



Copyright Infringement due to Online File Sharing

6.901 Inventions and Patents

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Introduction

File sharing has become one of the most prevalent on-line activities. Napster, the original music sharing service founded in 1999, revolutionized file sharing by allowing the free flow of MP3 formatted songs through its user friendly interface. Obtaining music and other files became easily accessible, extremely convenient and, most importantly, free.

Consequently, Napster and similar tools appealed to the masses, especially the youth, thus fueling the file sharing boom of the current decade. Peer to peer (P2P) downloads are on the rise, especially amongst teenagers. A study conducted by Juniper Research found that 34% of the 15-24 age group admitted to sharing music online without paying for it. Additionally, consumers are three times more likely to opt for the illegal downloads instead of paid ones.¹ A 2002 Cornell study showed that over half of the school's bandwidth was dedicated to users of Kazaa, another popular file sharing application.² Fastrack, the most popular network averages 2.54 millions users daily.³ According to Webnoize, the top four file-sharing systems-- Fastrack, Audiogalaxy, iMesh, and Gnutella-- were used to download 3.05 billion files during August, 2001.⁴

The magnitude of the file sharing problem is large and continues to increase in scope. Attempted solutions to date have been ineffective and potentially inherently unfair in terms of distribution of settlement proceeds. A better solution needs to be developed that can solve the myriad of problems associated with this issue.

Moral Issue: Is File Sharing Thievery?

File sharing is becoming easier and faster and end users are benefiting with the accumulation of free music downloads. However what are the implications for the victims this problem, the music industry? With more than 230 million copies of Kazaa downloaded worldwide, file sharing distributes mass quantities of copyrighted material and, therefore, qualifies as an infringement on private property. Copyright owners argue that file-sharing is essentially piracy; end users are obtaining files that they did not pay for. Although illegal, people are still willing to violate copyright laws for the convenience and benefit of free music as this behavior is not even viewed as immoral by most people. A Gallup poll conducted in August of 2003 showed that only 18 percent of 13- to 17-year-olds considered cheating on a test morally acceptable. However, 83 percent of those same teens did not have a problem with downloading free music.⁵

Economic Issue: Is File Sharing Significantly Impacting on Music Sales?

On behalf of the music industry, the Recording Industry Association of America (RIAA), representing big labels like AOL Time Warner's Warner Music and Vivendi Universal's Universal Music Group among others, is spearheading the efforts to eliminate illegal file-sharing worldwide. The RIAA has sued approximately 13,000 people in the United States suspected of sharing copyrighted material. The RIAA believes that the distribution of music over the Internet not only affects the profits of the music industry, but is also detrimental to the careers of artists due to the lackluster sales of records. Many argue that the quantity of quality music is declining because of the hostile music environment that software piracy has carved out.

Without doubt, P2P networks have opened the floodgates for file-sharing. However, one must ask what are the real economic costs associated with the exchange of free music? End users can substitute free downloaded music for legitimate purchases of records, thus reducing music sales. The RIAA contends that each download by a pirate represents a lost legitimate sale. To support this, the RIAA reported a 10.3 percent and a 7 percent drop in total US music shipments in 2001 to 2002 respectively. In addition, this trend is not limited to the US. According to the IFPI, an organization representing the recording industry worldwide, global music sales are down for the fourth consecutive year, and were down 7 percent in 2003.

