

BITTORRENT'S MESSY FUTURE:
CONTROLLING COPYRIGHT INFRINGEMENT ON
PEER-TO-PEER NETWORKS

By Bryant Welch

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1. Introduction

The rise of widespread high-speed Internet access has led to fascinating technological advancements in data sharing. Peer-to-peer (P2P) networking software like Napster and KaZaa have been allowing individual computer users to illegally download and distribute vast arrays of copyrighted material for several years now. While the Supreme Court has addressed specific aspects of Copyright Law and what constitutes copyright infringement, web users continue to share large amounts of data, both legal and copyrighted, through continuously emerging technologies that have not yet been scrutinized by the highest Court.

The 1976 Copyright Act provides the affirmative defense of fair use,¹ but distributing music and other copyrighted material without a license can constitute infringement. Defendants can also violate copyright law through contributory infringement by showing knowledge of and materially contributing to the infringement.² The U.S. Supreme Court began to analyze copyright law in light of emerging technologies with the pivotal case of *Sony Corp. of America v. Universal Studios, Inc.*, which determined that products are not liable for copyright infringement if they are capable of substantial non-infringing uses.³ Additionally, one who has the power to control infringing acts while benefiting from them can be liable for vicarious infringement, which was further explained by the Supreme Court in *A & M Records, Inc. v. Napster*.⁴ Lastly,

¹ 17 U.S.C.A. §107

² *Sony Corp. of America v. Universal Studios, Inc.*, 464 U.S. 417 (1984)..

³ *Id.*

⁴ *A & M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004, (9th Cir. 2001).

in *Metro-Goldwyn-Mayer v. Grokster*, the Supreme Court ruled that a defendant can be held liable for copyright infringement by demonstrating clear and intentional inducement.⁵

BitTorrent represents the latest, and perhaps most extensively used peer-to-peer technology that currently falls through the legal cracks left in the wake of the Supreme Court's decisions in *Napster* and *Grokster*. BitTorrent avoids using a centralized server like Napster by connecting users directly with one-another. Additionally, the technology's developers have not promoted the software as a device enabling copyright infringement, so the BitTorrent technology avoids the *Grokster* pitfall of inducement. While BitTorrent facilitates a growing number of legal enterprises, a vast majority of the data being transferred is copyrighted.⁶ Computer users continue to illegally share a growing amount of copyrighted works in the form of music, movies, television programs, books and software applications, while the major copyright holders seek relief for what they see as lost revenue through infringement over peer-to-peer networks.

But a number of organizations are taking steps to stop the feverish growth of file sharing through BitTorrent, including universities and the U.S. Justice Department. Still, there are many perfectly legal uses for P2P networking, and the technology itself presents a valuable asset to the future of the Internet, so courts face the task of carefully interpreting existing laws while legislators must avoid hindering the development of new technologies as they attempt to stop copyright infringement over the Internet.

⁵ *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster*, 545 U.S. 913, 936 (2005).

⁶ Market research showed that an average of 8.7 million users were simultaneous sharing data over peer-to-peer networks in 2005, with 74% of that number actively trading music files. David M. Ewalt, *LimeWire, BitTorrent and BearShare... Oh My!*, Forbes Magazine, Jan. 24 2005 at http://www.forbes.com/digitalentertainment/2005/06/24/file-sharing-music-movies-cx_de_0624sharing.html.

II. Current Copyright Law and the Liability of Peer-to-Peer Networking

A. The Copyright Act of 1976

The current guidelines for copyright protection stem from the Copyright Act of 1976. The federal statute provides for the protection of “original works of authorship fixed in any tangible medium of expression,” which, in addition to literary works, includes musical works, motion pictures and sound recordings.⁷ Today, copyright protection is automatically granted once a work is “created,” but the Copyright Office still offers optional registration for a fee, which provides a public record of the work for reinforcing a copyright claim in a court, as well as the opportunity for statutory damages and attorney’s fees.⁸

A person infringes upon a copyrighted work when that person reproduces, distributes, performs, publicly displays or makes a derivative work of the protected work without the permission of the copyright owner.⁹ The Copyright Act provides specific remedies that aggrieved parties can seek when their works have been infringed upon. For now, the granting of injunctions has proved to be the most powerful tool in stopping digital copyright infringement over peer-to-peer networks.¹⁰ Other remedies provided by the statute include impounding the infringing works, actual damages, statutory damages of up to \$150,000.¹¹

While these remedies can amount to a steep penalty for a copyright infringer, the statute supplies defendants with the affirmative defense of fair use.¹² Essentially, copyright law has a narrow corridor of permissible usage of a copyrighted work without payment or permission. In evaluating whether use of a copyrighted work is fair, courts look at (1) the purpose and character

⁷ 17 U.S.C.A. §102(a)(1-7).

