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The Peer-to-Peer Revolution: A Post-Napster Analysis of the Rapidly Developing File Sharing Technology

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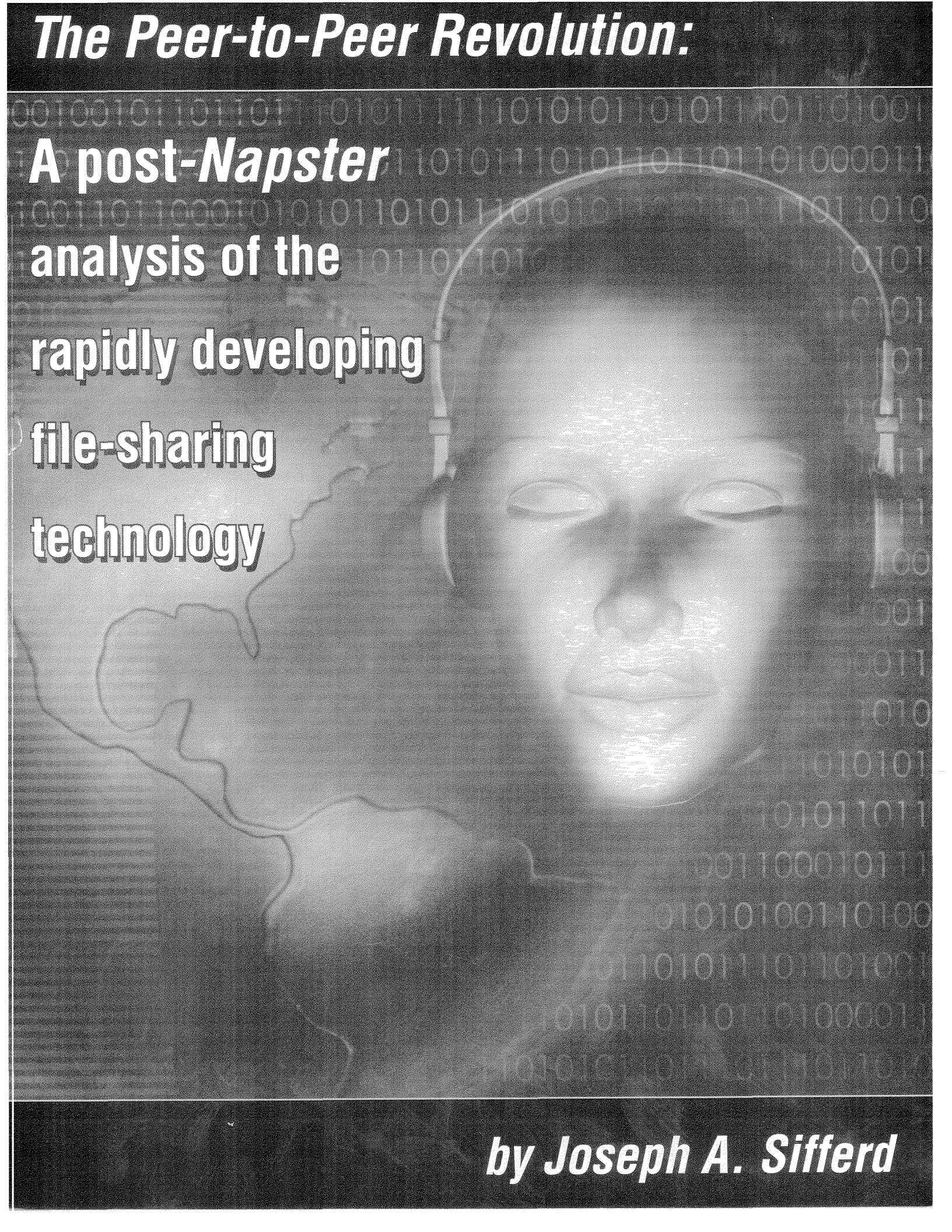

A post-*Napster* analysis of the rapidly developing file-sharing technology

by Joseph A. Sifferd

Introduction

In its dispute with peer-to-peer file sharing developers such as Napster, the music industry is using the legal system, most notably existing copyright law, to maintain its chokehold on music distribution. History has shown that the entertainment industry will oppose any technology that has the potential to upset its monopoly over artists and consumers. Throughout the development of copyright law in the United States, Congress has made an effort to balance legitimate technological advances and the rights of individual copyright holders, as required by the Constitution.[1] Likewise, the courts, in interpreting these statutes, have tried to separate justifiable versus unjustifiable uses of creative works.

This Note will focus on *A&M Records, Inc. v. Napster, Inc.*,[2] and will include an analysis of copyright law applicable to the legality of the incipient peer-to-peer file-sharing technology. The first Section will provide a brief factual history and introduction to the *Napster* legal discussion. The second Section of this Note will include a survey of relevant copyright doctrines, followed by a discussion of the Ninth Circuit's analysis of these doctrines as applied to the facts presented in *Napster*. Finally, I will address the future of the peer-to-peer phenomenon, including a review and analysis of different types of peer-to-peer networks that are experiencing continued use and development. Some Napster offspring are constructed in a way that makes them seemingly immune to copyright liability. Thus, using post-*Napster* copyright law, I will address whether the judicial system will be able to control online music piracy, or whether Congress will be forced to address the issue with additional legislation. Ultimately, the evolution of peer-to-peer networks may spark a congressional response that will reshape copyright law to more effectively deal with Internet-related technological advances.[3]

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Napster: Facts and Procedural History

In 1999, an eighteen year-old college dropout, Shawn Fanning, developed an idea that sent the music industry into a frenzy. That year, Fanning and Sean Parker, an Internet chat-room friend, founded Napster, Inc., a peer-to-peer file sharing business that enabled its users to trade and share music files for free over the Internet.[4]

Napster provided its members with free MusicShare software,[5] allowing them to connect to Napster's servers. Once connected, MusicShare scanned the MP3 files available on the hard drive of any user connected to the Napster site, adding those file names or song titles (not the actual files themselves) to the directory of available songs on Napster's server index. Napster also allowed its users to play the music they downloaded and provided a chat room for members to interact.[6]

MusicShare was an integral part of the protocol for Napster file-sharing, and its user-friendly simplicity was largely responsible for Napster's global popularity. First, a user sent a particular song request to the Napster server. The server then combed the hard drive of other users who were online to locate that selection. If the server found a match, Napster then linked the searching computer with the computer holding the file.[7] The file was then downloaded directly from the host's personal computer ("PC") to the requesting user's PC.[8] Once music files were downloaded, users had the freedom to use the songs as they pleased, which included using other computer capabilities unrelated to the Napster software to transfer songs from their hard drive onto compact discs ("CDs"), a process known as "burning." Napster never actually touched the copyrighted materials.[9] However, it did post the names of the songs and users screen names on its indices.

Internet users instantly fell in love with Napster. The number of Napster users soared to over 20 million in just over a year after Napster's inception and peaked at around 90 million prior to its shut down on July 1, 2001.[10] Napster operated as a non-profit company receiving $15 million in investment funds from the Silicon Valley venture capitalist firm Hummer Winbald.[11] Most of the money was used for legal fees and employee salaries. Napster continued to operate as a non-profit company throughout its court battles.

The Recording Industry Association of America

("RIAA") and eighteen affiliates of the top five record labels filed suit against Napster on December 6, 1999 in the U.S. District Court for the Northern District of California.[12] This initial suit was followed by a flurry of lawsuits by artists seeking to protect their copyrighted works, including suits brought by heavy metal rock group Metallica and rapper Dr. Dre.[13] Anticipating Napster's early demise, users flooded the Internet. At one point, the Napster.com web site averaged 945,000 visitors per day.[14]

Napster hired the law firm Fenwick & West and also recruited prominent attorney David Boies to handle oral arguments before the district court and Ninth Circuit Court of Appeals.[15] On July 12, 2000, plaintiffs moved jointly for a preliminary injunction against Napster.[16] Boies lost his first battle with the RIAA on July 26, 2000 when U.S. District Judge Marilyn Patel granted the music industry's motion for a preliminary injunction that would have forced Napster to shut down its services based on findings of contributory and vicarious infringement of plaintiffs' copyrighted works.[17] However, on July 27, 2000, Napster filed an emergency motion to stay the injunction, which was granted the following day.[18] After hearing oral arguments on October 2, 2000, the Ninth Circuit remanded the case and allowed Napster to continue servicing its users pending the outcome of the trial.[19]

In February of 2001, the Ninth Circuit determined that Napster, as it was currently organized, violated existing copyright law, but forced the district court to narrow the scope of its injunction. Napster voluntarily shut down its system on July 1, 2001, just four months after the Ninth Circuit opinion was released.[20] Either Napster was unable to meet the Ninth Circuit's restrictions, or it made a business judgment to restructure its system so as to produce a service that would be appealing to the music industry for purposes of creating an Internet music distribution partnership. The latter reason is more likely, as Napster seems to be making progress in settlement negotiations with the various sectors of the music industry. Even after its file-sharing service was terminated, Napster continues to be one of the most visited entertainment websites on the Internet.[21]

Review of Federal Copyright Law

Federal copyright law is composed of an expansive body of both legislative materials and judicial decisions designed to protect copyright holders' interests and provide defenses for alleged infringers. In order to explore the legalities of peer-to-peer file-sharing networks, it is important to have a basic understanding of copyright law. This Section thus provides a brief explanation of the relevant portions of copyright law. This discussion is also crucial to understanding the Ninth Circuit's analysis, which will be discussed immediately following this Section. I will begin with a review of the theories relied on by the music industry in bringing its suit: contributory and vicarious liability. The analysis will then turn to an expansive body of law from which Napster marshalled its defenses. These defenses include: the "fair use" defense under the 1976 Copyright Act, the "substantial non-infringing use" doctrine established by the Supreme Court in *Sony v. Universal*, "noncommercial" recording associated with the Audio Home Recording Act ("AHRA"), "safe harbors" available under the Digital Millennium Copyright Act ("DMCA") for immunity to Internet-related infringement. Finally, a discussion of the No Electronic Theft Act ("NETA"), which creates liability for non-commercial infringement on the Internet that might otherwise go unpunished, will follow.