However, the above views are not universally held. On the contrary, a study done at Harvard and the University of North Carolina uncovered that “downloads have an effect on sales which is statistically indistinguishable from zero.” In 2002, the researchers tracked music downloads for a span of 17 weeks, matching data on file transfers with actual market performance of the songs and albums being downloaded. They noted that file sharing has only had a limited effect on record sales. While downloads occur on a vast scale, they concluded that most users are individuals who may not have bought the music even in the absence of file sharing.”⁶

Moreover, looking at the most recent data from RIAA’s own sales statistics it can be seen that the RIAA’s stance is misleading. While it is true that for the first half of 2005 retail sales fell by \$266.1M (5.3%), this does not take into account digital music sales (such as

iTunes) which have increased by \$124.5M (169.9%) compared to the same period last year, However, when this is taken into account, the loss is almost halved.⁷

Artists' views of File Sharing

Music artists, in general, oppose illegal file sharing. Artists of every style and genre, including Madonna, Elton John, Sheryl Crow, Jay Z, Lenny Kravitz among others, are have spoken out against illegal copying.⁸ Metallica filed a lawsuit against Napster in 2000 after discovering the circulation of the “I Disappear” demo. Although Metallica lost the battle, the case had some significant consequences. It was one of the first steps in breaking the emerging file sharing business. Over 300,000 Napster users were banned from the service for sharing Metallica MP3s. Other artists like Dr. Dre, Eminem and Madonna joined the battle against Napster.

Alternatively, many recording artists are proponents of file sharing. In some cases, file sharing can actually stimulate sales by uncovering new talent. The better than expected sales of Radiohead's album *Kid A* can be attributed to the premature release or “leakage” of the tracks on Napster. A study conducted by the Pew Internet & American Life Project surveyed 3,000 musicians and songwriters about their views about file sharing. Surprisingly, they found that 35% of the subjects agreed that file sharing was not necessarily bad because it helped market and distribute the artist's work and twenty three percent agreed that file sharing was harmful. When asked about the effect on their career, 37% were indifferent and 35% report that free downloading has actually boosted their reputation.⁹

Basis of suits

The lawsuits filed cite violations in the Digital Millennium Copyright Act of 1998 (DMCA). This copyright law implements the World Intellectual Property Organization's (WIPO) treaties on copyrights in digital media along with updating US copyright law to allow for the protection works from digital infringement as well as adding civil and criminal penalties for violating copyrights through it.¹⁰ The DMCA also provides protection against the circumvention of the technical protections used by US copyright owners to protect their works (such as encryptions to prevent cd copying).¹¹

It appears that the overall goal is for the RIAA to use both preventative and punitive lawsuits to keep individuals from being able to access and download illegal materials. The majority of lawsuits filed in file sharing cases fall into two classes.

The first group of suits consists of the RIAA targeting institutions and companies that allow for file sharing. The defendants in these lawsuits range from universities to internet service providers. It appears that these lawsuits, which are often contested and hence more expensive, allow for the recording companies to gain the information needed target individuals through their settlements. A good example of this is the MIT case discussed later in this paper.

The second class of lawsuits target individual file sharers (so-called "John Doe" lawsuits). These are lawsuits filled by recording companies using information that the

RIAA has subpoenaed from universities and ISPs to target individuals. As of November 2004 the RIAA had sued over 15,000 individual users of file sharing services¹² with almost 700 new suits being filed each month.¹³

These lawsuits are extremely inexpensive for the recording companies to pursue. Since they already possess the information needed to sue, it takes very little time (and money) to prosecute these individuals. In addition, since the DMCA provides for extremely steep penalties for copyright infringement (up to \$500,000 for the first offense and \$1,000,000 for subsequent offenses in addition to jail time),¹⁴ the amounts sought by recording labels can be astronomical.

Moreover, since the majority of those sued under P2P usage lawsuits are not piracy professionals but young people who simply do not want to pay for music, defendants in these lawsuits usually do not possess the resources to fight these charges. Therefore, they often end up settling for several thousand dollars.¹⁵ For example, in a sample recording industry letter threatening a lawsuit obtained from a pro-P2P interest group, the lawyer states that they will seek minimum damages of \$750 per song.¹⁶ While most users are being sued for several songs this can quickly add up to much more than the user is capable of paying and settlement becomes the only real option.