⁸ U.S. Copyright Office Circular 1, Revised July 2006, at <http://www.copyright.gov/circs/circ1.html>.

⁹ 17 U.S.C.A. §501.

¹⁰ *Napster*, 239 F.3d at 1011.

¹¹ 17 U.S.C.A. §502-505.

¹² 17 U.S.C.A. §107.

of the use, (2) the nature of the copyrighted work, (3) the amount of the portion of the copyrighted work used, and (3) the effect of the use on the potential market or value of the original work.¹³ However, beyond activity strictly for educational purposes, the fair use doctrine does not provide any protection for those who freely distribute copyrighted works to others without a license.

B. The *Sony* Doctrine: Substantial noninfringing uses

The advent of a predecessor to the modern-day video cassette recorder provided the vehicle with which the Supreme Court would first address the growing concern of copyright infringement by newly emerging technologies.

The *Sony* case presented the question of whether the manufacturer could be held liable under vicarious liability for the infringing actions of the customers that bought the Sony Betamax video recorder.¹⁴ The studios argued that enabling customers to record television programming for watching at a later time constituted contributory copyright infringement on the part of the manufacturer. Although the Court noted that the Copyright Act did not contain a provision for vicarious liability through contributory infringement, Justice Stevens suggested that contributory infringement is simply a tool of the universal vicarious liability doctrine to hold a party liable for the actions of another.¹⁵ The Court clearly stated that the sale of equipment capable of reproducing copyrighted works “does not constitute contributory infringement if the product is widely used for legitimate, unobjectionable purposes.”¹⁶ Furthermore, as long as the product was “merely capable of substantial noninfringing uses,” the manufacturer could not be held

¹³ *Id.*

¹⁴ 464 U.S. 417 at 435.

¹⁵ *Id.*

¹⁶ *Id.* at 442.

liable under the doctrine of contributory infringement.¹⁷ The Court ruled that the Betamax video recorder was in fact capable of substantial non-infringing uses by enabling purchasers of the product to privately time-shift television programming. After applying the 4-pronged analysis of fair use from the Copyright Act, the Supreme Court disagreed with the Appeals Court decision and determined that time-shifting of the television programming did not infringe upon the copyrighted works.¹⁸

C. Digital Millennium Copyright Act of 1998

Facing the growing beast of exponential increase in the development of digital technologies that could provide users with means for copyright infringement at the digital level, Congress enacted the Digital Millennium Copyright Act (DMCA) to protect the safeguards that copyright holders were beginning to implement to prevent unauthorized distribution of copyrighted works through digital media. The most significant portion of the DMCA prohibits individuals from circumventing technological measures designed to control access to copyrighted works.¹⁹ Specifically, the statute provides criminal penalties of up to \$1,000,000, as well as the opportunity for rights holders to bring civil actions, to be imposed on those who develop products designed to circumvent these technological measures protecting the copyrighted digital work.²⁰

The DMCA has successfully paved the way for copyright holders to implement controls against the illegal distribution of protected content. Unfortunately for the legislators on Capitol Hill, the technological development curve has arced in such a way that protecting these newly-

¹⁷ *Id.*

¹⁸ *Id.* at 448.

¹⁹ 17 U.S.C.A. §1201(a).

²⁰ *Id.*

developing technological measures has little effect on the current problem of widespread digital file sharing over peer-to-peer networks.

D. Peer-to-Peer emerges and *Napster* falls

1. *Napster* as the first file sharing scapegoat

Napster emerged in the late 1990s with a revolutionary approach to sharing data, particularly MP3 music files, over the internet through “peer-to-peer” technology. Through their proprietary software, users could search a database on Napster’s servers for music files located on any other computer using the same software.²¹ Several record companies, each owning a significant amount of copyrighted music, sued Napster for contributory and vicarious copyright infringement. In response, Napster invoked the affirmative defense of fair use, claiming that its users were not engaged in copyright infringement. The district court rejected Napster’s defense, concluding that, because the users were not creating any new work through the system, Napster did not meet the requirements of any of the four factors of the fair use analysis.²²

Although the Supreme Court did not play a part in the decision, the Court of Appeals for the 9th Circuit revisited the *Sony* analysis by articulating the different components of contributory copyright infringement and vicarious liability.²³

The Court defined a contributory infringer as “one who, with the knowledge of the infringing activity, induces, causes or materially contributes to the infringing conduct of another...”²⁴ The knowledge requirement includes both actual and constructive knowledge, meaning that even without knowledge of any specific infringing acts, Napster still had reason to

²¹ *Napster*, 239 F.3d at 1011.