Contributory and Vicarious Infringement

To be held liable for contributory infringement, the plaintiff must show that the defendant had actual or constructive knowledge of its users infringing activities, and that defendant substantially participated in the infringement by inducing, causing, or materially contributing to its occurrence.[22] To be vicariously liable, the plaintiff must demonstrate that defendant actually supervised or exercised control over the direct infringement and that the defendant had a direct financial interest in the infringing activity.[23] No actual knowledge of the infringing activity is required for vicarious liability, and no financial motive is needed to establish contributory liability.

In order to prove either contributory or vicarious copyright infringement, the music industry must show that Napster users were engaged in direct infringement. Direct infringement simply means that one of the plaintiff's enumerated rights under the Copyright Act of 1976 has been violated. These enumerated liberties include the rights of reproduction, performance, and distribution of plaintiff's copyrighted work.[24]

Generally, plaintiffs suing to protect their intellectual property pursue contributory and vicarious infringe-

ment claims, instead of filing suit against the direct infringers. A direct infringer typically has shallow pockets from which to obtain monetary damages. This litigation philosophy certainly holds true with respect to the Napster dispute; the music industry could reach the assets of a hot e-commerce company worth millions, rather than suing teenagers downloading N*Sync and other mainstream music in the privacy of their own homes.

Copyright Act of 1976: Fair Use

In 1976, Congress enacted a body of copyright law that protected creative works of authorship while recognizing limitations on the exclusive rights of copyright owners. Under 17 U.S.C. section 107, Congress allowed for certain unauthorized uses of copyrighted works to be categorized as legal, non-infringing uses —a doctrine known as "fair use".[25] Section 107 provides that "the fair use of a copyrighted work, including such use by reproduction in copies or phonographs or by any other means specified by [the Act], for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright." The statute lists four factors that should be considered when determining whether the use made of a work in any particular case is in fact "fair."[26] These include:

1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
2) the nature of the copyrighted work, whether the work is creative or only factual;
3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
4) the effect of the use upon the potential market for or value of the copyrighted work.[27]

The Supreme Court in analyzing multiple fair use cases has stated that these factors are not meant to be exclusive in determining whether use of a copyrighted work is fair.[28] In many cases, the unauthorized use of a copyrighted work is found to be fair even though a majority of the four factors above weigh in favor of the plaintiff. However, courts seem to be more skeptical of the fair use defense where the work is being used in a manner that has an adverse effect on the copyright holder's market.[29]

One of the first cases to address intellectual property rights in cyberspace was *Religious Technology Center v. Netcom*.[30] This case addressed the issue of whether a computer bulletin board service ("BBS") and an Internet service provider ("ISP") can be held liable for direct copyright infringement committed by a subscriber of the BBS.[31] In its review of the issue the court analyzed the fair use defense and provided a helpful summary of cases defining its application.[32]

The *Netcom* court found that the purpose of the use was commercial, as Netcom benefited from fees paid by its infringing subscribers.[33] However, the court stated that Netcom's use also benefited "the public in allowing for the functioning of the Internet and the dissemination of other creative works."[34] Based on this reasoning, the court reiterated a common law principle that unauthorized copying of protected works can be considered fair use despite the commercial purpose of the activity.[35]

Addressing the second prong of the fair use analysis, the Netcom court found that the nature of the work at issue was both original and creative.[36] Though its finding generally militated against fair use, the court concluded that this factor alone was not dispositive.[37] Likewise, the court found that the third fair use factor, the portion of the work used, "should not defeat an otherwise valid defense."[38] Though Netcom posted substantial portions and even entire works belonging to the plaintiff, the court stated "the mere fact that all of a work is copied is not determinative of the fair use question, where such total copying is essential given the purpose of the copying."[39]

The fourth factor, concerning the adverse affect of the defendant's use on the market for the plaintiff's copyrighted work, is likely the most important factor that a court considers in analyzing fair use.[40] In *Netcom*, the court stated that the plaintiff must show that the defendant's unauthorized use will significantly harm the market for the original work; failure to show such evidence weighs in favor of fair use. The fair use defense is particularly persuasive when no financial harm is shown to affect the market of the plaintiff's work, regardless of the determination of the first three factors.[41]

The *Sony* Decision: Substantial Non-Infringing Use

The fair use doctrine has expanded to accommodate various technological advances. One such development, Sony's videocassette recorder ("VCR"), sparked a great deal of controversy in the entertainment industry in the 1980s.[42] When the VCR was first introduced, the movie industry was determined that it would destroy their market. In actuality, VCRs revolutionized the movie business, providing an avenue for mass distribution and sale of films to consumers. The film industry was particularly concerned that these machines allowed consumers to record copyrighted works at home and watch them multiple times free of charge. Its concerns were exacerbated by the fact that VCRs allowed mass production of films to be sold cheaply in the black market.

The film industry sued Sony for contributory and vicarious copyright infringement, alleging that Sony was liable for the direct violations of their customer-users.[43] Among other legal doctrines, the Supreme Court analyzed Sony under the fair use defense.[44] The Court stated that the VCR needed only to be capable of a "significant non-infringing use," such as private, non-commercial time-shifting in the home in order to qualify for fair use protection.[45]

The time-shifting capabilities of the VCR made it possible for consumers to record free television shows that they otherwise would have missed so that they could conveniently watch them at a later time. The Court reasoned that the sale of copying equipment, which is capable of being used for legitimate purposes, does not constitute contributory infringement.[46] The court stated that it is important to find "a balance between a copyright holder's legitimate demand for effective—not merely symbolic—protection of the statutory monopoly, and the rights of others freely to engage in substantially unrelated areas of commerce."[47] The Court further stated that when litigation arises in response to technological advances that threaten copyright protection "sound policy, as well as history, supports consistent deference to Congress when major technological innovations alter the market for copyrighted materials."[48]

The Ninth Circuit in *RIAA v. Diamond Multimedia Sys., Inc.* analogized the *Sony* fair use notion of time-shifting to the idea of "space-shifting."[49] Space-shifting consists of transferring, recording, or copying music that the consumer already owns to a different medium for convenience. A consumer space-shifts, for example, when she transfers music from a traditionally purchased compact disc to an audiotape or her computer's hard drive. The court reasoned that space-shifting was a similar non-commercial use protected by the fair use doctrine.

Audio Home Recording Act: Non-Commercial Use

In 1992, Congress added the Audio Home Recording Act ("AHRA") to the body of copyright law.[50] Enacted to address the development and marketing of digital audio tape ("DAT") recorders, section 1008 of the AHRA states:

> No action may be brought under this title alleging infringement of copyright based on the manufacture, importation, or distribution of a digital audio recording device, a digital audio recording medium, an analog recording device, or an analog recording medium, or based on the noncommercial use by a consumer of such a device or medium for making digital music recordings or analog musical recording.[51]

The AHRA was intended to prevent serial commercial copying and to allow consumers to make DAT recordings for their own personal home use.[52]

Napster argued that the AHRA's home use provision could be applied to downloading, copying, or recording digitally transmitted music from the Internet.[53] Computer hard drives, however, were intentionally left out of the AHRA and not recognized as recording devices under the Act.[54] To push the AHRA through Congress, the music industry was forced to compromise with the computer industry, making computer hard drives exempt from the Act.[55] Thus, it seems the AHRA is confined to non-computer recording devices. Because the AHRA does not address computers as digital recording devices, Congress was forced to add to the quickly growing body of copyright law with the 1998 passage of the Digital Millennium Copyright Act ("DMCA").[56]

Digital Millennium Copyright Act: Safe Harbors

The DMCA not only bans attempts to circumvent copyright protection, but also provides safe harbors and immunities for ISPs and educational establishments.

Title I of the DMCA implements two treaties from the World Intellectual Property Organization ("WIPO") protecting American copyrights worldwide and providing authors with the exclusive right to authorize the availability of their works on the Internet.[57] More importantly, Title I prohibits

> the circumvention of technological measures that control access to a copyrighted digital work and makes it illegal to develop equipment or methods to circumvent copyright protection. The prohibition extends to the use of methods and tools to circumvent Copyright Management Information (CMI), as well as to the manufacture, distribution, and offering of such tools so long as the tools are: 1) primarily designed to circumvent CMI, or 2) have limited commercial use beyond circumvention, or 3) are marketed for purposes of circumvention.[58]

CMI consists of encrypted material that identifies the work so that the owner can trace the use of his copyrighted work.[59] Title I does however continue to permit unauthorized copying consistent with fair use privileges.[60]

Title II of the DMCA is more applicable to the *Napster* dispute. Title II establishes "safe harbors" or immunities for ISPs for the unlawful actions of their individual users. Put another way, an ISP can be held liable for direct infringement, but cannot be held liable for contributory or vicarious infringement based on the independent infringing actions of its users. The legislative purpose of the act is to "preserve strong incentives for service providers and copyright owners to cooperate to detect and deal with copyright infringements that take place in the digital networked environment...while providing greater certainty to service providers concerning their legal exposure for infringements that may occur in the course of their activities."[61] Safe harbors for ISPs are available in four circumstances. First, an ISP is not liable when it is merely acting as a conduit, inadvertently transferring infringing materials through the network.[62] Second, ISPs are allowed safe harbors when temporarily storing popular, yet infringing, materials for its users' convenience.[63] Third, ISPs cannot be held liable for acting as a storage facility for infringing material, *unless* the ISP knows or should know, or financially benefits from, the infringing material.[64]

Once an ISP is notified of the infringing material, however, it must either take action to have the material removed or prevent access to the material. If a user continues his or her infringing activities and the ISP is notified, the ISP may be forced to terminate that user's access to the Internet. Lastly, the act provides protection for information location tools ("ILTs") such as hyperlinks, online directories, and search engines.[65] ILTs cannot be held liable for directing users to locations that contain infringing materials, unless they have actual knowledge or are otherwise informed of the infringing material.[66] This Title forces copyright owners to go after the actual infringing users, preserving ISPs and ILTs, which are crucial to the success and efficiency of the Internet. ISPs are encouraged to remove infringing materials as quickly as possible once the materials are discovered.[67] The DMCA places no affirmative duty on ISPs or ILTs to police their users for infringing activities. Infringement by an individual must be red-flagged and brought to the attention of the ISP before it can be expected to take action.

No Electronic Theft Act

U.S. v. LaMacchia was the first case dealing with the unauthorized dissemination of infringing copyrighted works on the Internet[68] In *LaMacchia*, an MIT student created a website allowing visitors to download free software, but the court was unable to punish the defendant for his infringing activities because there was no existing copyright violation for which he could be charged. At the time of the trial, copyright law required that the defendant's infringing acts be willful and that his

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activities be in pursuit of some commercial purpose. The student in *LaMacchia* had no commercial purpose and gained no financial advantage from his infringing activities; therefore, he could not be punished under existing copyright law.

