

I Get By With a Little Help From My Friends¹: Solutions for the Recorded Music Industry©

by

Denise S. Smith, JD, MBA* and James W. Thompson, MBA**
Academy of Legal Studies in Business Annual Meeting, August, 2010

Introduction

Technological advances in digital recording and increased accessibility to recorded music through the Internet have contributed to rampant copyright infringement over the past decade. Congress has attempted to address the issue by adding penalties for illegal copying, and the courts have expanded liability to include those who contribute or induce others to infringe.² Nevertheless, the number of illegally downloaded music files continues to grow, despite numerous attempts to curtail the practice through increased enforcement efforts.³ File-sharing services, which facilitate the unauthorized transfer of copyrighted material among users, have taken on an almost Hydra-like quality;⁴ when one service is shut down, more spring to life, offering even more anonymity to users than previous services.⁵

Numerous methods have been suggested to curtail the illegal downloading of copyrighted music, including increased enforcement of existing copyright laws, requiring ISPs to monitor activity,⁶ and charging users a type of utility fee.⁷ This article will first review current law and enforcement efforts. It will then examine statistics from the Recording Industry Association of America and the International Federation of the Phonographic Industry to explain the impact of copyright infringement on the music recording business. It will propose a method of fairly compensating the people who compose, perform, and produce new music. Finally, the article will analyze the benefits and challenges which would be presented should this business model be adopted.

Current Law

The framers of the U.S. Constitution recognized the importance of legal protection for creators of intellectual property, and granted Congress the power “To promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries.”⁸ The Copyright Act of 1976,⁹ effective January 1, 1978, is the primary statute addressing copyrights in the United States. Prior law generally required a work to be “published” with notice of copyright in order to qualify for copyright protection. The requirement of notice was contained in the original Copyright Act of 1976, but was eliminated in order to comply with the provisions of the Berne Convention, effective March 1, 1989.¹⁰

One of the challenges that U.S. courts have encountered in applying copyright law to peer-to-peer (P2P) file sharing is the issue of whether or not this sharing of copyrighted music can be interpreted as “publication.”¹¹ The Copyright Act defines publication as “the distribution of copies...of a work to the public by sale or other transfer of ownership, or by rental, lease, or lending. The offer to distribute copies...for purposes of further distribution...constitutes publication.”¹² Users of filesharing services do not directly distribute files, but rather make them available for other users to access and copy. The Copyright Act itself, however, “does not provide a making available right,”¹³ a right which is not specifically enumerated in the Copyright Act as belonging to the copyright owner.¹⁴ Notwithstanding the provision in the WIPO Copyright Treaty, to which the U.S. became a party, which states that “[a]uthors of literary and artistic works shall enjoy the exclusive right of authorizing the making available to the public”¹⁵ of their works, the United States has not amended the Copyright Act to expressly include this right.

The Digital Millennium Copyright Act (DMCA),¹⁶ a WIPO-related law, contains an anti-circumvention prohibition and anti-trafficking provisions. The anti-circumvention portion of the DMCA “makes it illegal to evade antipiracy measures or technological protection measures (TPMs) that police access to a protected work.”¹⁷ The anti-trafficking portions, on the other hand, prohibit the manufacture and sale of devices which facilitate circumvention and also relate to “TPMs that control specific uses of a work, as compared to access.”¹⁸

Cases

One of the first “high tech” copyright infringement cases revolved around the question of whether videorecorders which allowed owners to record television broadcasts onto a storage medium were guilty of copyright infringement. Copyright holders sued Sony, manufacturers of the Betamax recording devices, on a theory of contributory infringement, claiming that purchasers of video cassette recorders were using these devices to infringe by recording broadcasts.¹⁹ In its

* Assistant Professor, Eastern Illinois University

** Songwriter, music producer, www.JThompsonMusic.com, james@jthompsonmusic.com

discussion of secondary liability for copyright infringement, the Court found that there was no direct contact between Sony and the Betamax users which would be necessary to support a finding of contributory copyright infringement. It then turned to a discussion of vicarious liability based on Sony's constructive knowledge that its Betamax recorders could be used by purchasers to make unauthorized copies. This theory of vicarious liability had previously been used in patent infringement cases, but there was no precedent for imposing this kind of liability in the area of copyright law. However, the Court reasoned that in both patent and copyright laws the theory of contributory liability "may require the courts to look beyond actual duplication of a device or publication to the products or activities that make such duplication possible."²⁰ It then adopted the "staple article of commerce doctrine" from patent law and applied it to the facts of this case to conclude that, because the Betamax was "capable of commercially significant noninfringing uses"²¹ Sony was not liable for copyright infringement.