²² *Id.* at 1017.

²³ *Id.* at 1019.

²⁴ *Id.* at 1020, citing *Gershwin Publ’g Corp. v. Columbia Artists Mgmt., Inc.*, 443 F.2d 1159, 1162 (2d Cir. 1971).

know of the infringing activity. Furthermore, the Court of Appeals upheld the district court's decision that by providing the site and facilities for direct copyright infringement, Napster had materially contributed to the infringing activity, and was therefore liable for contributory infringement.²⁵

In analyzing the notion of vicarious liability more deeply than the *Sony* Court, the Appeals Court evaluated whether Napster had “the right and ability to supervise the infringing activity and also [had] a direct financial interest in such activities.”²⁶ First, because Napster's revenue increased in direct correlation to its number of users, the Court ruled that they had a direct financial interest in the infringing activity. Second, because Napster could identify infringing material through searching their file database, they were deemed to have the ability and right to supervise the activity, yet they still refrained from policing the system. Thus, the Court held that Napster was vicariously liable for copyright infringement.²⁷

The Court concluded by holding that Napster “knowingly encourages and assists the infringement of plaintiffs' copyrights,”²⁸ thereby upholding the district court's injunction halting the downloading, uploading and transferring of copyrighted sound recordings without permission.²⁹

2. The fundamentals of peer-to-peer networking and its beneficial uses

The U.S. Copyright Office defines peer-to-peer (P2P) networking as simply, “a type of network where computers communicate directly with each other, rather than through a central

²⁵ *Id.* at 1022.

²⁶ *Id.* at 1022, citing *Fonovisa, Inc. v. Cherry Auction, Inc.*, 76 F.3d 259, 264 (9th Cir. 1996).

²⁷ *Id.* at 1024.

²⁸ *Id.* at 1020.

²⁹ *Id.* at 1011.

server.”³⁰ Modern P2P software like BitTorrent does not rely on a central server like that of Napster. Instead, the software connects individual users directly to one another, while the users select the files to share through software and websites that track the activity of the peers on the network.³¹

The benefits of a P2P network are tremendous and quite cost-efficient. For instance, distributors of content need not maintain powerful hardware and servers to make sure a number of users can actually access their data, and information contained in small packets can travel at extremely high speeds when shared between an array of computers. Additionally, P2P networking technology has provided the power of distributed computing, where various computers connected to the Internet can contribute unused storage space to perform complex tasks as a collective virtual supercomputer.³² One of the most significant developments in this field was by the SETI (Search for Extraterrestrial Intelligence) Institute, an organization that explores the phenomenon of life in the known universe by collecting radio signals from outer space. From 1999 until 2005, A program spearheaded by the University of California, Berkeley, called SETI@home, allowed Internet users to download a screen saver that utilizes the available resources of idle computers to digitally analyze the vast amount of signals collected by radio telescopes.³³ Tests showed that SETI@home was collectively responsible for trillions of calculations more than the most powerful supercomputers.³⁴ The program has since been incorporated into the Berkeley Open Infrastructure for Network Computing, which, in addition to

³⁰ U.S. Copyright Office Frequently Asked Questions about Copyright. <http://www.copyright.gov/help/faq/>

³¹ Clive Thomson, *The BitTorrent Effect*, Wired Magazine, Jan. 2005, at http://www.wired.com/wired/archive/13.01/bittorrent.html?pg=1&topic=bittorrent&topic_set=.

³² Michael A. Einhorn, Ph.D., *File-Sharing and Market Harm: An Economic Approach*. Entertainment, Arts, and Sports Law Journal, New York State Bar Association, Summer 2005, Vol. 16 No. 2, page 11.

³³ About SETI@home, http://setiathome.berkeley.edu/sah_about.php.