The legislature attempted to control noncommercial copyright infringement on the Internet in 1997 with the No Electronic Theft Act ("NETA").[69] NETA makes certain copyright violations a criminal offense regardless of the infringer's motives.[70] An individual who downloads or makes one or more unauthorized copies of material worth more than $1,000 but less than $2,500, within a 180-day period, can be fined up to $100,000 and face up to one year in prison.[71] The fine and sentence increase as the dollar amount of the infringing material increases.[72]

The first victim of NETA, a University of Oregon student, was convicted for violating NETA in August of 1999, after posting thousands of unauthorized MP3s, software, and digitally recorded movies on a personal home page.[73] After an FBI investigation, the student pled guilty and was sentenced to two years probation.[74] NETA is a significant addition to copyright law because it provides an alternative to punishing and preventing copyright infringement on the Internet. Rather than shutting down a legitimate website or ISP, NETA allows copyright holders to go after the direct infringers.

Ninth Circuit Analysis of *A&M Records, Inc. v. Napster, Inc.*

In its opinion dated February 12, 2001, the Ninth Circuit interpreted copyright law to find both Napster users and Napster, Inc. to be engaged in infringing activity that would not likely be protected by the defenses available under existing copyright law.[75] This decision forced the inaugural peer-to-peer network to restructure its service so as to bring it into compliance with the Ninth Circuit's interpretation of the law. The following analysis of the Ninth Circuit's opinion is supplemented with arguments used by Napster to counter the court's reasoning and ultimate conclusion.

Fair Use Defense to Direct Infringement

The Ninth Circuit began its analysis by affirming the district court finding that Napster users were directly infringing plaintiffs' rights of reproduction and distribution.[76] After reviewing the threshold question of direct infringement, the court analyzed the fair use defense as applicable to Napster users' conduct.[77] Napster artfully crafted fair use arguments aimed at legitimizing and protecting its users' activities. Napster contended that its users were engaging in distinct fair use activities including: sampling, space-shifting, and reproduction of songs with the permission of both independent and established artists.[78] After reviewing Napster's fair use arguments, the Ninth Circuit concluded that a balancing of the four fair use factors[79] supported plaintiffs' position that Napster users were not engaged in fair use.[80]

First, with regard to the purpose and character of the use, the court found that Napster users were in fact engaging in commercial use, upholding the district court's reasoning that "a host user sending a file cannot be said to engage in a personal use when distributing that file to an *anonymous* requester and Napster users get for free something they would ordinarily have to pay for."[81] Napster argued that its users downloaded songs for their own noncommercial home use.[82] The noncommercial uses of Napster included: space-shifting (transferring already owned songs to another medium for the convenience of the consumer), sampling (listening to songs placed on Napster by artists for purposes of advertising their music)[83], and providing an avenue for new artists to expose Napster users to their work.[84]

The court rejected these arguments for two primary reasons. First, the court was troubled by the vast number of copies being made, suggesting that the gravity of Napster copying was inherently commercial.[85] Second, the court noted that Napster users were distributing, not to friends, but to anonymous requesters.[86] The court stated further that direct economic benefit was not required to establish commercial use, "[r]ather, repeated and exploitative copying of copyrighted works, even if the copies are not offered for sale, may constitute a commercial use."[87]

The court also found that both the second and third factors of the fair use analysis, the nature of the use and the portion used, weighed against a finding of fair use.[88] The court reached the obvious conclusion that the songs being traded are creative in nature and that Napster users were copying music files in their entirety.[89] However, the court reiterated the common law notion that none of the fair use factors are dispositive. Rather, a balance of all four factors should be considered when analyzing the fair use defense.[90]

Finally, with respect to the effect of the use on plaintiffs' market, the court concluded that plaintiffs' evidence was sufficient to establish that Napster use harmed their market by reducing CD sales among college students.[91] The court further noted that Napster use raised barriers to the music industry's future market for the digital downloading of music.[92] The court upheld the district court's determination that plaintiffs' expert reports showed harm to the current and future market for digital music.[93] According to the court, "[h]aving digital downloads available for free on the Napster system necessarily harms the copyright holders' attempt to charge for the same downloads."[94]

Napster presented evidence that its service allowed users to sample new music or download music files temporarily before making a purchase.[95] At the height of Napster's popularity, music sales were at an all time high—N*Sync managed to break first week sales records with the release of their album "No Strings Attached," despite the fact that millions of their songs were traded daily using the Napster network.[96] Napster argued that it was performing the same service for the music industry that Sony VCRs did for the movie industry, revolutionizing the industry and producing higher demand and profit.

Despite these arguments, the Court affirmed that sampling constitutes commercial use even if the music traded is eventually purchased by the user.[97] The record industry does sample its songs, but the process is highly regulated and the songs sampled on Internet sites are usually incomplete or are available only on a temporary basis.[98] Napster enabled users to make a complete and permanent copy of music files.[99] The district court explained that "even if the type of sampling supposedly done on Napster were a non-commercial use, plaintiffs have demonstrated a substantial likelihood that it would adversely affect the potential market for their copyrighted works if it became widespread."[100] The Ninth Circuit agreed with this contention and stated that Napster's evidence, showing that the service enhanced plaintiffs' sales, was not enough to warrant a finding of fair use.[101]

The court also refused to extend the "space-shifting" aspect of fair use.[102] The court stated that "[b]oth *Sony* and *Diamond* are inapposite because the methods of shifting in these cases did not also simultaneously involve distribution of the copyrighted material to the general public; the time or space-shifting of copyrighted material exposed the material only to the original user."[103] It further distinguished *Sony* by stating that VCR users enjoyed taped television shows at home as opposed to distributing the programs.[104] However, Napster users, in order to access music from another location, automatically make their music available to millions of other users.

The court failed to note that Napster's MusicShare software allowed its users to prevent others from downloading their songs by simply terminating any unwanted or allegedly unlawful transfers. Users of VCRs, portable MP3 players, photocopiers, audio tape recorders, and other copying devices could and in fact do use these devices to reproduce and distribute copyrighted materials illegally. Yet, courts have refused to outlaw these technologies simply because they were capable of being used for illegitimate purposes.

Sony: Substantial Non-Infringing Use Defense

The Ninth Circuit reviewed Napster's argument that its network provided several "substantial non-infringing uses," and thus, under the *Sony* doctrine should not be treated either as a contributory or vicarious infringer.[105] The court, however, disagreed with this ostensibly plausible application of the *Sony* doctrine and found that plaintiffs were likely to prevail on the issues of contributory and vicarious liability.[106] The court recognized several non-infringing functions offered to Napster users, such as the New Artist Program, chat rooms, message boards, and permissive reproduction and distribution of songs by independent and established artists.[107] These features were not problematic, according to the decision, because plaintiffs did not wish to enjoin these non-infringing functions.[108] However, according to *Sony*, a technology capable of such substantial non-infringing uses should not be forced into extinction simply because it is also capable of infringing uses.[109] In this respect, the Ninth Circuit ignored the essence of the substantial non-infringing use defense enunciated by the Supreme Court in Sony and denied Napster the benefit of this defense to the claims of contributory and vicarious infringement.

Contributory Infringement

The Ninth Circuit found that Napster was engaged in contributory infringement of plaintiffs' copyright.[110]

The court stated that Napster had both actual and constructive knowledge of its users' infringing activity and materially contributed to that activity.[111] Based largely on Napster's internal documents, the court determined that Napster had actual knowledge of its users' infringing activities and maintained a policy of willful blindness with regard to the infringers' identities.[112] Furthermore, actual knowledge was established because the plaintiffs notified Napster of more that 12,000 infringing files that were being traded using the Napster network.[113]

Because of Napster executives' knowledge of the industry and intellectual property rights, Napster was found to have constructive knowledge of infringing activity.[114] This preliminary finding was bolstered by the fact that Napster's employees themselves had downloaded infringing materials.[115] Having established Napster's liability for contributory infringement, the court reviewed Napster's defense that its system was capable of "substantial non-infringing uses."[116]

The Ninth Circuit disagreed with the district court's analysis of the substantial non-infringing use defense.[117] The court found that the lower court erred by focusing primarily on Napster's current infringing uses, ignoring its current and future non-infringing capabilities.[118] Napster demonstrated that its file-sharing service provided artists and consumers with a number of innovative and welcomed non-infringing uses.[119] As previously mentioned, these uses included the New Artist Program, space-shifting, and sampling.[120]

At one point during Napster's first life, more than 25,000 artists gave permission for their songs to be traded freely on the Napster network.[121] Many of these artists used Napster as a way of publicizing their works and reaching their fans directly.[122] Napster's New Artist Program promoted new artists on its website and encouraged users to download and sample their music.[123] Many performers, including Metallica, Courtney Love, The Offspring, the Beastie boys, and Motley Crue authorized digital recordings of live performances in concert halls across the world that were legally traded on Napster.[124] Napster also facilitated the lawful exchange of works with copyrights that had expired.[125]

Furthermore, Napster argued that its file-sharing system allowed "space-shifting," which was legitimized as a "paradigmatic noncommercial use" under *Diamond*.[126] In fact, many Napster users already owned the works they download using Napster.[127] For example, rather than transport one's CDs from home to work every day, peer-to-peer file-sharing makes it possible to simply download one's CDs onto a home computer and transmit them via the Internet to one's office computer. Space-shifting is a convenience similar to the time-shifting concept approved of in the *Sony* case and has been viewed as one of many substantial non-infringing uses according to the Ninth Circuit's opinion in *Diamond*.[128] Case law supports the notion that any use which enhances the enjoyment of a product already purchased should constitute fair use.[129]

> "THE *record supports the district court's finding that Napster has actual knowledge that specific infringing material is available using its system, that it could block access to the system by suppliers of the infringing material, and that it failed to remove the material.*"

Napster further argued that "sampling" is a primary non-infringing use.[130] Napster's surveys showed that a large number of its users downloaded a song before purchasing it in music stores.[131] Eighty-four percent of Napster users stated they downloaded songs to determine if they were worth purchasing in CD form.[132] Napster's studies also showed that 90% of the songs downloaded were deleted after sampling.[133] Consumers often have heard, or want, only one song on a CD, yet they are forced to purchase the entire CD at an arguably fixed and inflated price—a price determined not by the market, but by the music industry. Consumers are often forced to gamble as to whether they will enjoy the remainder of the songs on a CD. Napster's surveys also showed that 50% of college students purchased between 10% and 100% of the music they downloaded, which is a much higher purchase-rate than radio listening yields.[134]