In the notorious case of *A&M Records, Inc. v. Napster, Inc.*,²² the Ninth Circuit considered the question of whether facilitating the sharing of exact copies of digital music files would constitute contributory copyright infringement. The court held that Napster may only be liable to the extent that it had knowledge of specific files, knew or should have known of the files on Napster's system, and failed to prevent distribution of the infringing files.²³ "Conversely, Napster may be vicariously liable when it fails to affirmatively use its ability to patrol its system and preclude access to potentially infringing files listed in its search index."²⁴ Napster unsuccessfully asserted that its system constituted a "fair use" of copyrighted material under the statutory exceptions to the Copyright Act.

While *Sony* endorsed use of the "staple article of commerce doctrine" in copyright infringement, it left unanswered the question of how "significant" a noninfringing use must be to qualify for protection. This question was answered, in part, in the 2005 case of *MGM v. Grokster*.²⁵ The respondents in *Grokster* distributed free software to users which enabled the sharing of files through peer-to-peer (P2P) networks. Although respondents received no income from the distribution of the file-sharing software, significant revenues were generated from the sale of advertising space that was streamed to users during downloads.²⁶ The Court explained that the only practical alternative to pursuing all direct infringers, users of the P2P software in the case, would be to hold the distributor liable for secondary infringement. "One infringes contributorily by intentionally inducing or encouraging direct infringement ... and infringes vicariously by profiting from direct infringement while declining to exercise a right to stop or limit it."²⁷ The Court distinguished *Grokster* from *Sony* by explaining that *Sony* prohibits the presumption of secondary liability based solely on a product's potential for infringing use, but that "where evidence goes beyond a product's characteristics or the knowledge that it may be put to infringing uses, and shows statements or actions directed to promoting infringement, *Sony's* staple article rule will not preclude liability."²⁸

Capitol Records v. Thomas,²⁹ illustrates the challenges of enforcing copyright infringement penalties against an individual user. Thomas, a single mother, was found guilty of infringing on plaintiff's copyright on twenty-four songs and making these songs available to others on the peer-to-peer network Kazaa. The jury awarded Capitol Records the statutory damages amount of \$9250 per song. This award was modified on appeal to \$2,250 per recording, and the court acknowledged the improbability that the plaintiffs would be able to collect.³⁰ The defendant was also enjoined from directly or indirectly infringing plaintiff's rights, including by way of online distribution, because the court acknowledged that "illegal distribution over peer-to-peer networks, such as Kazaa, causes...lost revenues and layoffs."³¹

Because of the expense of pursuing and prosecuting direct and indirect infringers and the difficulty of preventing the development of additional file-sharing methods, other means of copyright enforcement should be explored.

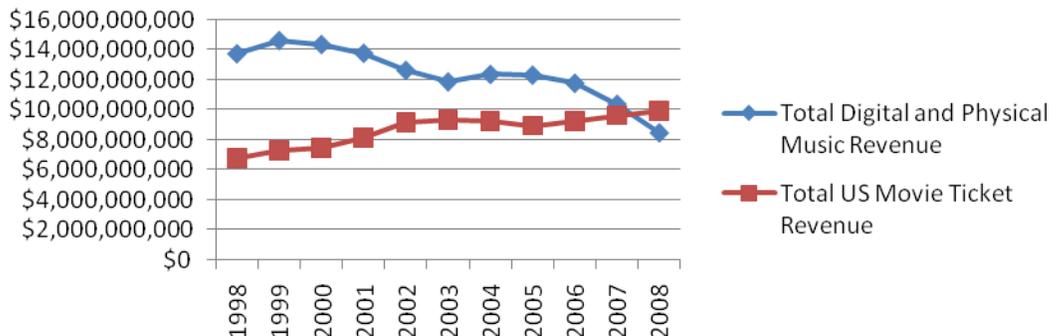
A Balancing Act

One of the challenges at the heart of the file sharing debate is the tension between the desire to reward creative activity and society's interest in promoting technological advances. As the U.S. Supreme Court noted in *MGM v. Grokster*, "The more artistic protection is favored, the more technological innovation may be discouraged; the administration of copyright law is an exercise in managing the tradeoff."³² As one author noted, copyright law "must create an incentive for authorship by giving potential authors the ability to exploit their works, but it must do so for the purpose of enriching society with those works. It thus must balance the monopoly power of copyright ownership with the demand for availability of works of authorship to the public."³³