³⁴ Einhorn, *supra* note 17, at 12.

analyzing radio signals, utilizes participating computers for researching other beneficial interests like climate change and curing human diseases like cancer.³⁵

E. *Grokster* Rule: The Current Phase of Copyright Law and Peer-to-Peer Networking

Not long after the immediate death of the free Napster service, several predecessors sought to grab Napster's market of music-loving downloaders while avoiding the pitfall of maintaining a central server to organize and monitor the content.³⁶ Grokster and StreamCast utilized the new P2P technology to enable users to transfer vast amounts of electronic material at speeds in great excess of those enjoyed by Napster users, resulting in billions of files being shared. Outraged by this potentially lost revenue, a collection of movie studios, record companies and individual copyright holders, represented as Metro-Goldwyn-Mayer Studios, sued two companies for damages and an injunction.³⁷

By not using a centralized server, the defendants could not directly monitor what files were being transferred or when. Thus, they claimed that, despite knowing that most of the files passing through the software violated copyrights, they did not have the ability to police the content passing through their software.³⁸

While the Supreme Court briefly touched upon the defendants' evidence of noninfringing uses, such as bands freely distributing music to build an audience or literary works in the public domain,³⁹ it overlooked the Court of Appeals' direct application of the *Sony* ruling to P2P networks. Instead, it looked to see if the defendants intentionally induced copyright

³⁵ Phil Hochmuth, *SETI@home Project Ends*, PC World, December 16, 2005, at <http://www.pcworld.com/article/id,123949-page,1/article.html>.

³⁶ *Grokster*, 545 at 925.

³⁷ *Id.* at 921.

³⁸ *Id.* at 923.

³⁹ *Id.*

infringement. Both of the defendants had used software to direct former users of Napster to their respective products, which the Court saw as openly targeting a known demand of copyright infringement. Because the defendants' revenue was based on advertisements that displayed on users' screens, they had a direct financial interest in increasing the number of users, and thus increasing copyright infringement. Lastly, beyond sending emails to warn users about potential copyright infringement, neither Grokster nor StreamCast made any effort to stop the distribution of copyrighted material.⁴⁰

In the end, the *Grokster* Court ruled that “one who distributes a device with the object of promoting its use to infringe copyright, as shown by clear expression or other affirmative steps taken to foster infringement, is liable for the resulting acts of infringement by third parties.”⁴¹

III. BitTorrent and the next evolution of peer-to-peer networking

A. The emergence of BitTorrent

Bram Cohen, a software developer that nurtured his expertise in writing software code while working for an assortment of startup websites in the 1990s, followed his interest in file-sharing over networks and created the BitTorrent protocol to allow faster transfers of data than ever before.⁴² Today, his open-source code is freely shared by a number of different BitTorrent “clients,” or software interfaces, that utilize Cohen's original technology to allow users to personalize their file-sharing experience.

BitTorrent's technology improves upon that of predecessors like Grokster by separating large amounts of data into smaller pieces so users on the P2P network can continuously upload components of the larger file as they download new ones. Consequently, if more users begin

⁴⁰ *Id* at 926-7.

⁴¹ *Id* at 937.

⁴² Thomson, *supra* note 31.

downloading data, they will also be uploading more data collectively, which results in faster downloads for everyone. This enables the transferring of much larger files than ever before, which was evidenced by an England-based research firm's discovery that, in 2005, one-third of all data sent account is transferred by BitTorrent technology.⁴³ According to BitTorrent.com, over 150 million BitTorrent clients have been downloaded worldwide.⁴⁴ Given these elements of large file transfers and an attractiveness to users for ease and speed of downloads, the potential and most likely real amount of digital wide-scale copyright infringement through BitTorrent is astronomical.

In order to facilitate user access to files that can be transferred via BitTorrent, a growing number of websites called trackers provide torrent files that represent a larger file or group of files that the user wishes to download. The Sweden-based website The Pirate Bay, which claims to be the world's largest BitTorrent tracker, maintains that by only storing the torrent files and no copyrighted material on their server, they cannot be held liable for copyright infringement.⁴⁵ In fact, the website publishes threatening emails it receives from copyright holders, as well as their own responses and claims of immunity.⁴⁶

B. BitTorrent's noninfringing uses

Once BitTorrent popped its head up in cyberspace, its first major task was distributing the open-source operating system Linux and its associated software. Users were able to access the immense files at unheard-of speeds, which led to an exponential increase in the popularity of the

⁴³ *Id.*

⁴⁴ BitTorrent, About Us, at <http://www.bittorrent.com/about>.