The RIAA argued that the substantial non-infringing uses of Napster were heavily outweighed by infringing uses. But *Sony* makes it quite clear that the technology need only be capable of substantial non-infringing uses.[135] The Supreme Court found that a majority of the VCR's uses were infringing, yet held that the few non-fringing uses were sufficient to protect the technology from being discontinued.[136] The Court mentioned one uncopyrighted movie, "My Man Godfrey," one

television show, "Mr. Rogers," and sports programming, all three of which could be legally recorded.[137] Taken together these non-infringing uses mentioned by the Court at the time constituted less than 10% of all the possible uses of the VCR.[138] Under the Supreme Court's standard in *Sony*, it seems logical to conclude that Napster could have escaped liability with only 10% of its uses being substantially non-infringing.[139]

Napster should not be required to re-engineer its technology to allow only non-infringing uses. Both *Sony* and section 512(m) of the DMCA make it clear that new technologies should not be judicially banned or required to be re-engineered unless the only substantial use of which they are capable is unlawful.[140]

In a rather cursory review of Napster's arguments, the Ninth Circuit sided with the plaintiffs. In its analysis of the actual knowledge requirement established in *Netcom*, the Ninth Circuit concluded that plaintiffs would likely be successful in showing that Napster had actual knowledge of infringing activity on its system.[141] "The record supports the district court's finding that Napster has actual knowledge that specific infringing material is available using its system, that it could block access to the system by suppliers of the infringing material, and that it failed to remove the material."[142] Plaintiffs notified Napster of the infringing files on its system and those files continued to be traded, despite Napster's practice of terminating the accounts of users that possessed infringing materials.[143]

With regard to the material contribution prong of the contributory infringement analysis, the Ninth Circuit concluded that Napster materially contributed to its users' infringing activities.[144] The Court stated, "Napster provides the 'site and facilities' for direct infringement—without the support services defendant provides, Napster users could not find and download the music they want with the ease of which defendant boasts."[145]

Vicarious Infringement

Vicarious infringement can be established by showing that the defendant has both a direct financial interest in the infringing activity and the right and ability to supervise the activity.[146] The court determined that Napster had a direct financial interest in its users' activity.[147] It rejected the notion that Napster was a non-profit company, and thus, not capable of financial benefit.[148] Financial benefit was found to have existed because Napster's future revenue depended on the availability of infringing music files as a "draw" for customers.[149]

The district court found that Napster failed to exercise its right and ability to police its system.[150] In its reservation of rights policy on the website, Napster stated that it reserves the right to block access to the Napster server and terminate the accounts of its users.[151] The Ninth Circuit explained that in order to be relieved of vicarious liability, Napster must exercise the right to police its system to its fullest extent.[152] However, the court recognized that the boundaries of the premises to be policed were limited to its search indices.[153] Songs were frequently spelled incorrectly by Napster users so it was possible to locate infringing files on the indices by entering variations of file names into the search engine that roughly corresponded to actual infringing file names. For example, if a user wanted to search for Madonna songs, the searching user simply had to eliminate one letter from the correct spelling. Thus, Madonna songs could be found by incorrectly spelling the name with only one "n": "Madona." The Court concluded that Napster failed to police its system in a reasonable manner, thus supporting the finding that the plaintiffs would likely succeed in showing vicarious liability.[154]

The Ninth Circuit also refused to extend application of *Sony's* "staple article of commerce" defense to the issue of vicarious liability, stating that the issue of vicarious liability was not before the Supreme Court in *Sony*.[155]

AHRA Defense

As previously mentioned, downloading MP3 files onto a computer hard drive does not fall within the ambit of the AHRA, thus the Ninth Circuit properly rejected application of the AHRA to peer-to-peer file-sharing.[156] Section 1008 of the AHRA does not allow copyright infringement suits based on the manufacture, importation, or distribution of a digital audio recording device or a digital audio recording medium.[157] Furthermore, the Act does not permit a cause of action based on noncommercial use by the purchaser of such digital music devices.[158]

In *Diamond*, the Ninth Circuit found that computer hard drives are not digital audio recording devices under the AHRA because their "primary purpose" is not to make digital recordings of music.[159] The *Nap-*

ster court followed the reasoning in *Diamond*, concluding that songs fixed on computer hard drives are not analogous to the digital music recordings addressed in the AHRA.[160] Both the plain language of the statute and the legislative history support this finding.

DMCA Safe Harbor Defense

Napster argued that section 512 of the Digital Millennium Copyright Act provides a "safe harbor" defense for its service.[161] Napster lost this argument at the district court, which concluded that secondary infringers are never protected by the safe harbors provided in section 512.[162] The Ninth Circuit refused to uphold such a broad conclusion, stating:

> We do not agree that Napster's potential liability for contributory and vicarious infringement renders the Digital Millennium Copyright Act inapplicable per se. We instead recognize that this issue will be more fully developed at trial. At this stage of the litigation, plaintiffs raise serious questions regarding Napster's ability to obtain shelter under §512, and plaintiffs also demonstrate that the balance of hardships tips in their favor.[163]

Despite this disagreement, the Ninth Circuit found that the district court considered evidence sufficient to support its conclusion that plaintiffs, in seeking a preliminary injunction, had shown that "the balance of hardships tips in their favor".[164]

Napster arguably qualified as an ISP and "information location tool" under sections 512(a) and (d) of the DMCA.[165] This meant that Napster should not have been responsible for the individual copyright infringements of its users, and it should not have been given an affirmative duty to seek out individual infringers.[166] Furthermore, Napster argued that it maintained its immunity by satisfying the prerequisites under section 515(i), which requires ISPs to terminate the accounts of repeat offenders and not to circumvent technology measures used to identify or protect copyrighted works.[167]

Napster claimed that it terminated access for every user for which it received an appropriate violation notice under the DMCA.[168] At one point during the litigation, Napster permanently denied access to over 700,000 users.[169] Napster placed a code on the infringing party's computer to ensure that he did not try and log on under another account name.[170] Even after Napster received notice of infringing activity by an individual user, it proved difficult to verify a legitimate infringement claim because of possible fair use defenses available to individual users and a lack of copyright notices on the copies.[171] Under the DMCA and relevant case law, an ISP is to be provided with actual knowledge of infringing material at a particular location before vicarious infringement can be determined.[172]

The music industry did, however, raise legitimate questions as to whether Napster qualified as an ISP under the DMCA, noting that Napster never actually touched the infringing music files like an ISP would.[173] The infringing materials went directly from one user's PC to the other; Napster simply put the two PC's in touch with one another. Napster also presented an argument, which was rejected, that it should have been treated as an information location tool, receiving protection similar to that of an ISP under the DMCA.[174] Peer-to-peer file-sharing is a technology that was introduced into the market after the DMCA was enacted, and thus the language of the DMCA does not specifically address peer-to-peer networks.

Waiver, Implied License, and Copyright Misuse

The Ninth Circuit further rejected Napster's affirmative defenses, upholding the lower court's conclusion that waiver, implied license, and copyright misuse were fallacious defenses.[175] Beginning with the affirmative defense of waiver, both courts concluded that the plaintiffs had not created technology capable of destroying their own market, and thus, the plaintiffs did not forfeit or waive their exclusive control over creation and distribution of digital MP3 files.[176] Second, the courts concluded that the plaintiffs did not grant an implied license to distribute their music simply by encouraging the exchange of music files over the Internet.[177] In fact, the record showed that the plaintiffs expressly objected to the availability of its music on Napster.[178]

Finally, the court renounced Napster's argument that the music industry surrendered its copyright protection by colluding to use its copyrights to extend their monopolistic control over online distribution of music.[179] The court stated, "[t]here is no evidence here that plaintiffs seek to control areas outside of their

grant of monopoly. Rather, plaintiffs seek to control reproduction and distribution of their copyrighted works, exclusive rights of copyright holders."[180]

Napster argued that the music industry's grip on music distribution constituted "copyright misuse."[181] Copyright holders cannot use their copyright for anti-competitive purposes.[182] In other words, copyright holders should not be able to use their copyrights to gain control over technologies that they did not invent and do not own, such as the VCR and, arguably, Napster. A copyright owner that is found liable for "copyright misuse" loses his or her right to copyright protection.[183]

At times, it appears that the music industry acts collectively to eliminate music distribution that is not within its control. The recent cases against MP3.com and Napster are great examples of the collusive effort of the RIAA and the big five record labels to stifle technological advances in order to maintain their current choke-hold on the distribution of creative works.

RIAA members acting in concert have managed to pool 90% of the copyrights on music in the U.S.[184] According to David Boies, "record companies do operate as a cartel...their approach to Napster has been coordinated" and antitrust laws forbid this.[185] Should someone be able to establish that the RIAA is guilty of antitrust violations, then copyright misuse will also have been proved. The standard of proof for copyright misuse is much lower than that in an antitrust claim.[186] Antitrust problems arise when an industry, such as the RIAA and its record labels, acts collusively and refuse to deal or negotiate with other distributors.[187] The collective suit against a new form of music distribution such as Napster seems like a sign of monopolistic activity. Nonetheless, the Ninth Circuit, disagreeing with Napster's interpretation of the copyright misuse defense, gave this issue little treatment in its opinion.[188]

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Injunction modification

The Ninth Circuit provided guidance to the district court for purposes of modifying the injunction. The court refused to allow an injunction based simply on Napster's existence, without a showing of knowledge and a refusal on the part of Napster to remove infringing materials from its system.[189] Unless Napster prevented distribution of infringing materials that it knew to be on the system, it should be shut down to stop ongoing contributory infringement. With regard to vicarious liability, the court reiterated that Napster must exercise its right and ability to police its system for infringing files.[190] Furthermore, Napster was required to either block access to the infringing material or terminate the infringing user's access to the Napster network.[191]

In narrowing the scope of the district court's decision, the Ninth Circuit stated that the burden is on the plaintiffs "to provide notice to Napster of copyrighted works and files containing such works available on the Napster system before Napster has the duty to disable access to the offending content."[192] The court placed an affirmative duty on Napster to police its system.[193] However, in light of this opinion, it seems somewhat ambiguous whether Napster had a duty to police its system only after it received notice that infringing materials exist on its system, or whether Napster had an ongoing duty to patrol its system for infringing materials.