In addition, lawsuits that end in settlement are extremely inexpensive for the plaintiffs to pursue. It costs them very little in terms of attorney time to pursue these suits given that the majority of these claims are settled quickly out of court. For example, in May 2004

the RIAA sued 493 individuals and by the 25th of that month 486 of the defendants had already settled.¹⁷

Litigation

Since the late 1990's when sharing music over the Internet became popular, the recording industry (RIAA) has been busy taking software companies as well as individuals to court for copyright infringement. Although some music artists who own the copyrights to their music such as Andre Young (also known as Dr. Dre) and the music group Metallica¹⁸ have participated in suing software companies in the past, the recording industry for the most part has carried out and continues to carry out these lawsuits since they generally own their artists' copyrights.

Since the introduction of online file-sharing, it has not been particularly clear as to who is directly responsible for copyright infringement done through the use of file-sharing programs. The three discernable groups are Internet service providers (ISPs), file-sharing software creators, and actual users of these file-sharing programs. Internet service providers give users the ability to share files over the Internet, software companies provide software that makes file-sharing easier, and individuals are the ones who actually share files but are able to because of ISP's and file-sharing software.

Even before file-sharing programs became popular, ISPs pressured the government to pass legislation for protection from copyright infringement lawsuits resulting from the actions of their subscribers. This led to the passing of the Digital Millennium Copyright

Act (DMCA) in 1998 that states ISPs cannot be held accountable for transmitting copyrighted material.¹⁹ Because of the DMCA, the recording industry has focused their efforts to stop online music piracy by suing software companies and individuals caught sharing music over the Internet.

The recording industry first began its lawsuit frenzy by targeting software companies that made it possible for its users to share music files online. It seemed logical that if these companies were shut down and their programs removed from the Internet then online music piracy would not be so prevalent. Also, filing lawsuits against a few software companies instead of the millions of individuals who used them seemed to be a more efficient alternative.

The first major lawsuit was the RIAA v. Napster case filed in December of 1999 where the recording industry alleged Napster was committing copyright infringement.²⁰ This unprecedented lawsuit brought to surface all sorts of questions as to how copyright law is applied to the Internet. By looking at the details of how Napster operated it was not clear at first whether they were infringing or not. If it were the case that Napster had servers containing all these copyrighted music files which it shared to anyone using their software over the Internet then it is clear that they were without a doubt infringing. In this case Napster physically had copyrighted music which it was distributing without compensating the artists. Unfortunately, Napster did not operate in this manner and what complicated the case was that Napster did not physically hold the music files being distributed. Napster users themselves had the music files and Napster's software simply

connected its users to other users.²¹ Napster gave users the ability to commit infringement but it was really up to the user whether they did it or not. In this respect, a similar case took place in 1984 when the U.S. Supreme Court ruled in favor of Betamax.²² In that case, Hollywood tried to stop the distribution of Sony's VCR. The VCR enabled its users to tape television programs illegally but, again, its users were responsible for whether they did it or not.

The creators of Napster thought they had circumvented copyright law by not holding the music files themselves, which is essentially true. In addition, to cover themselves they included copyright protection documentation with their software that warned users not to use their software for copyright infringing purposes and that any users caught would have their membership revoked.²³ It seemed that Napster abided by all legal statutes but on further inspection on how Napster operated proved otherwise. Instead of storing files Napster kept a server that contained a list of all its users and the files they contained.²⁴ Since Napster was able to see which of its users were sharing copyrighted music and did little about it they were found guilty of copyright infringement. Copyright law states that if someone is knowingly aiding in copyright infringement then they are just as guilty as individuals doing the actual copying and/or distribution.²⁵ In the end, Napster settled numerous lawsuits resulting in the loss of millions of dollars. They filed for bankruptcy in 2002 and sold what remained of their company to Bertelsmann AG.²⁶

While the recording industry was suing Napster they also filed a lawsuit against Audiogalaxy, another Napster-like software company that enabled online file-sharing.

