supra* note 45, at 16–18.

88. *Id.* at 18–21.

89. See Neil Weinstock Netanel, *Impose a Noncommercial Use Levy to Allow Free Peer-to-Peer File Sharing*, 17 HARV. J.L. & TECH. 1, 74–76 (2003).

90. *Id.* at 4.

91. Nat Ives, *Musicland Tries to Embrace the Internet and Emulate the Atmosphere of Retail Chains Like Starbucks*, N.Y. TIMES, Aug. 24, 2004, at C4.

92. See Nick Pachetti, *Apple's iPod Used to Be the Only Real Choice in Portable Music Players. Not Anymore*, MONEY, Dec. 2004, at 171.

93. Michael McCarthy, *CD Prices Hit Sour Note with Retailers, Buyers*, USA TODAY, Dec. 8, 2003 at 1B.

94. Walmart.com, Music Downloads, <http://musicdownloads.walmart.com/> (last visited Nov. 17, 2005).

95. Laurie J. Flynn, *Microsoft Challenges Rivals With New Online Music Service*, N.Y. TIMES, Sept. 2, 2004, at C4.

96. That the price of downloading music will continue to decrease is, of course, an assumption. In fact, the music industry has pressured iTunes to increase prices. *Apple Head Attacks Record Firms*, BBC NEWS, <http://news.bbc.co.uk/1/hi/entertainment/music/4265434.stm> (last modified Sept. 20, 2005).

attraction of P2P services is the ability to get a song or an album immediately, without leaving home. Digital music stores offer the same type of convenience, eliminating this reason for preferring P2P services.

¶47 iTunes also offers two elements that P2P services can't—quality and safety. Whereas files offered on P2P services are not guaranteed to be of any particular quality and may not even be the song the person was looking for,⁹⁷ iTunes files are consistently high quality. Further, whereas using P2P services subjects a user to risks of viruses,⁹⁸ there is no such risk in using iTunes.

¶48 The proof of the attractiveness of these services is in their success. A recent report indicated that online music sales increased 1000% from 2003 to 2004.⁹⁹ Revenues from legal online downloading increased 600% to \$330 million during the same period.¹⁰⁰ And the increase from 2004 to 2005 was almost 150%.¹⁰¹ These impressive figures are occurring during the nascency of the industry, when standards are still being worked out. Once those standards are developed, online services should become even more viable. The point is that online music services are substantially decreasing the costs of buying music and are becoming an increasingly attractive alternative to P2P. This alternative has arisen even in the absence of liability for P2P services.

4. Other Developments Will Increase Costs

¶49 At the same time that the cost of music is declining, the cost of using P2P systems is increasing. Commentators often treat P2P systems as offering music for “free.” While it is true that P2P systems do not charge consumers access fees, there are substantial costs associated with obtaining music on P2P systems.

¶50 The first of these costs is time. Suppose that a consumer wants to get the newest Dave Matthews Band album *Stand Up*. Depending on the P2P platform being used, a user must jump through several hoops to find the album. On a P2P service such as Grokster, the user must first find out the names of the individual songs on the new album. The user must then type in the name of each individual song into a P2P search box, run a search for each individual song, choose from among the dozens of returns the quality and type of file the user wants, and then download each individual song, making sure that each download is successful. The user must then check each file to make sure that it is acceptable to him. He must check to be sure that he truly received the song he wanted and not a phony file placed there to foil downloaders.¹⁰² And he must be sure that the song is not corrupted in some other way. Finally, the person must compile all of

97. See *infra* note 102 and accompanying text (noting the effort by record companies to curtail P2P music file sharing by adding phony files to P2P networks).

98. See *infra* note 106 and accompanying text.

99. *The Buzz*, ST. PETERSBURG TIMES (Fla.), Jan. 24, 2005, at 4D.

100. *Id.*

101. *Online Burn Helps Ease Sales Sting*, NEWSDAY, Dec. 30, 2005, at A13.