The opinion could be construed as placing the burden on the plaintiffs to provide notice of infringing activity before Napster was required to affirmatively block access to such material or terminate user access. However, the duty to police its system was likely an ongoing obligation, regardless of notice. What if Napster, while policing its system, discovers materials that it believes to be infringing? Should Napster be required to block access to such material without notice by the plaintiffs? With respect to the notice requirement, it seems as though the court treated Napster as an ISP, which have no affirmative duties to police their systems under current law. However, by placing a duty on Napster to patrol its system, the court seems to regard Napster as a hybrid ISP without the "safe harbor" protection provided by the DMCA.

Napster Settlement Negotiations

In late October 2001, Napster began making headway with settlement negotiations by announcing its alliance with German media giant, Bertelsmann.[194] The parties agreed to join forces and develop a service that would

allow members to pay a monthly fee for access to the entire BMG catalogue.[195] Bertelsmann agreed to drop its lawsuit against Napster in exchange for the right to purchase a portion of Napster's stock. Bertelsmann also agreed to give financial support to help develop Napster's system to make their plan a reality.

Napster is currently headed by two ex-Bertelsmann executives.[196] Also, Bertelsmann holds warrants worth 58% of Napster, if exercised.[197] Bertelsmann seems to have accepted that Napster's technology may be the way of the future, and looks forward to opening up the technology as a means of distributing books and movies.[198] Chairman and chief executive of Bertelsmann, Thomas Middelhoff, was quoted as saying, "[p]eople want to share things, and where it used to be done on tape recorders now it's done over the net. Peer-to-peer file sharing is a reality and will only get bigger."[199]

As of September 2001, Napster had negotiated a preliminary settlement with American songwriters and music publishers, agreeing to pay songwriters $26 million for past infringement.[200] The agreement also provides $10 million as an advance for future royalties for legal rights to published songs that will be available on Napster's new subscription service.[201] Of course, this agreement only encompasses the publishing rights of 700,000 songs.[202] Napster plans on its subscription service being operational by the end of 2001 and estimates its customer base to reach one to two million subscribers within its first two years.[203] The terms of the agreement grant publishers one-third of Napster's content revenue—a much higher rate than traditionally paid for publishing rights.[204] This preliminary agreement has not been ratified by all sectors of the publishing industry and has yet to be approved by the district court.[205] Napster also continues to negotiate rights held by performers and various record labels.[206]

Alternatives to Napster

It seems as though the battle between the music industry and the rapidly developing peer-to-peer technology is in its infancy. While this conflict seems limited to giant music corporations and technology developers, the consequences of the Napster dispute could spark an epic struggle that inherently involves artists, consumers, and industry elites in the way information is distributed over the Internet. Some fear that too much control over the distribution of information will lead to monopoly.[207] Many consumers and some major artists are tired of the music industry exerting its stronghold on music distribution, and thus, have chosen to support new technologies that fall outside the control of the music industry.[208]

Napster's success sparked the birth of multiple alternative forms of Internet content distribution technologies. Gnutella emerged, then Limewire, and today there are approximately 176 brands of file-sharing software worldwide.[209] Some of the Napster progeny are developing legitimate business models in hopes of forming a contractual relationship with the music industry that will allow them to distribute music online. Napster, Inc. is one such company that is redesigning its system to be more compatible with the interests of copyright owners that wish to charge monthly subscription fees for access to their music. Other Napster offspring have mutated into pure peer-to-peer networks that lack accountability, with no central controlling or enabling unit for copyright owners to sue.

Two basic types of peer-to-peer networks have evolved to this point. First is the Napster or "closed" network model, which requires a centralized server or search index to tie its users together, enabling them to trade directly with one another.[210] The other is an "open" or "pure" peer-to-peer system.[211] The pure peer-to-peer network only requires two individuals with computers to contact one another using a variety of software programs that are free and readily available for download on the Internet.[212] There is no single entity or computer capable of controlling or shutting down the entire network.[213] One expert, Howard Siegel, explains the virtual immunity of these pure peer-to-peer networks compared to the closed, central server networks:

> The query process and the list of results can look remarkably similar to Napster, and yet all of it can be accomplished without any reference to a central computer. Indeed, on true [peer-to-peer] networks, it is impossible to filter or block material from being swapped because there is no single place on the network to install a filter through which everything passes.[214]

Closed Peer-to-Peer Networks

With the *Napster* precedent, courts are likely to force closed systems to shut down their central server, thus, disabling the network. Some closed networks, like

Napster, have chosen to redesign their systems so that they are compatible with the Ninth Circuit opinion. The music industry is trying to harness the closed network as a means of entering the field of online music distribution.

One sector of the music industry, comprised of Bertelsmann, EMI, Warner, and RealNetworks, teamed up to create a subscription service called MusicNet, with which Napster plans on being involved.[215] This group plans to use AOL as its catalyst.[216] The subscription service is expected to be operational by November 22, 2001, and will have an estimated monthly subscription fee of less than $10 per month.[217] A preview of the service in October 2001 showcased approximately 25,000 songs, either in a continuous stream or for download.[218] The service is expected to provide 100,000 titles from record labels such as Warner Brothers, BMG, Virgin, RCA, Arista, Capitol, Elektra, EMI, and Zomba.[219] The record giants responsible for this venture promise excellent variety, including everything from old school Elvis to the newest releases.

Pressplay is a competing system developed by Universal and Sony, which will attempt to lure the website visitors of both Yahoo and Microsoft.[220] It is uncertain whether these subscription-based services will be able to compete with their illegitimate pure file-sharing competitors. Perhaps the encryption technology will annoy consumers. Furthermore, consumers could be turned away by the fact that they can only listen to the music they download on their computer, being unable to burn the music onto compact discs for play elsewhere.

"Pure" Peer-to-Peer Alternatives

Napster sparked the development of multiple pure file-sharing systems that have taken over the peer-to-peer spotlight, which include Gnutella, BearShare, LimeWire, KaZaA, Morpheus, Audiogalaxy, OpenNap, Aimster, Freenet, eDonkey, iMesh, WinMX, and Mojo Nation.[221] These services provide the ease associated with Napster combined with decentralized, pure peer-to-peer capabilities.[222] Sites like CNet's Download.com provide several different file-sharing programs available for download. Some of the peer-to-peer programs permit the sharing of movies, software, and books, in addition to music.[223] MusicCity.com's Morpheus, KaZaA, and Audiogalaxy are the three most downloaded files on Download.com, a comprehensive website of free software.[224] The following provides a brief description of some of the more popular file sharing networks and their enabling software.

MusicCity.com, of Nashville, TN, is a subsidiary of Streamcast.[225] MusicCity claims that 23 million people have downloaded its peer-to-peer software,[226] known as Morpheus.[227] The Morpheus software searches the network of users for the most powerful computers and then uses those computers as hubs that other users may tap into in order to search the network.[228] The system permits users to search the Internet for files that can be downloaded directly from other users' computers.[229] It is alleged that between two and two and a half million people use the MusicCity service each day.[230] The Morpheus software is capable of sustaining its network on its own.[231] Unlike Napster, a central server is not required to keep the network afloat.[232] As MusicCity chief executive Paul Weiss put it, "[i]t can't be turned off, ever—Someone could walk into our data center in downtown L.A., shut down every server we have, and the network would continue."[233] In the continued development of their software, MusicCity's programmers hope to enable Morpheus users to access other peer-to-peer networks as well as their own.[234]

Three of the founding members of the Morpheus software work from three separate "virtual offices": one office in Los Angeles, California, another in Scottsdale, Arizona, and the third in Nashville, Tennessee.[235] MusicCity.com recently licensed some of its Morpheus technology to FastTrack, an Amsterdam-based company.[236] Sharing software on an international level allows users to get music from areas of the world to which they ordinarily would not have access.[237]

Morpheus, like other pure file-sharing networks, also allows its users to trade files other than music, including pornography.[238] MusicCity.com has come under fire for allowing illegal child pornography to be traded on its system.[239] In response, MusicCity representatives claim that they are unable to control what its users do, yet in response to complaints, the company put a "family filter" on the latest version of its software to block previously available pornography files.[240]

Another popular file-sharing network, comparable to Napster, is KaZaA.[241] This service, powered by FastTrack, allows users to search, download, and organize media files in one place.[242] KaZaA is praised for produc-

ing quick search results and downloads.[243] The reason for its quickness lies in KaZaA's ability to "simultaneously pull pieces of the file from several sources to speed up the transfer—and assure that the file arrives intact."[244] Using high speed Internet access, recently released hit singles can be downloaded in less than a minute and the corresponding music video in just over five minutes.[245] KaZaA, like most of the aforementioned networks, allows users to trade movies, books, and a variety of other files. KaZaA is based in the Netherlands, well outside the grasp of U.S. copyright laws.[246]

My personal favorite pure peer-to-peer network is Audiogalaxy. Audiogalaxy is quick and easy to use, offering "the highest quality music for download—at near CD-quality sampling rates of up to 256 kilobits per second," which is double the speed of most file-sharing services.[247] If disconnected during the download process, Audiogalaxy allows you to continue downloading the same file from a different source in order to complete the transfer. This "auto-resume" function allows users to complete partial downloads.[248] Audiogalaxy gains increasing popularity because it "enables listeners to enhance their musical awareness through reviews and music samples while at the same time the company allows musicians to extend their work to a broader audience."0[249] Audiogalaxy appears to provide substantial non-infringing uses, including a means of distribution for artists not represented by the music industry, which is similar to Napster's New Artist Program. The service also provides message boards that allow its users to converse about music.[250]

If you do not know a song name or artist name, Audiogalaxy provides alternative methods for finding music files.[251] For example:

> Audiogalaxy classifies music into more than 100 styles, including obscure genres like cow punk, roots reggae or organic house (that's electronica). Select a particular musical style – say, contemporary folk – and it'll offer a description and examples of sub-genres such as the femme-folk of the Indigo Girls or the slide guitar jams of Ben Harper. You can sample a handful of songs within the genre – or search the entire Galaxy according to music style.[252]

This method of finding music seems to me to be more effective and attractive than any other form of music distribution to date. The Audiogalaxy software does not include a media software player; thus, users are required to download one of many free media players available on the Internet.[253]