As Justice Stewart wrote, "[c]reative work is to be encouraged and rewarded, but private motivation must ultimately serve the cause of promoting broad public availability of literature, music, and the other arts."³⁴ In the digital age, however, with the ready availability of technology that is capable of producing exact replicas with no diminution of quality, there is a greater concern that fewer songwriters and artists will choose to spend their time and talent to produce new music if their efforts do not generate income due to the inability of current mechanisms to prevent unauthorized copying of their work. This concern has had a negative impact on the recording industry. The recording music industry has consolidated in recent years, much more so than other industries. Over a ten year span, overall retail value of recorded music in 2008 was \$5.5 billion, down from \$13 billion in 1999.³⁵ Movie ticket sales, another form of entertainment, did not suffer the same casualties. In 1998, revenue was \$6.8 billion and in 2008, revenue had grown to \$10 billion.³⁶ Movie ticket sales were chosen because they are an alternate form of entertainment, and their content can also be delivered digitally.

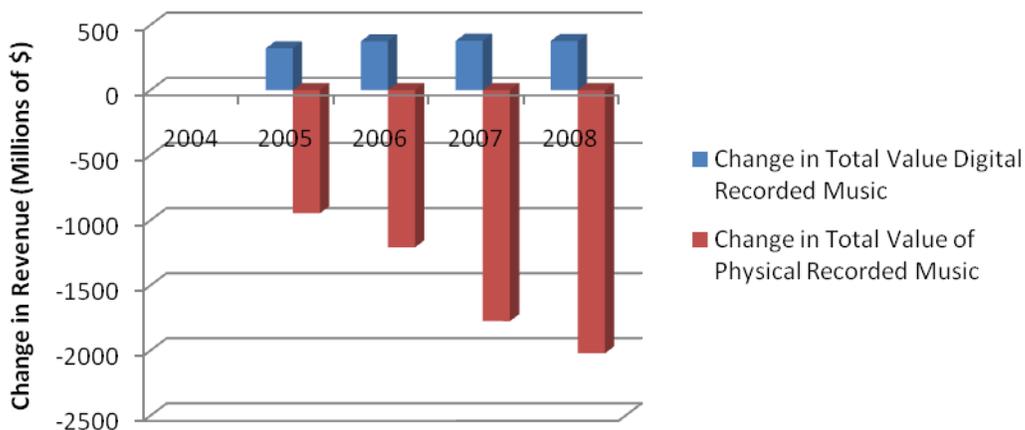
As the recorded music industry shrinks, the appropriate monetary compensation is not available to support a broad base of artists. As fewer artists are compensated for their work, other job opportunities become more attractive. This results in less art being created and a general homogenization of the music that is brought to market. For a country that places such weight on its mixing pot of cultures, and the subsequent art it produces (not to mention its rich history), copyright infringement of music is a huge issue.

Recorded Music vs. Movie Ticket Revenue



Developments in the way music files are stored and transferred have contributed to the increase in illegal file sharing. In particular, three developments have had the most impact.³⁷ First, the amount of storage capacity of computers and other digital devices, including the ubiquitous iPod, has dramatically increased. Second, network speeds have increased, making it possible to download music files in a fraction of the time it took 10 years ago. Third, the physical size of storage units has shrunk, in part due to the MP3 format. The Apple iPod, in fact, proved to be an excellent platform for playing music, but the overall sales of music digitally has not grown fast enough to offset the decline in physical music sales. The change from the predominance of “physical music sales” in the form of CDs and cassette tapes to digital sales has also had an impact on the music industry.

Digital vs. Physical Music Sales



A New Method of Sharing the Wealth

While there has been a decline in the sale of recorded music, there is no shortage of avenues to experience music. In the past music was consumed via recordings in one’s home, live, or on the radio. Today, there are not only paid avenues, such as XM satellite radio, CDs, DVDs and iTunes, but there are many other popular, *free* ways to access music. The band OK Go used the free service offered by YouTube to great effect, and their now ubiquitous music video “Here It Goes Again” went “viral” and was watched over 50 million times, thanks in part to their quirky treadmill dance.³⁸ Pandora Radio is a free internet radio service that allows users to access over 750,000 songs in their database.³⁹ Other services such as MySpace and Last.fm also have a loyal following, and P2P clients such as Limewire give users access to millions of files through the internet. Let’s not forget the tried and true terrestrial radio stations, which tap into the preinstalled radios of almost every vehicle, representing a large market.