102. See Malaika Costello-Dougherty, *Tech Wars: P-to-P Friends, Foes Struggle*, PC WORLD, Mar. 13, 2003, at 15, available at <http://www.pcworld.com/news/article/0,aid,109816,00.asp> (documenting the practice of adding phony files to P2P networks and attributing it to a company called Overpeer, an industry anti-piracy company).

the files, often rename them for consistency's sake, and then burn a disk. These steps take an enormous amount of time, not compared to driving to a store and buying the album, but compared to using an alternative like iTunes, where a similar process can be accomplished with approximately five mouse clicks and the user can expect that the result will be high quality. Other platforms, such as BitTorrent, offer a more streamlined process, mostly because those platforms can transfer larger files such as a .zip file containing all the songs on an album. But because BitTorrent requires a tracking file to be placed on a website, which essentially enables copyright infringement, those who direct BitTorrent users to copyrighted files subject themselves to lawsuits, thus decreasing the availability of the tracking files and the viability of BitTorrent.¹⁰³ But in a now-familiar pattern,¹⁰⁴ dozens of new programs have emerged to take up where BitTorrent left off.¹⁰⁵

¶51 There is an important relationship between a person's ability to buy an album and the amount of time that person is willing to spend downloading an album. For a typical lawyer who makes about \$50 an hour, spending 15 minutes downloading an album costs about \$12.50. The opportunity costs that the lawyer endures to download an album therefore total at least \$12.50. For a person working at a minimum wage job who gets paid about \$6 per hour, the opportunity cost of 15 minutes is about \$1.50. Thus, the more a person gets paid, the less willing a person is to spend his time using P2P systems to download music, and the more willing a person will be to use an alternative such as iTunes.

¶52 The second major cost of using P2P systems is the risk of exposure to viruses.¹⁰⁶ Anytime a person downloads and executes a new file on his computer, the person is exposing himself to the risk that the file contains a virus that will infect his computer. The risk of viruses spreading over P2P systems, while not high, does exist. There is no such risk when downloading files through a service such as iTunes, which is responsible for ensuring that the files are virus free.

¶53 A third cost, though by no means substantial or certain, is the tax on a downloader's conscience that is levied because the downloader knows that he is violating the law. Many academics argue that the law shapes economic preferences.¹⁰⁷ If one accepts this view, it follows that most people generally prefer following the law even absent the risk of legal sanctions. Conversely, not following the law must impose some sort of tax on the conscience of the average person who violates the law. Two points do admittedly militate against viewing this tax as substantial. The first is that with repetition, this tax effect wears off, as people get used to violating the law in a certain

103. See Daren Fonda et al., *Downloading Hollywood*, TIME, Feb. 14, 2005, at 43.

104. This is the pattern that P2P programs have followed since the industry began trying to shut them down. See Mann & Belzley, *supra* note 16, at 299–301.

105. See File Hippo, File Sharing, <http://www.filehippo.com/software/p2p/> (last visited Nov. 17, 2005).

106. Wendy M. Grossman, *Speed Traps*, INQUIRER (U.K.), Jan. 14, 2005, at A1, available at <http://www.theinquirer.net/?article=20718>.

107. See e.g., Louis Kaplow & Steven Shavell, *Fairness Versus Welfare*, 114 HARV. L. REV. 961, 1334–39 (2001); Cass R. Sunstein, *Legal Interference with Private Preferences*, 53 U. CHI. L. REV. 1129, 1145–58 (1986).

way. Second, laws that do not resonate in some broader concept of justice are often dismissed as not reflective of the more general social law.¹⁰⁸ Downloading may be one prominent example of the effect that a law perceived to be unjust has on normally law-abiding citizens.¹⁰⁹ Nevertheless, it should be recognized that P2P users, who undoubtedly know they are violating the law, may incur at least some tax in this way.