Once Napster was successfully sued, Audiogalaxy quickly opted to settle. Audiogalaxy had tried to implement search filters that did not return the location of copyrighted material but the filters were deemed to not be good enough by the RIAA and National Music Publishing Association (NMPA).²⁷ Audiogalaxy settled its lawsuits losing millions of dollars, just like Napster, and removed most of its files for download.

The software company Kazaa succeeded Napster but in order to avoid being sued in U.S. courts they operate outside of the United States. They have their headquarters in Australia and based their operations in the island nation of Vanuatu.²⁸ The recording industry in the United States has not been able to successfully shut down Kazaa although a lawsuit in Los Angeles is still pending. The Australian Record Industry Association (ARIA), on the other hand, has taken steps to stop Kazaa. In September 2005, an Australian court ruled that Kazaa was not itself responsible for copyright infringement but in order to continue their operations in Australia they had to find a way to stop the distribution of copyrighted material. Kazaa did not comply so people in Australia are now unable to use Kazaa. In response, Kazaa moved itself to Amsterdam where it still continues to operate.²⁹

The latest court decision that has had a major impact in the area of online file-sharing occurred June of this year. In the case of MGM Studios, Inc. v. Grokster, the U.S. Supreme Court held Grokster responsible for copyright infringement.³⁰ This case was unlike the Napster case because Grokster's servers kept only a list of users instead of a list of users and the files they had. When searching for a file a user was connected to

other users and if they did not have the file they were looking for then they just searched the files of other users. By implementing file-sharing this way, Grokster could not tell whether their users were distributing copyrighted material so they were not responsible. Similar to companies that create VCRs, Grokster provides technology that could be used to illegally copy material but it is up to the user whether they choose to do so or not. Because of this logic Grokster had won two previous court decisions.³¹

The recording industry backed MGM Studios whereas corporations like Intel, Yahoo, and Microsoft backed Grokster. In the minds of tech companies, a court decision against Grokster would create a precedent and discourage the creation of Internet technology. (which could be viewed as the type of technology the U.S. Constitution states that the government should promote and protect). Grokster losing also meant questioning the legality of technology such as CD and DVD burners, iPods, and VCRs as well as copy machines.

The U.S. Supreme Court found Grokster guilty of copyright infringement since they believed Grokster promoted its product to be used for copyright infringement purposes and that there is evidence showing that Grokster's software was primarily used for the purpose of illegally distributing material over the Internet. On ruling against Grokster, Justice Souter stated, "We hold that one who distributes a device with the object of promoting its use to infringe copyright, as shown by the clear expression or other affirmative steps taken to foster infringement, is liable for the resulting acts of infringement by third parties."³²

The court decision led to Grokster shutting down and has created a precedent to be used in future cases involving Internet technology that can possibly be employed for copyright infringement suits. This decision has also resulted in other software companies that create file-sharing programs to take extra steps such as making it explicit that their software not be used in any way to download or distribute copyrighted material.

After successfully suing Napster and Audiogalaxy, the recording industry was still not satisfied and began targeting individual users of online file-sharing programs in 2003. The recording industry's primary targets are users who share music. However, if online piracy continues to exist at such a large-scale, it will be no surprise if they go after any individuals downloading music as well. The recording industry is able to find the IP addresses of these individuals but is unable to find out exactly who they are without the relevant ISP revealing that information to them.

Verizon Communications was taken to court in 2003 by the recording industry to reveal the names of four people that had been found to share a great deal of music.³³ Citing the DMCA, the court ruled in favor of the recording industry and the decision stood even after Verizon appealed. A month after Verizon lost their court battle, MIT and Boston College were subpoenaed to turn over the names of students whose IP addresses the recording industry had found to be sharing a lot of music.³⁴ Because the lawsuit was filed in the wrong state it was dismissed. At the end of 2003, a federal appeals court ruled that the DMCA does not require ISPs to give the names of their users to the

recording industry. The recording industry continued with their lawsuits suing individuals knowing when only their IP addresses. Surprisingly, the RIAA has now set up a rather efficient system of identifying people sharing music, sending them a notice that they are being sued, and quickly settling outside of court for a few thousand dollars.