With such a wide range of music available from many different avenues, one may wonder why a proposed new model of commerce for music is attractive for the end user, in this case, the listener. Justification for the compensation of the music creators and their associates is given earlier in this paper, but in the end, the listeners' experience is just as important, because they are the consumers- they represent everyone from the avid fan following their favorite group, to the casual music listener.

If there's anything to learn from the success of Apple's iTunes and iPod, it's that listeners value the experience that Apple has streamlined for them. Once the pertinent billing information is entered, Apple can make music recommendations based on the user's existing library via its Genius software, and the music can be purchased with the click of a button via the elegant user interface. As of January 2009, Apple had sold over 6 billion songs on iTunes.⁴⁰ How is it possible for a model like iTunes, which charges users for content, to possibly exist in a world of YouTubes and Limewire? iTunes' success, though not enough to offset the decline in physical music sales, has shown that at their current price point, *some* users are willing to pay. As many will attest, consumers are always bound by time and money, and Apple seems to have provided a time saving way of purchasing music, at a price point that is acceptable to their users. These consumers have forgone alternatives like Limewire, who facilitate the distribution of the music for free. These avenues can be less than elegant to use, and can cost the user not only setup and search time, but also money in the form of computers that are ruined by viruses.

While it is clear that iTunes has been a success for Apple, scaling a model to the entire industry is a different paradigm. As a whole, society has had free access to music from multiple avenues for too long to justify a subscription service. Rhapsody is a good example of a subscription service, they have plans starting at \$12.99 a month that allow users unlimited access to their music catalog.⁴¹ Still, it is hard for some users to justify paying a monthly subscription fee for services such as Rhapsody and XM Radio, when the traditional radio coupled with sites such as YouTube offer free music.

Other Solutions, Other Issues

Recently, members of the International Federation of the Phonographic Industry (IFPI) have supported a plan called "graduated response" to address the issue of digital piracy.⁴² The graduated response approach would enlist the support of internet service providers (ISPs) to identify subscribers who use their ISP accounts for infringement purposes. The ISP would send a notice to these users who have used their accounts for copyright infringement and "suggest the use of a legitimate service."⁴³ If the infringement continued, the ISP would send additional warnings, and would ultimately suspend service for the users who ignored the warnings. The IFPI has reviewed consumer surveys in different countries which indicate that this system would effectively influence consumer behavior. While this tactic is rightfully meant to protect copyrighted content, a more positive approach that still encourages the consumption of music, could gain more favor among consumers.

The "Music Like Water"⁴⁴ proposal attempts to mitigate the concerns of buyers and sellers by establishing a "music utility" model to distribute digital music, similar to electricity and water utility systems.⁴⁵ The user would pay a monthly flat utility fee, giving them access to all of the music they would like during that month. The money generated from monthly fees would be put into a pool and distributed to the respective owners of the music (songwriters, publishers etc...) creating a new model for the distribution of recorded music. While this model seems like a step in the right direction since it compensates the respective content owners, it will still meet resistance from users who are used to one of the many current free music players. You'd be hard pressed to find someone excited about receiving another monthly bill in the mail, especially if that bill is for music they've spent years accessing online for free. As a result, the recurring process of accessing music needs to feel free, be familiar to the consumer, and represent very little extra spending at the individual consumer level, easing the adoption by the consumer. But how can this be accomplished, and how can all the involved parties be satisfied?

A New Method of Sharing the Wealth

The U.S. consumer electronics industry is alive and healthy, likely due to the popularity of netbooks, and phones.⁴⁶ Although it took a slight dip in 2009, global revenues remained a healthy \$375 billion, with positive outlooks for 2010 IPTV.⁴⁷ The recorded music industry can be revitalized while simultaneously enriching the end user's experience via a small electronic fee factored into the selling price by electronics manufacturers. Based on historical data, a 4% fee built into the selling price of electronic devices would result in a staggering \$15 billion annual revenue. That is more than enough the return the recorded music industry to its highly profitable 2009 state. Electronics manufacturers might also be interested in absorbing part of this fee, because of the increased features their products would tout, and also because of the increase in content, and therefore demand for players, that would result from the recorded music industry's revitalization. Realizing that there is still \$5.5 billion dollars in the recorded music industry as of 2008, a fee of 2.5% - 3% would be enough to offset the current downsizing.