¶ 54 The final and perhaps most significant cost of using P2P systems is the exposure to legal action that a person faces by engaging in P2P sharing. Starting in 2003, the Recording Industry Association of America (RIAA) began filing lawsuits on behalf of music companies against individual filesharers. Since the beginning of those lawsuits until October 2004, the RIAA had filed lawsuits against over 5,900 individual filesharers.¹¹⁰ The average lawsuit alleged approximately 2,000 copyright violations.¹¹¹ Statutory damages in copyright cases provide plaintiffs with a statutory minimum of \$750 in damages for each copyright violation.¹¹² Since aggregation is allowed in these cases, the average defendant faced approximately \$1.5 million in statutory damages.¹¹³ While many defendants could make novel claims to try to avoid liability,¹¹⁴ faced with the practical burden of litigating these claims and the huge risk of actually being ordered to pay \$1.5 million in damages, only one defendant has challenged an RIAA lawsuit.¹¹⁵ The other defendants have instead opted to settle for an estimated average of between \$2,000 and \$3,000.¹¹⁶

¶ 55 From the perspective of a rational actor, the threat of being the subject of an RIAA lawsuit should not be sufficient to stop people from downloading. There are over sixty million users of P2P services.¹¹⁷ Only approximately 6,000 have been the subject of lawsuits. This means that there has so far been a 1-in-10,000 chance of being sued. The lawsuits settle for about \$3,000. Thus, on a per person expected cost, the lawsuits impose only about \$.30 per P2P user, in exchange for which the user gets hundreds of songs. But this marginal cost may be enough in light of the other costs detailed above to dissuade a significant number of people from using P2P services. And risk-averse people may be wholly dissuaded from file sharing based on the risk of a lawsuit alone.

¶ 56 Even if the threat of a lawsuit seems too dispersed today, a new technology may

108. See Janice Nadler, *Flouting the Law*, 83 TEX. L. REV. 1399, 1431 (2005).

109. *Id.* at 1431 & n.123.

110. Barker, *supra* note 14, at 535.

111. *Id.* at 535–36.

112. 17 U.S.C. § 504(c)(1).

113. Barker, *supra* note 14, at 536.

114. One such claim, as suggested by Cam Barker, is that these aggregated statutory damages violate the Due Process Clause of the U.S. Constitution in the same way that the punitive damages did in *BMW of North America, Inc. v. Gore*, 517 U.S. 559 (1996). Barker, *supra* note 14, at 556.

115. *Mom Fights RIAA Suit Solo*, WIRED.COM, Dec. 26, 2005, <http://www.wired.com/news/technology/0,69938-0.html>.

116. Barker, *supra* note 14, at 526; Benny Evangelista, *Downloading Teens Star in Super Bowl Ad*, S.F. CHRON., Jan. 31, 2004, at A1 (“Many accused file-sharers have settled for about \$2,000 to \$3,000 each.”).

117. SmartGuard Software, White Paper, available at http://www.smartguardsoftware.com/Blockster_White_Paper_v1.1.htm (last visited Nov. 17, 2005) (citing a Forrester Research paper).

ensure that the future will include certain prosecution for those who originally add copyrighted material into the P2P world. Every copyrighted file must be ripped from a CD or converted from a DRM file before it can be freely released into the P2P world. BayTSP, a company that creates software catered to the intellectual property industry's battle against filesharers, recently announced the launch of a program that monitors P2P networks and can identify the source of infringing material.¹¹⁸ Armed with the knowledge of who originally ripped the file and made it available to the world, the RIAA could make it a policy to sue every single person who adds copyrighted music to the P2P world. Faced with a certain lawsuit, few individuals would share copyrighted music with the world.

¶ 57 * * *

¶ 58 The costs of using P2P services are increasing at the same time that the cost of purchasing music through legitimate avenues is decreasing. While the early success of P2P services may have put a substantial dent in the income stream of the music industry, there is substantial evidence that after that initial disequilibrium, the market is finding equilibrium without the introduction of liability for those who create P2P programs. With these developments, the Court was right in *Grokster* not to disturb the emerging market balance by imposing broad liability on innovators. The Court's solution—imposing liability only on those innovators who actively encourage infringement—reaches those who flout the copyright laws without seriously threatening those who create products and promote their legal uses.