⁴⁵ The Pirate Bay, About at <http://thepiratebay.org/about>.

⁴⁶ The Pirate Bay, Legal Threats, at <http://thepiratebay.org/legal>.

software.⁴⁷ Today, BitTorrent is utilized for a growing number of legal uses, including downloading videos in the public domain, such as amateur combat videos available at www.militaryvideos.net.⁴⁸ In addition, many MP3 music files, the pawn that was at the heart of the issue from the beginning of P2P copyright infringement, are being freely and legally distributed to an unlimited number of users through BitTorrent. The widely popular rock group Nine Inch Nails actually worked with its record company in May of 2007 to freely distribute three tracks from its upcoming album in hopes that the leaked content will spark computer users' interest in purchasing the album.⁴⁹ Many music groups considered to be a part of the jamband scene allow concert goers to tape live shows on recording devices with their own microphones, and subsequently offer the recordings to be legally downloaded.⁵⁰ The etree.org music community, which began in 1998 as an online network to connect users for trading live music that had been recorded to CDs, facilitates the distribution of legally recorded music by maintaining a database of live concerts and providing users with a detailed tracker of torrent files for recordings of live concerts by participating bands.⁵¹

Cohen's own creation now maintains a legitimate business site at www.bittorrent.com to allow downloading of free samples and paid-for content, while proponents of the fundamental technology maintain an information blog at www.bittorrent.org. Still, Cohen claims to have never downloaded a copyrighted work, seemingly as a demonstration of his dedication to the

⁴⁷ Daniel Roth, *Torrential Reign*, FORTUNE, Oct. 31, 2005, at 74.

⁴⁸ *Id.*

⁴⁹ *Nine Inch Nails Puts Songs on Popular File-Sharing Site*, May 1, 2007 at

<http://www.roadrunnerrecords.com/blabbermouth.net/news.aspx?mode=Article&newsitemID=71605>.

⁵⁰ These frequently-touring bands, such as Phish and Dave Matthews Band often offer concertgoers specialized "taper" tickets that allow the ticket holders to record the music from a designated section within the venue.

⁵¹ etree.org only provides access to music from bands that have explicitly allowed the taping and trading of their live performances, and it actively opposes the distribution of MP3 files, allowing only for the transfer of lossless, or uncompressed, music files.

technology and his passion for the rapid distribution of information.⁵² His commercial, dotcom site maintains that it does nothing to facilitate or encourage copyright infringement through its service, and its terms and conditions page warns users against attempting to circumvent any digital rights management technology, citing a possibility of copyright infringement.⁵³

C. The *Sony* test: Is BitTorrent capable of significant noninfringing uses?

As the most major technology currently utilizing P2P networks, BitTorrent is clearly capable of significant non-infringing uses, despite the likelihood that a vast majority of the content being shared infringes upon copyrights. However, under the vague refinement of the *Grokster* case, the *Sony* doctrine can only protect technology developers that do not exhibit a clear purpose to infringe upon copyrights. So with what main purpose was BitTorrent developed and distributed? As discussed above, Bram Cohen wrote his software simply to take advantage of an opportunity to greatly increase the speeds at which computer users can download large files. Additionally, the bittorrent.org forum describes the software as a means to publish one's own personal works, such as movie clips, video games and software to an immense audience.⁵⁴ Therefore, it is unlikely that a court would find BitTorrent liable for copyright infringement under the *Sony* test.

D. The *Napster* test: Beefing up the *Sony* evaluation of BitTorrent

While BitTorrent might easily escape any consequences under the cursory *Sony* test, the doctrine of contributory infringement from *Napster* could put the software on thinner ice. While those responsible for the BitTorrent technology would probably escape from meeting the actual

⁵² Thomson, *supra* note 31.

⁵³ BitTorrent.com Commercial Content Terms of Service, at <http://www.bittorrent.com/terms>

⁵⁴ What is BitTorrent? at <http://bittorrent.org/introduction.html>.

knowledge of copyright infringement, a plaintiff could potentially show constructive knowledge, especially because the commercial wing of BitTorrent warns users against infringing upon copyrights. Still, BitTorrent itself does not maintain any databases or servers to track usage or the content being shared, so it would still be an uphill battle to demonstrate that they have reason to know of the copyright infringement. Determining whether the free distribution of the open-source BitTorrent software constitutes a material contribution to copyright infringement would also be difficult for a court. Obviously, no users would be able to share the infringed-upon content without the software, but as BitTorrent people do not offer access to any copyrighted material, they could probably fall back on a defense that their intent is reflected in their above-mentioned purpose of facilitating high-speed transfers of large data files.