Who benefits from the litigation?

It is difficult to determine who receives the proceeds from this litigation. However, some information can be obtained and some associated inferences can be made. Similarly, some interesting things concerning who gets paid and how much they receive can be inferred. The big winners in these actions are the lawyers and the recording companies while for the most part the artists receive only a small fraction of the proceeds.

The fact that lawyers benefit from this can be inferred. Every action taken by the RIAA or one of its member companies, independent of outcome, yields fees for the law firms that represent them. The sheer volume of case load should amount to a windfall in fees for these firms.

Moreover, it is also intuitively obvious that the recording companies are able to get large amounts of money from these settlements arrived at through little or no effort on their part as discussed above.

The question is does this benefit the artist or is this just a way for the company employing that artist to extract more money from the market independent of what the musician is

paid? In lawsuits filed by recording companies to protect their copyrighted works, the artists typically receive no money for the lost royalties caused by illegal distribution. Record companies are notorious for withholding and shortchanging on royalty payments as illustrated by the fact that in May of 2004 New York State Attorney General Elliot Spitzer had to step in and force many labels to pay out royalty checks that they had withheld.³⁵ 60% of artists believe that the RIAA campaign of suing individuals will not benefit that at all.³⁶

The fact alone that artists are not fervently against P2P file sharing should serve as an indication as to the small amounts of money they have or expecting to recover from these lawsuits. 43% of paid artists are in favor of P2P networks as they promote and distribute an artist's work to a broad audience. Moreover, 2/3 of artists believe that the companies that make the content available and create the protocols for transfer for free should be the targets of the RIAA versus attacking individual users.³⁷

Summary

The issue of file sharing related to music is complex and has become quite significant. Considering all these lawsuits, the real question is whether allowing the RIAA to sue all these companies and individuals is in fact promoting "the progress of science and useful arts" as stated in the U.S. Constitution. First of all, allowing lawsuits against these tech companies may actually impede the progress of science and technology. Just imagine if Hollywood and the movie and recording industries were able to stop the distribution of VCRs, cassette recorders, CD and DVD burners, iPods, copy machines, etc. Action

definitely must be taken to stop the illegal distribution of copyrighted material over the Internet but allowing these tech companies to be sued simply for monetary damages may not be the appropriate approach. The government needs to step in and somehow get the recording industry and tech companies to work together.

Since the money the recording industry is receiving from these lawsuits goes directly to them instead of the artists, one wonders how that is helping promote the progress of useful arts. It would be more appropriate to give the litigation proceeds directly to the artists.

Unfortunately, in many instances the company, not the artist, owns the copyright on the music. Since copyright owners have the right to enforce their copyrights, this sets up an interesting question: Do copyright holders have the ability to enforce their copyrights when doing so impedes the advancement of the arts?

The government is currently not fulfilling its duty to promote the progress of science and useful arts. Allowing the recording industry to proceed with their lawsuits is not the solution. Despite these suits, online piracy is still rampant. The recording industry needs to somehow work with these software companies and come up with a system that mutually agreeable and effective.

Considering the magnitude of this problem government intervention is most likely needed at this point. A possible solution would be to first stop all the lawsuits. Making

the RIAA wealthier isn't solving the problem. Forcing software companies to provide filters that do not return copyrighted material after a search would be the next step to take. No filter will be perfect but effective filters can be created. Software companies and the recording industry should work together to identify users distributing copyrighted material and only sue individuals who are repeat offenders. This is only an idea but it should be understood that there is no perfect solution. No matter what strategy is undertaken, there will always be individuals who participate in online piracy. The current situation and activities have proven to not be the solution. The goal of any solution would be to successfully alleviate the problem of online piracy while still promoting the progress of science. The challenge will be to develop a solution that will meet the conflicting needs and desires of the record industry, computer/internet entities, artists and the public.