V. OF WEALTH AND WELFARE IN MUSIC

¶ 59 There is no doubt that either decision the Supreme Court could have reached in *Grokster* would have had an effect on the music industry. In the preceding Parts, this article has argued first that the reasons for protecting the music industry are probably overstated if the goal of our legal structure is the production of music, and second that the market is reacting to P2P systems in ways that made sweeping Supreme Court action unnecessary at best and counterproductive at worst. This Part makes a more subtle point: Music is a good that is particularly ill-suited to being allocated solely according to wealth maximization principles. Thus, even if industry-supported wealth maximizing principles cut in favor of imposing liability on innovators in *Grokster* (and I have argued that they do not), welfare maximization principles caution against doing so. The *Grokster* opinion is consistent with these principles.

¶ 60 Consumers of music, like consumers of any other good, derive utility from its consumption. The purpose of any legal environment should be the maximization of utility.¹¹⁹ The problem, however, is that utility is peculiarly hard to measure. To combat this problem, several economists, Judge Posner chief among them, have argued that

118. Jack M. Germain, *File Sharers Can No Longer Hide*, TECHNEWSWORLD, Feb. 5, 2005, available at <http://www.technewsworld.com/story/40247.html>.

119. See Mark P. Gergen, *The Use of Open Terms in Contract*, 92 COLUM. L. REV. 997, 1001 (1992) (“The goals of maximizing expected return or expected utility are conventional in economic analysis of the law . . .”).

wealth should be used as a metric for measuring welfare and for allocating resources to maximize welfare.¹²⁰ This position is attractive in large part because of its clean lines—wealth is easy to measure. But the metric falls short in many ways, particularly in the context of music.

¶ 61 Wealth increases are always welfare increases, but some welfare increases are not measured by wealth increases. Wealth must be measured in terms of dollars.¹²¹ Wealth maximization principles call for legal rules that will increase the amount of dollars in the economy.¹²² Wealth and welfare are increased through voluntary transactions, but wealth maximization principles count only the voluntary transactions that involve money.¹²³ P2P transactions do not involve money, but they do involve increases in welfare. The same voluntary transaction without P2P would involve money. Quite simply, then, wealth maximization principles militate towards preventing P2P transactions because the same transactions conducted outside of P2P channels would involve money and, therefore, increase wealth.

¶ 62 Welfare maximization principles, on the other hand, do not try to create such clear lines between good and bad transactions. Voluntary transactions that increase welfare are good even if they do not increase wealth.¹²⁴ In section IV(B)(1) above, three different types of users were identified. One group of users—New Users—were those who would never purchase music but who do access music through P2P systems. Welfare-centered principles count the utility of these users; wealth maximization principles do not. A Supreme Court decision imposing liability on P2P software innovators would have prevented P2P software from being available even to New Users of P2P, thus decreasing welfare without increasing wealth. Similarly, welfare maximization principles would suggest that the other groups of users—Protestors and Lost Buyers—should be allowed to continue using P2P systems, which increase their welfare. Protestors experience an increase in welfare by expressing their discontent with the system at the same time that they obtain music. Lost Buyers increase their welfare by getting more music than they would be able to buy in money based transactions.

¶ 63 The point here is quite simple: The Court should not rush to protect the music industry by imposing liability on P2P software unless they have some reason to prefer wealth maximization. Absent any reason to believe that P2P systems will actually cause musicians to stop producing music, P2P systems increase rather than decrease welfare by more widely distributing music. The Court was right not to completely cut off this welfare-increasing technology.

120. See generally Richard A. Posner, *Utilitarianism, Economics, and Legal Theory*, 8 J. LEGAL STUD. 103 (1979).

121. Jules L. Coleman, *Efficiency, Utility, and Wealth Maximization*, 8 HOFSTRA L. REV. 509, 523 (1980).

122. *Id.* at 523–24.

123. *Id.*

124. *Id.* at 524.

VI. PEER-TO-PEER TECHNOLOGIES AND WELFARE

¶ 64 P2P systems represent a major advance in computing technology and have more legitimate uses than illegitimate uses.¹²⁵ While the rhetoric from the record industry seems to imply that P2P networks are nothing but a drain on society,¹²⁶ P2P systems have a considerable positive effect on welfare. Even if we measure welfare only in terms of wealth, P2P is desirable. First, P2P arguably does not decrease wealth by reducing the number of money based transactions. Even for Lost Buyers—those P2P users who would otherwise purchase music—P2P use simply causes a wealth transfer, not a decrease in wealth.¹²⁷ The user who would have otherwise purchased the music now has more money to spend on something else.