Audiogalaxy now blocks certain artists from being downloaded on its site for fear of a legal battle with the music industry. Thus, some searches may produce a warning, which states, "SEARCH PROHIBITED. You cannot request this song due to copyright restrictions. Please try a different search."[254] This feature is likely to decrease Audiogalaxy's popularity should it continue.[255]

Gnutella was one of the first pure peer-to-peer networks to follow Napster.[256] Its software was developed by AOL apostates.[257] These programmers, Justin Frankel and Tom Pepper, also created Winamp and started the company Nullsoft, which was later purchased by AOL.[258] AOL did not approve the Gnutella project and the project was quickly cancelled.[259] Nonetheless, the program leaked onto the Internet and continues to be downloaded and utilized today.[260] Gnutella is another network plagued by pornography trade.[261] One of its users posted a site called the "Wall of Shame" that lists hundreds of IP (Internet protocol) addresses of users that tried to download child pornography.[262]

Many of the pure systems portray an anti-industry sentiment that seems to echo throughout these networks. Some programs actually display anti-industry views on their face—for example, Aimster's home page reads "Take AIM at the RIAA."[263] As one author explained his view of the industry:

> [I]t's clear that the record labels would rather sue than find sensible rapprochement with the new world of digital distribution. To date, though, all their legal strategy has accomplished is to radicalize the community of online music fans and accelerate the process of technological change. Meanwhile, though Napster use is way down this year, it seems that music sales are to. Gee, could there be any connection there?[264]

The Post-Napster World

Following its suit against Napster, a battle that the music industry seems to have won, the RIAA waged war against Aimster, a Napsteresque file-sharing network.[265] Many follow-up suits have since been filed by different sectors of the music industry against various alleged contributory infringers. Some of these suits are being

marshalled by online management businesses such as Copyright.net, a Nashville based company that specializes in protecting its clients' intellectual property rights.[266] In Korea, two brothers face up to five years in jail and monetary fines estimated at almost $40,000 for creating their own version of Napster, called "Soribada" (meaning "the sea of sound").[267]

Most recently, the record and movie industries have united to combat companies that facilitate pure peer-to-peer networks that threaten their control over distribution of movies and music.[268] A suit was filed by more than thirty music and film studios in the United States District Court in Los Angeles, California.[269] The three defendants named in the complaint are MusicCity.com, using its Morpheus software; Gorkster, and Consumer Empowerment B.V.[270] All three of these defendants provide software that allow users to trade files in pure peer-to-peer networks.[271] The claims are similar to those posited in Napster, alleging that the defendants are both contributorily and vicariously infringing plaintiffs' copyrighted works by facilitating music and movie pirating over the Internet.[272]

An RIAA spokesman argued that MusicCity maintains a system that facilitates massive infringement, from which it profits financially.[273] The chief executive of Streamcast, Steve Griffin, stated that the company profits by delivering advertisements to users of its software.[274] Like Napster, Griffin claims that his company has no knowledge of what content its users are exchanging and that it has no way of controlling the users' behavior.[275] Consumer Empowerment is the maker of the FastTrack software used by all three defendants, and is based in Amsterdam.

These latest suits mark the first challenge to pure peer-to-peer networks that, unlike Napster, have no central directory or distribution point.[276] Because of the music industry's refusal to accept and harness peer-to-peer technology here in the United States, many companies, including defendant Grorkster (based in Nevis, West Indies), have relocated offshore to avoid whatever liability might be imposed on U.S. soil.[277] Moreover, MusicCity, Grokster, and Consumer Empowerment have developed systems designed to avoid contributory and vicarious liability.

MusicCity executive, Steve Griffin, stated, "[w]e have a piece of software that, by its definition and performance, simply allows people to communicate with each other—What the user chooses to make available to the rest of the world from an information standpoint is totally their choice—We do not know what it is, we do not control it."[278] The software at issue connects users to one another automatically without intervention by any of the three defendants.[279] Music industry supporters, however, feel that the defendants should be held liable despite their knowledge of direct infringement, because they have created software designed principally to facilitate an infringing use.[280] MusicCity argues that its peer-to-peer network is independent of its business model, which simply provides graphics and advertising that appear on users' computers after they log in.[281]

Ostensible Immunity of "Pure" Peer-to-Peer Networks

The outcome of litigation surrounding pure peer-to-peer networks is uncertain. It does not seem as though current copyright law as interpreted by the *Napster* court, will be able to curtail pure peer-to-peer networks. Perhaps the music industry will be able to hold contributorily and vicariously liable those that created the software that allow pure networks to function. A judicial decision of this nature, however, will not stop the pure peer-to-peer networks already in existence. A pure network cannot be defused by simply holding its creator liable. Some of these software programs are created and circulated by anonymous individuals.

Pure peer-to-peer networks are likely to grow until a legitimate solution is implemented that would protect copyrighted works from being traded over the Internet, or until a method is instituted for policing pure networks and holding direct infringers accountable for their actions.

Solutions

The music industry might suggest holding liable all parties involved in the support of peer-to-peer networks, including those remotely and indirectly involved. With the music industry's history of hard-line and uncompromising perspectives toward new technology that threatens its copyright protection, it would not be surprising if the industry, through litigation and extensive lobbying, goes after everyone from deep pocketed direct infringers, trading songs from the privacy of their own homes, to ISPs, educational institutions, and peer-to-peer software inventors. It

seems, however, that the most efficient solutions might result from unprecedented compromise by all parties involved. The following are ideas that may lend to the resolution of this conflict in a way that preserves the interests of consumers, artists, ISPs, peer-to-peer and related technology developers, and the music industry. Peer-to-peer technology may provide limitless legitimate uses that prove beneficial to all involved, including the music industry. These substantial non-infringing uses should be preserved.

Encryption Technology

Despite these legal battles, one expert, attorney and professor Howard Siegel, believes that "much of the fight against music swapping will not be waged in the courts but in technology wars and business wars, as the major record labels move into the online distributions scene."[282] The music industry is currently involved in developing various technological methods that will be used to protect their intellectual property in the years to come.[283] One such technology is "digital fingerprinting."[284] This technology, which is currently being implemented by Napster, allows accurate identification of songs even if their names are misspelled.[285] The music industry would eventually have ISPs use the technology to block infringing materials that might flow through their system.[286] Digital fingerprinting can also be used to police peer-to-peer networks, chat rooms, and ordinary websites.[287] However, some peer-to-peer networks make it harder to use digital fingerprinting than others.[288]

Another technology designed to protect copyright interests is the "digital watermark."[289] A digital watermark is permanently attached to a song or movie before distribution, allowing copyright owners to track their works.[290] The watermark acts as a stamp of authenticity.[291] The technology basically makes a song unplayable if it is compressed into MP3 format and then decompressed.[292] However, this is only possible on watermark compatible players, thus, it would take a drastic overhaul of the electronics industry to utilize this technology.[293] It would require watermarks to be installed on all CDs distributed and force consumers to purchase new watermark compatible CD players, which does not seem likely to happen any time soon.[294] Furthermore, all songs released up to the point of implementation of the watermark technology would remain unprotected.[295]

Companies such as Macrovision are focusing on creating copy deterrent software that can be placed on compact discs.[296] Vice President of Macrovision, Carol Flaherty, vows to press both civil and criminal charges against anyone that circumvents its technology, which is made possible by the DMCA.[297] Some companies like Macrovision have taken the approach of punishing those computer wizards that manage to break through their encryption software, whereas, other companies choose to harness the expertise of those that manage to disrupt their technology, offering them jobs to develop more protective software.[298]

NETA Police Force

It is possible for the music industry to lobby congress for a government police force capable of tracking down individual music pirates. These direct infringers could be turned over to ISPs or the proper government authority, which would be responsible for either terminating the users' Internet access or, for more severe violations, direct infringers could be held criminally liable under NETA for having downloaded or exported high volumes of infringing materials. It is likely, however, that a governmental policing agency would cross the constitutional line of invasion of privacy.[299] Moreover, prosecutors are already over-burdened by homicide and drug cases—it simply would not be an efficient or plausible solution to require government agents to hunt down Internet music and movie pirates and have them prosecuted in a court of law.

THESE *latest suits mark the first challenge to pure peer-to-peer networks that, unlike Napster, have no central directory or distribution point. Because of the music industry's refusal to accept and harness peer-to-peer technology here in the United States, many companies, including defendant Grorkster (based in Nevis, West Indies), have relocated offshore to avoid whatever liability might be imposed on U.S. soil.*

Cooperation

The music industry should bear at least some of the burden associated with eliminating music piracy from the Internet. Therefore, I submit that the most credible solution is to place the initial burden of policing peer-to-peer networks on the music industry and force the industry to work together with ISPs to bring direct infringers to justice. This resolution requires no additional copyright legislation, and yet protects copyright interests and permits the utilization of peer-to-peer technology. The industry should bear the burden of chasing down direct infringers and providing the identity of music pirates to ISPs under the DMCA. Upon notification, ISPs should be required to work with the industry to combat online infringement, rather than eliminating file-sharing technology altogether.

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The music industry should use its own Internet police force (e.g., Copyright.net)[300] to track down infringers that might be liable under NETA, turning them over to the proper authorities with adequate evidence to support criminal liability, rather than placing such burdens on ISPs and other technologically innovative Internet services.

Conclusion

The debate over the legality of peer-to-peer file-sharing is in its infancy. Since the *Napster* decision, Napster and the various components of the music industry continue to work toward a resolution. At present, the courts have forced Napster and several other similar business models to clean up their act and find a way to work in conjunction with the music industry and copyright holders in general to license and sell digital music over the Internet.

As anticipated, the technologically advanced citizens of the world continue to develop more untouchable breeds of peer-to-peer file-sharing. These Napster offspring allow users to communicate and trade files directly from other users, without the assistance of a central server to run the system. Moreover, these pure peer-to-peer file-sharing networks are growing rapidly due to advances in programs that facilitate the networks.

It is unclear whether current copyright law is capable of discouraging individual users from infringing the rights of intellectual property owners. It is equally unclear who will enforce the law, holding direct infringers liable. How will individual teenagers be punished in order to deter them from freely trading copyright protected files? Without Internet policing systems, it seems virtually impossible for individual plaintiffs or the government to track down any substantial number alleged offenders. A policing method is not currently extant under existing intellectual property law. But perhaps an effective policing force established under NETA or by the music industry will be able to contain the illegitimate uses of peer-to-peer networks.