End Notes

¹ <http://securitypronews.com/news/securitynews/spn-45-20051129ChooseyKidsChooseIllegalFileSharing.html>

² Internet Usage Statistics, Cornell University, 2002.
<http://www.cit.cornell.edu/computer/students/bandwidth/charts.html>

³ http://www.mpa.org/CurrentReleases/2004_11_04_Statistics.pdf

⁴ <http://answers.google.com/answers/threadview?id=31618>

⁵

<http://www.beaconnewspaper.com/media/paper540/news/2003/11/18/Opinion/FileSharing.Is.The.Moral.Equivalent.Of.Stealing.A.Car-560417.shtml?norewrite&sourcedomain=www.beaconnewspaper.com>

⁶ Oberholzer, Felix and Koleman Strumpf, "The Effect of File Sharing on Recording Sales An Empirical Analysis," 2004.

⁷ <http://www.riaa.com/news/newsletter/pdf/2005midYrStats.pdf>

⁸ http://www.musicunited.org/3_artists.html

⁹ http://usatoday.printthis.clickability.com/pt/cpt?action=cpt&title=USATODAY.com+-How+do+musicians+feel+about+Internet+file-sharing%3F&expire=&urlID=10192781&fb=Y&url=http%3A%2F%2Fwww.usatoday.com%2Ftech%2Fcolumnist%2Fericjsinrod%2F2004-05-12-sinrod_x.htm&partnerID=1665

¹⁰ <http://www.copyright.gov/legislation/dmca.pdf>, p 1

¹¹ Ibid, p 4

¹² Acohido, Brian, "Fed Raid Pounces on Equipment for Digital Privacy," USA Today, August 26, 2004, http://www.usatoday.com/tech/news/techpolicy/2004-08-26-copy-crackdown_x.htm

¹³ Bridis, Ted, "Some Twists in Music Piracy Lawsuits," Biz Report, August 23, 2004, <http://www.bizreport.com/news/7847>

¹⁴ <http://www.copyright.gov/legislation/dmca.pdf>, p 7

¹⁵ <http://www.vnunet.com/vnunet/news/2125054/riaa-sues-493-p2p-users>

¹⁶ http://www.eff.org/IP/P2P/sample_riaa_letter.pdf

¹⁷ <http://www.vnunet.com/vnunet/news/2125054/riaa-sues-493-p2p-users>

¹⁸ <http://www.afterdawn.com/news/archive/2195.cfm>

¹⁹ http://www.dmca.harvard.edu/dmca_overview.php

²⁰ <http://en.wikipedia.org/wiki/Napster>

²¹ <http://computer.howstuffworks.com/napster.htm>

²² Lardner, James. "Annals of Law: The Betamax Case." The New Yorker, 6 April 1987.

²³ Op Cite, Wikipedia - Napster

²⁴ <http://computer.howstuffworks.com/napster2.htm>

²⁵ http://www.riaa.com/news/filings/napster_faq.asp

²⁶ http://www.cbsnews.com/elements/2003/06/26/in_depth_scitech/timeline560590_0_main.shtml

²⁷ http://news.zdnet.com/2100-9595_22-922904.html

²⁸ <http://en.wikipedia.org/wiki/Kazaa>

²⁹ Ibid

³⁰ http://en.wikipedia.org/wiki/MGM_Studios%2C_Inc._v._Grokster%2C_Ltd.

³¹ Ibid

³² Ibid

³³ <http://news.com.com/2100-1023-960838.html>

³⁴ <http://web.mit.edu/newsoffice/2003/riaa.html>

³⁵ http://www.usatoday.com/life/music/news/2004-05-04-music-royalties_x.htm

³⁶ http://www.pewinternet.org/pdfs/PIP_Artists.Musicians_Report.pdf , p vi

³⁷ Ibid, p v- vi