¶ 65 Second, P2P systems have actually increased wealth if viewed from the perspective of the effects that P2P has had on spurring the music industry to increase efficiency. As noted above, music today is available for considerably less than it used to be.¹²⁸ This decrease in price pressures the music industry to increase efficiency, which adds to total consumer surplus by increasing the number of voluntary, money-based transactions that take place, and increasing the consumer surplus of these transactions. An illustration of this analysis follows. Consumer surplus occurs any time there is a voluntary transaction. For example, if a record label feels that the profit-maximizing price of a song is \$1.50, they will sell to any consumer who values the song at or above \$1.50. Those consumers who value the song at above \$1.50 receive a consumer surplus in the amount of the difference between their subjective valuation of the song (maybe \$2.00) and the price of the song— $\$2.00 - \$1.50 = \$.50$. When this transaction is completed, wealth has been increased by \$.50. If P2P systems have forced efficiency gains that have brought the price of songs down to \$1.00, then the consumer surplus of the transaction described above becomes \$1.00 instead of \$.50 ($\$2.00 - \$1.00 = \$1.00$). Additionally, new consumers enter the market as costs are decreased, since before, the record companies only sold to those who valued the music at above \$1.50 and now they sell to all those who value the music at or above \$1.00. This further increases the number of voluntary money-based transactions and the total consumer surplus.

¶ 66 Third, P2P systems have spurred innovation in other areas that have proven to be wealth increasing. Skype, for example, is a P2P program that allows users to speak to each other as they would on a phone for free over the Internet.¹²⁹ Other possible

125. Justice Stevens noted in the Oral Arguments of the *Grokster* case that there are “some 2.6 billion legitimate uses” of P2P systems. Transcript of Record at 3, *Grokster*, 125 S. Ct. 2764 (No. 04-480), 2005 U.S. TRANS LEXIS 27 at *2. It’s not clear to what the Justice was referring, but his point is well taken that there are a lot of legitimate uses of P2P systems. For a very comprehensive survey of the legitimate uses of P2P systems, see DINESH VERMA, LEGITIMATE APPLICATIONS OF PEER-TO-PEER NETWORKS (2004).

126. The Record Industry’s counsel in *Grokster* stated that the idea that P2P systems had legitimate uses was “an absolutely incorrect assertion of reality.” Transcript of Record at 3-4, *Grokster*, 125 S. Ct. 2764 (No. 04-480), 2005 TRANS LEXIS 27 at *2.

127. Solum, *supra* note 62, at 1156.

128. See *supra* notes 92–94 and accompanying text.

129. Skype, <http://skype.com/> (last visited Nov. 17, 2005) (claiming that “[t]he whole world can talk for free”); John Jainschigg, *Tried Skype Yet? Very Interesting -- Peer-to-Peer VoIP*, COMM. CONVERGENCE, Nov. 2003, at 34.

adaptations of P2P systems include creating instantly scaleable workflow management systems for offices¹³⁰ or building e-commerce marketplaces that allow businesses to communicate needs or capabilities with each other directly, rather than through an intermediary.¹³¹ And these are just a few of the legitimate uses.¹³² Each such use, since it is preferred by the user over the previous alternative, increases wealth and welfare by increasing efficiency or utility.

¶ 67 Fourth, some scholars see P2P networks as integral to an open and free democratic society.¹³³ This places P2P at the very core of our social values. A place of such prominence may be a bit of a stretch, but this is another way of viewing the important welfare-increasing benefits of P2P systems.