The fee would be included in the selling price of the product, meaning consumers would not be put-off by seeing a tax on their receipt, and the minor increase would be both justifiable by the service offered, and negligible enough to not disrupt consumers spending patterns. Although the money from such fees is small on an individual level, it adds up quickly and would be collected in a large pool and distributed to content owners based on the number of downloads. A system such

as Nielsen Sound Scan, that is currently being used to track the sales of music and music videos in the United States and Canada, would keep track of the number of downloads that are made and distribute the appropriate money to the respective content owners.

In the past, consumers were accustomed to owning a tangible product that music was affixed to. Today many individuals have grown accustomed to accessing “the cloud” for information, and it is done every day when videos from YouTube are accessed. In order for this model to work, the music would be pulled from “the cloud”⁴⁸ which would provide access to a comprehensive set of all recorded music that is stored on servers. In this way, consumers wouldn’t actually physically possess the music, but rather, access it through the internet. When all music is tagged and stored on a series of servers and access through the cloud, it would be possible to make the end-user experience easier and more enjoyable by giving them suggestions based on their listening preferences. This system would also facilitate the tracking of downloads—once a user streamed a piece of music, it would be easy to record the pertinent information, and use it to distribute the proper payment to content owners.

Moreover, use of this new model would not result in copyright infringement, either directly by user or indirectly by the services that provide the streamed music, because a licensing arrangement would provide that a portion the fees assessed at the sale of electronic products capable of accessing the “cloud” music would be used to pay the persons responsible for the creation of this music.

Benefits and Challenges

The benefits of this “automatic” assessment of royalties for songwriters, artists, and producers are numerous. While ASCAP’s enforcement of blanket licensing has “successfully shaped and harnessed a marketplace to reward, attract investment for, and encourage composers capable of commanding an audience,”⁴⁹ this mechanism only applies to broadcast and live performances of the works and does not address the copyright infringement issues surrounding peer-to-peer file sharing. A fee collected at the time a consumer electronic device is purchased would ensure that the persons responsible for creating the music that consumers love are properly compensated and provide incentive for further music to be produced.

The money generated will be used to compensate the owners of the music, and gradually boost the sagging sales faced by the recorded music industry. Increases in the level of compensation for those creating the music would allow selling recorded music to become a viable career option, and encourage creative individuals to continue their work. As songwriters, publishers and producers are allowed to develop their skill sets over their lifetime, the quality of the end product is increased—giving the consumer more options and theoretically, a higher quality product to listen to.

While the listener benefits from higher quality products and a streamlined consumption process, the electronics manufacturers, our “friends” in this model, also benefit. These manufacturers’ products rely on the content they play—without the content, they aren’t useful to consumers. By fairly compensating the content creators, electronics manufacturer can ensure that their products have a future use for consumers. Their very existence is directly tied to the existence of the content that they play back. Manufacturers and sellers of products capable of copying music files would be able to avoid potential liability for indirect copyright infringement by participating in the fee collection process. In addition, this system would have less of a “chilling effect”⁵⁰ on technological innovation and encourage the development of improved software and electronic media.

Perhaps one of the greatest benefits of such a system is the reduction in piracy, without the need for punitive action. Society would benefit from this model by encouraging both technological innovation and increased production of new musical works. Additionally, enforcement of copyrights would be less cumbersome and costly than litigation. Since the cost would be included as a part of the purchase price of new consumer electronics, consumers would then either perceive music as “free” or at least as value added. This model adds negligible cost to the consumer, while providing them with access to any music they want, at any time.

Conclusion

Like all new models, there will be roadblocks and conflicts. Deciding what specific system is appropriate to track the music downloads; along with the obtaining financing necessary to develop the system are topics that will likely be of great debate. The industry will also need to choose a company or series of companies to create a check-and-balance system. Because this model includes the electronics manufacturers, it makes these decisions more difficult, as they cross different industries and their respective leaders. Additionally, traditional record labels have shown great resistance to changes in the business, and are most accustomed to selling a tangible product to consumer. The software would also have to be developed and implemented into electronic devices to access the music.