The music industry may manage to maintain its hold on copyrighted works by offering a more viable means of distribution over the Internet. The industry as a whole might find itself thanking Napster's founder Shawn Fanning for creating a hybrid of peer-to-peer file-sharing that can be legitimized and utilized as a means of expanding music distribution. Hopefully, the market will force the music industry to be a bit more reasonable in pricing online music so that consumers will not feel compelled to forgo compensating copyright owners by supporting pure peer-to-peer networks. Lawmakers and judges alike should be wary of overprotecting copyright interests to the point of pushing consumers to withdraw their financial support of the music industry. After all, copyright law was established to promote creativity by providing protection for copyrighted materials, which provides for the compensation of artists who enrich the world with music. Unfortunately, it seems that through its lobbying power the music industry has shifted the purpose of copyright protection from protecting artists to protecting itself. JELP

J.D. Candidate, Vanderbilt University Law School, 2002; B.A. Vanderbilt University, 1999. I would like to thank my family, including Grandmother Ward, for their love and support. Without them, this Note and my legal education would not have been possible. I would also like to thank my friends, most notably, Josh Perry for his support and editorial work. Finally, I want to thank my mentors, Wade A. Kegley, John M. Wood and John S. Beasley, for their encouragement, guidance and faith.

1 U.S. CONST. art. I, § 8, cl. 8.

2 A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004 (9th Cir. 2001).

3 Inherent in this note is the rapid pace at which peer-to-peer technology continues to develop. Thus you may find certain areas of discussion to be somewhat outdated. This Note does, however, provide a detailed account of the technological and legal developments of peer-to-peer networks up to the date of publication. Also, the "post-*Napster*" era refers to those developments taking place subsequent to the creation and shutdown of the original Napster.

4 The Napster song swapping service is currently offline. At the date of this publication, the service is being refined so as to comply with the requirements set out by the Ninth Circuit in its latest *Napster* opinion. *See Napster*, 239 F.3d 1004 (9th cir. 2001).

5 MusicShare is software that was developed by Napster, Inc., which enabled its users to utilize the file sharing service. The software could be downloaded for free from Napster's website. Visit http://www.napster.com.

6 Jayne A. Pemberton, *Update: RIAA v. Diamond Multimedia Systems Napster and MP3.com*, 7 RICH. J.L. & TECH. 6 (Fall 2000).

7 Karl T. Greenfeld, *Meet the Napster*, TIME, Oct. 2, 2000, at 62.

8 *Id.*

9 *Id.*

10 Pemberton, *supra* note 6, at 2; Steven Levy, *The Noisy War Over Napster*, NEWSWEEK, June 5, 2000, at 50.

11 Steven Levy, *supra* note 10, at 51.

12 Brief for Appellant at 6, A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004 (9th Cir. 2001) (Nos. 00-16401 and 00-16403) [hereinafter Brief for Appellant]. The top five record labels include Sony, Universal, EMI, BMG and Warner.

13 *Id.*

14 David Williams, *Napster, Recording Industry Battle Over Injunction, available at* http://www.cnn.com/2000/LAW/law.and.technology/10/02/napster.trial.01/ (last visited Dec. 5, 2001).

15 Boies' clients include IBM, AOL and CBS, but he is more recently known for bringing down Microsoft for the Department of Justice and for his representation of presidential candidate Al Gore in the Florida vote counting dispute. *See* John Heilemann, *David Boies: The Wired Interview, available at* http://www.wired.com/wired/archive/8.10/boies_pr.html (last visited Dec. 5, 2001). The law firm of Fenwick & West continues its representation of Napster, whereas, David Boies is no longer involved in the *Napster* dispute. Boies focused solely on the litigation aspects of the Napster dispute, which subsided after the latest Ninth Circuit opinion. Fenwick & West is now involved in the settelment negotiations and restructuring of Napster, Inc.

16 Brief for Appellant, *supra* note 12, at 6.

17 Bob Keefe, *Napster Converting to Fee-Based Music Site*, THE ATLANTA J. AND CONST., Nov. 1, 2000, at 1E. "The court enjoined Napster from 'causing, or assisting, or enabling, or facilitating, or contributing to the copying, duplicating or otherwise other infringement upon all copyrighted songs, musical compositions, or materials in which plaintiffs hold a copyright or with respect to plaintiffs' pre-1972 recordings in which they hold the rights.'" *See* Brief for Appellant, *supra* note 12, at 6.

18 Brief for Appellant, *supra* note 12, at 6.

19 The District Court issued a revised injunction in an opinion dated Oct. 2000, "enjoining Napster 'from engaging in, or facilitating others in copying, downloading, uploading, transmitting, or distributing plaintiff's copyrighted' works 'without express permission of the rights owner.'" *See id.*

20 Jonathan Chang, *UC-Berkley Students Seek Viable Alternatives to Napster*, DAILY CALIFORNIAN, Sept. 25, 2001.

21 Jon Rees, *Bertelsmann's Pile of Cash Makes British Rivals Quake*, SUNDAY BUSINESS GROUP, Sept. 30, 2001.

22 Wendy M. Pollack, *Tuning In: The Future of Copyright Protection for Online Music in the Digital Milliennium*, 68 FORDHAM L. REV. 2445, 2456 (2000).

23 *See id.* at 2457.

24 17 U.S.C. § 106 (1976).

25 *See id.* at § 107.

26 *See id.*

27 *See id.*

28 *See* Harper & Row, Publishers, Inc. v. Nation Enters., 471 U.S. 539, 587 (1985).

29 A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004, 1016 (9th Cir. 2001).

30 Religious Tech. Ctr. v. Netcom On-Line Communications Services, Inc., 907 F. Supp. 1361 (N.D. Cal. 1995).

31 *Id.* at 1365.

32 *Id.*. at 1378.

33 *Id.* at 1379.

34 *Id.*

35 *Id.* (citing Sega v. Accolade, 977 F.2d 1510, 1523 (9th Cir. 1992)). The United States Supreme Court in Campbell v. Acuff-Rose Music, Inc. emphasized that a commercial use is not determinative of a finding of fair use, noting that most of the uses in the fair use statute are "generally conducted for profit in this country." *See* 510 U.S. 569, 589 (1994).

36 *Netcom*, 907 F. Supp. at 1379.

37 *Id.* (citing Campbell, 510 U.S. at 586).

38 *Netcom*, 907 F. Supp at 1380.

39 *Id.* (citing Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 449-450 (1984)).

40 *See* 3 NIMMER ON COPYRIGHT § 13.05A4, at 13-188-189 (citing Harper & Row Pub., Inc. v. Nation Enters., 471 U.S. 539, 566 (1985)).

41 *See* Sony Corp. of Am. v. Universal City Studios Inc., 464 U.S. 417 (1984); Religious Tech. Ctr. v. Lerma, 897 F.Supp. 260, 263 (E.D. Va. 1995); Religious Tech. Ctr. v. F.A.C.T.NET, Inc., 901 F. Supp. 1519, 1522-26 (D. Colo. 1995).

42 *Sony*, 464 U.S. at 424.

43 *Id.*. at 420

44 *Id.*; 17 U.S.C. §107 (1994).

45 *Sony* 464 U.S. at 442.

46 *Id.*

47 *Id.*

48 *Id.* at 431.

49 Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., Inc., 180 F.3d 1072, 1079-81 (9th Cir. 1999).

50 17 U.S.C.S. § 1008 (1994).

51 § 1008; Pollack, *supra* note 22, at 2461.

52 Pollack, *supra* note 22, at 2461-62.

53 *Id.* at 2462

54 *Id.*

55 *Id.*

56 *Id.* at 2463.

57 *Id.*

58 *Id.*

59 *Id.*

60 *Id.* at 2464.

61 *Id.* at 2465.

62 17 U.S.C.A. § 512(a) (West Supp. 2001). For general information regarding the application of the DMCA *see* Pollack, *supra* note 22 at 2465.

63 *See* § 512(b).

64 § 512(c).

65 § 512(d).

66 Pollack, *supra* note 22, at 2466.

67 *Id.*

68 Charles C. Mann, *The Heavenly Jukebox*, THE ATLANTIC MONTHLY, Sept., 2000, at 42.

69 *Id.*

70 Pollack, *supra* note 22, at 247.

71 *Id.* at 2468.

72 *Id.*

73 *Id.*

74 *Id.*

75 *See* A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004 (9th Cir. 2001).

76 *Id.* at 1014.

77 *Id.* at 1014-19.

78 *Id.* at 1014.

79 For a list of these four factors *see* text *infra* accompanying note 24.

80 *See Napster*, 239 F.3d at 1004.

81 *See* A&M Records, Inc. v. Napster, Inc., 114 F. Supp. 2d 896, 912 (N.D. Cal. 2000) (citing Sega Enters. Ltd. v. MAPHIA, 857 F. Supp. 679, 687) (emphasis added).

82 Brief for Appellant, *supra* note 12, at 31.

83 The Dave Matthews Band became the first major label artist to release a single on Napster as a means of promoting their new album and maintaining a "close relationship with their fans." *See* Terry vanHorn, *Dave Matthews Band Issues Single on Napster*, Sonicnet.com, *available at* http://www.sonicnet.com/news/archive/story.jhtml?id=1437912 (Jan. 11, 2001).

84 *See id.* Napster's "New Artist Program" provided an alternate method of gaining exposure and distributing their works.

85 *Id.*

86 *Id.*

87 *Id.*

88 *Id.*

89 *Id.*

90 *Id.*

91 *Id.*

92 *Id.*

93 *Id.*

94 *Id.*

95 Brief for Appellant, *supra* note 12.

96 *See* Mann, *supra* note 67, at 42.

97 A & M Records, Inc. v. Napster, Inc., 239 F.3d 1004, 1018 (9th Cir. 2001).

98 *Id.*

99 *Id.*

100 *Id.*

101 *Id.* at 1018-19.

102 *Id.* at 1019.

103 *Id.*

104 *Id.*

105 *Id.*

106 *Id.*

107 *Id.*

108 *Id.*

109 *See* Sony Corp. of Am. v. Universal City Studios Inc., 464 U.S. 417 (1984).

110 *Id.*

111 *Id.*

112 Napster's internal documents and marketing strategy seem to have revealed Napster executives' knowledge and understanding that their service enabled its users to trade infringing materials. *See* A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004, 1020 n.5 ("[A] document authorized by co-founder Sean Parker mentioned 'the need to remain ignorant of users' real names and IP addresses 'since they are exchanging pirated music.'").