¶ 68 Finally, P2P itself represents an enormous advance in computing efficiency.¹³⁴ P2P networks remove middlemen from transmissions. Instead of requiring a central server to hold files and transmit those files to users, P2P systems directly connect people who are looking for certain information with the people who have that information. By reducing traffic bottlenecks at servers, these files can be transmitted much more efficiently.¹³⁵ In essence, P2P systems turn all the computers on a P2P network into massive file servers and create thousands of servers where previously only one existed, making P2P networks much more robust than conventional networks.¹³⁶

VII. LIFE TOGETHER?

¶ 69 So far, this article has treated P2P and copyright infringement as inextricably linked—as though the choice must be between ending copyright infringement and keeping P2P systems. This may be a false dichotomy, depending on the extent to which other changes can be made either to P2P systems or to the systems that support P2P that would make it possible to end, or at least seriously curtail, copyright infringement without getting rid of P2P systems. This Part will address a few of these options. With the potential viability of these options, the Court was correct in hesitating to impose blanket liability on P2P software companies.

¶ 70 The first possible solution would entail adding filtering technology either to P2P

130. Georgios John Fakas & Bill Karakostas, *A Peer to Peer (P2P) Architecture for Dynamic Workflow Management*, 46 INFO. & SOFTWARE TECH. 23 (2004).

131. Diogo R. Ferreira & J.J. Pinto Ferreira, *Building an e-Marketplace on a Peer-to-Peer Infrastructure*, 17 INT'L J. COMPUTER INTEGRATED MANUFACTURING 254 (2004).

132. See *supra* note 125 and accompanying text.

133. Yochai Benkler describes the importance of P2P systems as follows: “An open, free, flat, peer-to-peer network best serves the ability of anyone—individual, small group, or large group—to come together to build our information environment. It is through such open and equal participation that we will best secure both robust democratic discourse and individual expressive freedom.” Yochai Benkler, *Viacom-CBS Merger: From Consumers to Users: Shifting the Deeper Structures of Regulation Toward Sustainable Commons and User Access*, 52 FED. COMM. L.J. 561, 568 (2000).

134. *Grokster*, 125 S. Ct. at 2770; *In Praise of P2P*, ECONOMIST, Dec. 4, 2004, at 35.

135. *In Praise of P2P*, *supra* note 134.

136. *Id.* (quoting Yochai Benkler as calling P2P systems robust, and adding, “P2P networks have, after all, withstood years of legal, technical and physical assault, but still work.”).

software itself, or to the networks that facilitate the P2P software. While filtering technology was wholly unsuccessful in combating infringement in the Napster situation,¹³⁷ new advances in filtering technology may allow systems to more successfully employ it today. For example, a company called Audible Magic claims that its products allow Internet service providers (ISPs) to manage P2P traffic, either simply to limit the amount of bandwidth available on a network for P2P traffic, or to filter out either copyrighted or pornographic material while allowing other P2P traffic to continue untouched.¹³⁸ Similarly, two record labels, Vivendi Universal Entertainment and Universal Music Group, developed a royalty-free system that allows ISPs such as universities to automatically identify network users who are likely infringing copyright and automatically restrict or terminate service to these individuals.¹³⁹

¶ 71 The desire of ISPs to limit bandwidth available for P2P users is easily understandable. One recent study estimated that 60 to 80 percent of all web traffic was attributable to P2P.¹⁴⁰ The desire of ISPs, in the absence of liability, to filter P2P traffic for copyrighted or illicit material is less understandable.¹⁴¹ If, however, filtering techniques do become viable, lawmakers might consider regulating ISPs instead of software companies, since ISPs will find it harder to avoid the regulation.¹⁴² In any event, filtering¹⁴³ is one of the possible solutions to the P2P crisis that should be fully explored and developed before imposing blanket liability on P2P software companies. The Court was right in not imposing such liability before those technologies have had a chance to more fully develop.

¶ 72 A second option would entail changing the way files are added to P2P networks. Currently, individual users decide what files to make available on the network. There is no verification process conducted by anyone to determine whether the files added are infringing. One could imagine, however, a system whereby files are submitted for verification and then entered into a registry of authorized files that the P2P software would then turn up on searches and allow to be transferred. P2P software could include automatic updates that would periodically update the local registry of approved files, which would contain information about the type of file and its size. Such a requirement would fundamentally alter the nature of P2P, placing an entity in the middle of the

137. See *A&M Records, Inc. v. Napster, Inc.*, 284 F.3d 1091, 1097–98 (9th Cir. 2002).

138. See Audible Magic, CopySense Application, <http://www.audiblemagic.com/products-services/copysense> (last visited Nov. 17, 2005).