Since the cloud is accessed via the internet, any downtime or dead spots in the current internet infrastructure would cause the system to stop working. It should be possible for devices to use other means of accessing the cloud, such as high-speed cell phone connections. These connections could mitigate any downtime that may occur from internet outages (moments that would truly mark “the day the music died”⁵¹), while also supplementing mobile electronic devices that may

drift away from a local area network. Technological trends are moving rapidly towards the interconnectedness of all electronic devices, and it is likely that all devices will eventually be able to access the internet.

While there are several barriers to the successful implementation of such a model, this model provides fair compensation for all parties involved. Content creators receive payment, electronics manufacturers benefit from continued content for their products, and consumers benefit from an easy to use system that allows for access to any music, at any time. The transition to such a system is easiest now, because many consumers are already comfortable with streaming content, and are used to viewing content for free via the internet. The streamlined user interface would provide a simple yet effective interface, facilitating the access and discovery of the most comprehensive database of recorded music within the cloud. This begs the question why go through the process of stealing music, putting oneself at risk for viruses, and spending unnecessary time searching for music, when it is all available, in the cloud at no additional cost?

Footnotes

¹ Copyright, John Lennon and Paul McCartney, *Sgt. Pepper's Lonely Hearts Club Band*, Parlophone, 1967.

² *MGM v. Grokster*, 545 U.S. 913 (2005).

³ Data from 16 countries over a three-year period show that an estimated 40 billion files were illegal shared in 2008, *IFPI Digital Music Report 2009: Key Statistics*, <http://www.ifpi.org/content/library/DMR2009-key-statistics.pdf>

⁴ The Hydra was a multi-headed monster in Greek mythology, and its destruction was one of Hercules' labors. When one head cut off, two more grew to take its place.

⁵ See, e.g., *Arista v. Usenet.com*, 633 F. Supp. 2d 124, 133 (S.D.N.Y., June 30, 2009). "Defendants also promoted the fact that users' uploading and downloading activities could not be tracked or monitored, and that unlike other 'lower security' file-sharing programs like Napster and Kazaa, users would be able to conduct their infringing activities cloaked in anonymity." See also Jared S. Welsh, "Pay What You Like – No, Really: Why Copyright Law Should Make Digital Music Free for Noncommercial Uses," 58 *EMORY L.J.* 1495, 1518 (2009). "[J]ust as the Grokster model represented a direct reaction to the basis for liability in Napster, new technologies that attempt to skirt the sort of liability ultimately found in Grokster have already become widespread. One such technology, BitTorrent, is far more decentralized than any of its predecessors...As such, it may be far more difficult to establish liability for these systems than for more hierarchical structures like those in Napster and Grokster."

⁶ *Digital Music Report 2010*, International Federation of the Phonographic Industry (IFPI), <http://www.ifpi.org/content/library/DMR2010.pdf>, suggesting a "graduated response requiring ISPs to send notices of infringing activity to account holders advising them to discontinue infringement.

⁷ See David Kusek, "Music Like Water," *Forbes Magazine*, Jan. 31, 2005; Deborah Tussey, "Music at the Edge of Chaos: A Complex Systems Perspective on File Sharing," 37 *LOY. U. CHI. L.J.* 147 at 193, Fall 2005.

⁸ U. S. Constitution Article I Sec. 8.

⁹ Pub. L. No. 94-533, 90 Stat. 2541., Title 17 U.S.C.

¹⁰ "Copyright Basics," Circular 1, p. 4, available at <http://www.copyright.gov/circs/circ1.pdf>

¹¹ See *Capitol Records v. Thomas*, 579 F. Supp. 2d 1210 (D. Minn., Sept. 24, 2008).

¹² 17 U.S.C. §101.

¹³ *Capitol Records v. Thomas*, 2010 U.S. Dist. LEXIS 5049, 39, (D. Minn., Jan. 22, 2010).

¹⁴ 17 U.S.C. §106.

¹⁵ World Intellectual Property Organization Copyright Treaty, Article 6 (1), December 12, 1996, available at <http://www.copyright.gov/wipo/treaty1.html>.

¹⁶ 17 U.S.C. §1201, effective November 29, 1999.

¹⁷ Steve P. Calandrillo and Ewa M. Davison, "The Dangers of the Digital Millennium Copyright Act: Much Ado About Nothing?" 50 *WM AND MARY L. REV.* 349, 361 (Nov. 2008).