113 *Napster*, 239 F.3d at 1020.

114 *Id.*

115 *Id.*

116 *Id.*

117 *Id.* at 1021.

118 *Id.*

119 *Id.*

120 *Id.* Certain Napster functions are applicable to both arguments in favor of fair use provided by section 107 of the 1976 Federal Copyright Act and arguments related to "substantial non-infringing use" as enunciated in Sony Corp. of Am. v. Universal City Studios Inc., 464 U.S. 417 (1984). It is often hard to delineate between the two defenses, thus, arguments for the two defenses seem somewhat intertwined.

121 Hellemann, *supra* note 15.

122 Brief for Appellant, *supra* note 12, at 26.

123 *Id.*

124 *Id.* at 26-27.

125 *Id.* at 27.

126 *Id.* at 31.

127 *Id.* at 30.

128 Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., Inc., 180 F.3d 1072, 1079 (9th Cir. 1999).

129 Lewis Galoob Toys v. Nintendo, 984 F.2d 965, 971 (9th Cir. 1992).

130 Brief for Appellant, *supra* note 12, at 33.

131 *Id.*

132 *Id.*

133 *Id.*

134 *Id.* at 34.

135 Sony Corp. of Am. v. Universal City Studios Inc., 464 U.S. 417, 442 (1984).

136 *Id.*

137 *Id.*

138 Williams, *supra* note 14.

139 *Id.*

140 *See* 17 U.S..C.A § 512(m) (West Supp. 2001).

141 A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004, 1018 (9th Cir. 2001).

142 *Id.*

143 *Id.*

144 *Id.*

145 *Id.* at 1022.

146 *Id.*

147 *Id.* at 1023

148 *Id.*

149 *Id.*

150 *See* A&M Records, Inc. v. Napster, Inc., 114 F. Supp. 2d 896, 912. (N.D. Cal. 2000).

151 This information was available on the old Napster, Inc. website at http://www.napster.com, but the site has since been revised.

152 *Napster,* 239 F.3d at 1023.

153 *Id.* at 1023-24.

154 *Id.*

155 *Id.* at 1022.

156 *Id.* at 1024.

157 17 U.S.C. § 1008 (1994).

158 *Id.*

159 *See* Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys. , Inc., 180 F.3d 1072 (9th Cir. 1999).

160 *Napster,* 239 F.3d at 1024-25.

161 Brief for Appellant, *supra* note 12, at 50-55.

162 *Id.*

163 *Napster,* 239 F.3d at 1025.

164 *Id.*

165 Brief for Appellant, *supra* note 12, at 50.

166 17 U.S.C.A. § 512(m) (West Supp. 2001).

167 Brief for Appellant, *supra* note 12, at 51.

168 *Id.*

169 *Id.*

170 *Id.*

171 *See* Religious Tech. Ctr. v. Netcom On-Line Communications Services, Inc., 907 F. Supp. 1361 (N.D. Cal. 1995).

172 17 U.S.C.A. § 512(d)(1)-(3). (West Supp. 2001).

173 A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004, 1025 (9th Cir. 2001).

174 *Id.*

175 *Id.* at 1026.

176 *Id.*

177 *Id.*

178 *Id.*

179 *Id.*

180 *Id.* at 1027.

181 Heilemann, *supra* note 15.

182 *Id.*

183 *Id.*

184 *Id.*

185 *Id.*

186 *Id.*

187 *Id.*

188 *See* A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004 (9th Cir. 2001).

189 *Id.* at 1027.

190 *Id.* at 1023-24.

191 *Id.*

192 *Id.* at 1027.

193 *Id.*

194 Hank Berry, *BeCG Licenses Napster's Technology Platform for Global Music Company Be Music, available at* http://www.napster.com/pressroom/pr/010212html (Oct. 23 2001).

195 Bertelsmann owns BMG, Random House publishing, barnesandnoble.com, and Internet retailer CDNow. *See* Keefe, *supra* note 17, at E7.

196 Jon Rees, *Bertelsmann's Pile of Cash Makes British Rivals Quake,* SUNDAY BUS. GROUP, Sept. 30, 2001, at 12.

197 *Id.*

198 *Id.*

199 *Id.*

200 Christopher Grimes, *Napster Closer to Music Deal,* THE FIN. TIMES, Sept. 25, 2001, at 27.

201 *Id.*

202 *Napster, Music Publishers Settle,* THE COLUMBUS DISPATCH, Sept. 25, 2001, at 2C.

203 Grimes, *supra* note 200, at 27. This information is current as of the final revisions of this Note.

204 *See id.*

205 Keefe, *supra* note 17, at 1C.

206 *See id.*

207 David Honigmann, *Record of the Web's Music War: Book Review Sonic Boom: Big Labels and Peer-to-Peer Pioneers Have Both Behaved Badly*, FIN. TIMES, Aug. 22, 2001, at 11.

208 "Alanis Morissette took MP3.com stock worth...about one million dollars, in return for allowing the company to stream one of her songs. Others, including Courtney Love, Elton John, and Pete Townshend, have decided that they hate their record companies more than freeloading fans and have supported the new technologies." *See id.*

209 Chris Taylor, *The Next Napster; Free Online Music is Back, in the Indestructible Shape of Morpheus*, TIME, Fall 2001, at 32.

210 Howard Siegel and Benjamin Semel, *Combating Online Infringement Post-Napster*, N.J. LAW JOURNAL, vol. 166 p. 29, Oct. 1, 2001.

211 *Id.*

212 *Id.*

213 *Id.*

214 *Id.*

215 *Id.*; Dawn Chmielewski, *MusicNet Announces Rollout of Service in Two Months*, SAN JOSE MERCURY NEWS, Sept. 27, 2001.

216 *See* Siegel, *supra* note 210.

217 *See* Chmielewski, *supra* note 215. This information is current as of the final revisions of this Note.

218 *Id.*

219 *Id.*

220 *See* Siegel, *supra* note 210.

221 Scott Rosengerg, *Revenge of the File Sharing Masses!*, *available at* http://www.salon.com (July 20, 2001); Dawn C. Chmielewski, *Online Music Lovers Get Their Fix From Variety of Illicit Services*, SAN JOSE MERCURY NEWS, Sept. 6, 2001.

222 *See* Rosengerg, *supra* note 221.

223 *Id.*

224 Jonathan Chang, *Students Seek Viable Alternatives to Napster*, DAILY CALIFORNIAN, Sept. 25, 2001.

225 Matt Richtel, *New Suit Against Online Music Sites*, N.Y. TIMES, Oct. 4, 2001, at C4.

226 *Id.*

227 *Id.*

228 *Id.*

229 Chang, *supra* note 224.

230 *See* Richtel, *supra* note 225.

231 *See* Chang, *supra* note 224.

232 *Id.*

233 Taylor, *supra* note 209.

234 *Id.*

235 *Id.*

236 *Id.*

237 *Id.* It is often rare for retail music stores to have an abundant collection of imported music. Also, the music that makes it to foreign stores is often substantially delayed from the time of the homeland release.

238 Brian McWilliams, *We Can't Stop Child Porn*, NEWSBYTES, *available at* http://www.newsbytes.com (Sept. 19, 2001).

239 *Id.*

240 *Id.*

241 Chmielewski, *supra* note 221.

242 *Id.*

243 *Id.*

244 *Id.*

245 *Id.*

246 *Id.*

247 *Id.*

248 Holly M. DiJuliu, *Cant Stop the Music; Meet the New Boss (Morphues) Same as the Old Boss (Napster)*, THE COLUMBUS DISPATCH, Sept. 3, 2001, at 1E.

249 *Inflow's Austin Data Center Continues Growth and 100 Percent Uptime Guarantee*, BUSINESS WIRE, Sept. 18, 2001.

250 See DiJulius, *supra* note 248.

251 Chmielewski, *supra* note 221.

252 *Id.*

253 *Id.*

254 Chang, *supra* note 24.

255 DiJulius, *supra* note 248.

256 Rosengerg, *supra* note 221.

257 *Id.*

258 Greg Vrana, *Peering Through the Peer-to-Peer Fog*, EDN, July 19, 2001, at 75.

259 *Id.*

260 *Id.*

261 McWilliams, *supra* note 238.

262 *Id.*

263 Rosengerg, *supra* note 221.

264 *Id.*

265 See Siegel and Semel, *supra* note 210.

266 Seven Bonisteel, *MP3.com Sale to Vivendi Closes Amid New Lawsuits, available at* http://www.newsbytes.com. (Aug. 30, 2001).

267 Jen Muehlbauer, *Media Grok: How to Say 'Napster' in Korean,* THE INDUSTRY STANDARD, Aug. 15, 2001.

268 Matt Richtel, *A New Suit Against Online Music Sites,* N.Y. TIMES, Oct. 4, 2001, at C4.

269 *Id.*

270 *Id.*

271 Jon Healey, *Company Town; Suit Fires New Salvo in Copyright Battle,* LOS ANGELES TIMES, Oct. 4, 2001, pt. 3, at 4.

272 *Id.*

273 Richtel, *supra* note 268.

274 *Id.*

275 *Id.*

276 Healey, *supra* note 271.

277 *Id.*

278 *Id.*

279 *Id.*

280 *Id.*

281 *Id.*

282 Siegel, *supra* note 210.

283 *Id.*

284 *Id.*

285 *Id.*

286 *Id.*

287 *Id.*

288 *Id.*

289 *Id.* (Watermarking came about because of a collaborative effort within the music industry known as the Secure Digital Music Initiative ("SDMI")).

290 *Id.*

291 *Id.*

292 *Id.*

293 *Id.*

294 *Id.*

295 *Id.* (Seigel believes it might be possible for the music industry to seek assistance from the legislature in implementing the SDMI watermark technology, as was done in the Audio Home Recording Act ("AHRA"). "The 'AHRA' was passed to deal with fears over DAT – digital audio tape – recording devices and their ability to make serial copies with no degradation of sound quality. The AHRA required that all 'digital audio recording devices' conform to a Serial Copy Management System.")

296 *Macrovision battles music lovers,* MINNESOTA DAILY, Aug. 10, 2001.

297 *Id.*

298 *Id.*

299 The invasion of privacy issue would be especially likely if, for example, the FBI or similar government agency began busting into teenagers' bedrooms in order to seize their computers for having downloaded too many MP3s.

300 For more on Copyright.net visit their website at http://www.copyright.net. *See infra* text accompanying note.