139. Eugene Schultz, *Security Views*, 23 COMPUTERS & SECURITY 267, 274 (June 2004).

140. Joanne Glasner, *P2P Fuels Global Bandwith Binge*, WIRED NEWS, April 14, 2005, <http://www.wired.com/news/business/0,1367,67202,00.html>.

141. While ISPs certainly would benefit from reducing P2P bandwidth consumption, competition between ISPs for customers would make it difficult for most ISPs to limit customer access to P2P programs through filtering.

142. The ISPs would find it more difficult to avoid the regulation because they are physically present in the regulatory jurisdictions and would have more difficulty following the pattern of P2P software companies of shutting down and evolving to avoid legal action. See Mann & Belzley, *supra* note 16 (developing a framework for determining which Internet intermediaries are best suited to bear liability in any given transaction).

143. Brief for Bridgemar Services as Amici Curiae Supporting Neither, *Grokster*, 125 S. Ct. 2764, available at 2004 U.S. Briefs 480 (Lexis) (Jan. 24, 2005).

network. P2P services obviously wouldn't voluntarily place themselves in such a position because doing so would give them the power to control the files that are transferred and subject them to liability for allowing infringing files. The need to maintain the approved file registry would also mean that P2P services could likely no longer be free. And Benkler's vision of P2P systems as elements of a free and open society¹⁴⁴ would fall by the wayside, since once again the distribution of content would be controlled through a vertical structure. Finally, such a mandate could not easily come from a court, though court-imposed liability with certain affirmative defenses could come close. The mandate would more properly come from Congress, which can better deliberate on and fine-tune such a liability scheme.¹⁴⁵

¶ 73 These are just two options for allowing P2P systems to persist while reducing or eliminating copyright infringement. Without a doubt, there are several other options. The point is, however, that technology may again eliminate the dichotomy presented by *Grokster*. With such a prospect, the Court was right not to impose wider liability in *Grokster*.

VIII. CONCLUSION

¶ 74 The Supreme Court made a difficult decision in *Grokster*. The Court faced enormous pressure to solve the P2P crisis once and for all by imposing broad liability on P2P software developers. This article has shown that both welfare- and wealth-maximization principles cut against imposing crippling liability on P2P software companies. The chief argument against P2P software is that it prevents the music industry from reaping all the copyright royalties to which that industry is entitled by law. But while there is sufficient reason to think that music companies would leave the market without copyright revenues, there is at best a tenuous link between copyright and the production of music. Thus, protection of copyright royalties must be defended on the grounds that the music industry adds something to society. While the industry undeniably does add something to society, the size of that contribution arguably does not outweigh the deadweight loss to society caused by copyright protection. And even if one believes that the contribution of the music industry does outweigh the deadweight loss imposed by copyright, it does not necessarily follow that liability for P2P software companies is the most efficient method of protecting copyright, since that liability would virtually eliminate the P2P technology that promises substantial efficiency gains. Without liability, the current regime arguably affords sufficient protection for copyright in two ways. First, when viewed in the context of recent increases in copyright protection, the decrease in copyright protection due to P2P services is negligible. Second, market forces are working to make that impact even more negligible by decreasing the attractiveness of P2P technologies while increasing the lure of legitimate alternatives.

¶ 75 P2P software adds substantially to society, and is largely responsible for the efficiency increases realized by the music industry in the last few years. To impose

144. See *supra* note 133 and accompanying text.

145. See Mann & Belzley, *supra* note 16.

liability on P2P software manufacturers would have destroyed this promising technology in its infancy and deprived future generations of its benefits. The Court was right to avoid that result and to instead issue a minimalist opinion that addressed the egregious action present in *Grokster* without imposing broader liability on P2P innovators as a whole.