¹⁸ *Id.*, at 362.

¹⁹ *Sony v. Universal City Studios*, 464 U.S. 417 (1984).

²⁰ *Id.* at 442.

²¹ *Id.*

²² 239 F. 3d 1004 (9th Cir. 2001)

²³ *Id.* at 1027.

²⁴ *Id.*

²⁵ 545 U.S. 913 (2005).

²⁶ *Id.* at 926.

²⁷ *Id.* at 930.

²⁸ *Id.* at 935.

²⁹ 579 F. Supp. 2d 1210 (D. Minn. Sept. 2008), judgment amended in part 2010 U.S. Dist. LEXIS 5049 (D. Minn. January 2010).

³⁰ 2010 U.S. Dist. LEXIS 5049 at 33 (D. Minn. 2010).

³¹ *Id.* at 35.

³² 545 U.S. 913, 928 (2005).

³³ Welsh, *supra* note 5, at 1498.

³⁴ Twentieth Century Music Corp. v. Aiken, 422 U.S. 151, 156 (1975), quoting Fox Film v. Corp. v. Doyal, 286 U.S. 123, 127 (1932).

³⁵ Statistics from the Recording Industry Association of America's website, available at http://www.riaa.com/keystatistics.php?content_selector=2007-2008-U.S-Shipments-Numbers

³⁶ Available at <http://www.the-numbers.com/>

³⁷ Welsh, *supra* note 5, at 1512-1513.

³⁸ Available at http://www.youtube.com/watch?v=pv5zWaTEVkl&feature=video_response

³⁹ Available at <http://blog.pandora.com/faq/contents/29.html>

⁴⁰ Available at <http://techcrunch.com/2009/01/06/itunes-sells-6-billion-songs-and-other-fun-stats-from-the-philnote/>

⁴¹ Available at

http://learn.rhapsody.com/plans?pageid=unagi.21694371.wrapper&pageregion=A1&src=rcom_foot%2Clearn_rhap_whatism&rcode=learn_rhap_whatism&href=http%253A%2F%2Flearn.rhapsody.com%2Fplans%253Fpageid%253Dunagi.21694371.wrapper%2526pageregion%253DA1%2526src%253Drcom_foot%25252Clearn_rhap_whatism%2526rcode%253Drn%2526opcode%253Dlearn_rhap_whatism

⁴² See "Graduated Response – A Proportionate, Preventive Solution," Digital Music Report 2010, available at http://www.ifpi.org/content/section_resources/dmr2010.html

⁴³ *Id.*

⁴⁴ David Kusek, "Music Like Water," Forbes.Com, Jan. 31, 2005, available at

http://www.forbes.com/forbes/2005/0131/042_print.html

⁴⁵ DAVID KUSEK AND GERD LEONHARD, THE FUTURE OF MUSIC: MANIFESTO FOR THE DIGITAL MUSIC REVOLUTION, Berklee Press (2005).

⁴⁶ Available at

http://learn.rhapsody.com/plans?pageid=unagi.21694371.wrapper&pageregion=A1&src=rcom_foot%2Clearn_rhap_whatism&rcode=learn_rhap_whatism&href=http%253A%2F%2Flearn.rhapsody.com%2Fplans%253Fpageid%253Dunagi.21694371.wrapper%2526pageregion%253DA1%2526src%253Drcom_foot%25252Clearn_rhap_whatism%2526rcode%253Drn%2526opcode%253Dlearn_rhap_whatism

⁴⁷ Available at http://www.iptv-news.com/iptv_news/march_2010_2/global_ce_revenues_down_5_in_2009

⁴⁸ References to "the cloud" in this model are used to illustrate the streaming of music that is physically stored in another location- in this case, a series of servers at data centers that contain a comprehensive catalog of all recorded music. This music is streamed wirelessly from the various data centers, rather than downloaded and stored on the user's local hard drive. Cloud *computing* is different, and a thorough definition can be found at <http://csrc.nist.gov/groups/SNS/cloud-computing/>

⁴⁹ Peter S. Menell, "Indirect Copyright Liability and Technological Innovation," 32 COLUM. J.L. & ARTS 375, Summer 2009.

⁵⁰ See Peter S. Menell, *id.*

⁵¹ From "American Pie" by Don McLean