The next question under the *Napster* test asks whether BitTorrent has the right and ability to supervise the infringing activity and also has a direct financial interest in such activities. In the beginning, the BitTorrent technology operated solely on donations from generous downloaders of the software, so a plaintiff would have a difficult time establishing the requisite direct financial interest.⁵⁵ However, as more users benefit from downloading vast amounts of copyrighted material without any cost to them, more of the users could justify making a nominal donation to the BitTorrent folks as a token of appreciation for all the money that they were able to save. This presents the difficult task of proving the donators' intent. Additionally, the business plan of BitTorrent's commercial wing demonstrates that its financial interest is in facilitating the distribution of content that is officially licensed for a fee.⁵⁶ BitTorrent as a

⁵⁵ See Thomson, *supra* note 31.

⁵⁶ Ashwin Navin, *Perspective: The P2P mistake at Ohio University*, CNET News, May 7, 2007 at http://news.com.com/The+P2P+mistake+at+Ohio+University/2010-1027_3-6181676.html. (stating that content piracy is an enemy of BitTorrent's commercial program, as they rely on selling licensed content.)

software also lacks the requisite ability to supervise the infringing activity, as most copyrighted content being transferred through the protocol is organized and monitored by the tracker sites.

Therefore, it is unlikely those responsible for BitTorrent could be found liable for contributory infringement under the *Napster* doctrine, while it is even less likely that a court could find BitTorrent vicariously liable for any infringement.

E. Applying the *Grokster* Inducement Test to BitTorrent

Surprisingly, the *Grokster* test of whether BitTorrent intentionally induces copyright infringement offers the weakest argument for the software's liability. Because the developers and distributors of the BitTorrent technology have taken careful steps to present the technology simply as a means to share large amounts of information, they have avoided holding themselves out as intentionally supporting copyright infringement. While *Grokster* and *StreamCast* both actively lured the *Napster* users by presenting the opportunity to download copyrighted material, BitTorrent gained its popularity by distributing the Linux software and operating systems, which are completely open-source and free to share.⁵⁷ Additionally, the business model for BitTorrent only has a distant connection to increased revenue from copyright infringement at best. Therefore, it is also unlikely that the *Grokster* test could hold BitTorrent liable for inducing copyright infringement.

F. The *Grokster* case law lives on...

While the Supreme Court's decision in *Grokster* did not set a universal standard for evaluating electronic copyright infringement over the Internet, its narrow ruling continues to be followed and interpreted by federal courts in a variety of situations. The Supreme Court still

⁵⁷ See Thomson, *supra* note 31.

could develop the *Grokster* doctrine to better incorporate the *Sony* test, or even overrule the *Grokster* altogether, its inducement test continues to be presiding law regarding P2P copyright infringement. Additionally, a growing number of plaintiffs are seeking to invoke *Grokster*'s inducement test for a variety of scenarios beyond the Internet to stop the apparent inducement of other unlawful activity, be it copyright infringement or otherwise.

In 2006, the U.S. District Court in the Central District of California did not agree with the *Grokster*-related claim made by a pornographic publisher against Google's image search and AdSense programs. Seeking to prevent the search engine Google from displaying its copyrighted images as "thumbnails" on its results pages from image searches, the magazine and website publisher Perfect 10 sued Google for preliminary injunctive relief.⁵⁸ Invoking the *Grokster* ruling in its motion for a preliminary injunction, Perfect 10 claimed that Google should be held secondarily liable for contributory and vicarious infringement. Perfect 10 argued that Google users directly infringe upon their copyrights by redisplaying the copyrighted images after they had been reproduced by third-party websites.⁵⁹ The court rejected this argument because browser caching involves a computer storing recently viewed content, which is "an automatic process of which most users are unaware, and its use likely is 'fair' under 17 U.S.C. §107."⁶⁰ Perfect 10 further cited the *Grokster* decision to accuse Google of materially contributing to copyright infringement by providing a revenue stream to other infringing websites through their advertising program. The court sided with Google's contention that it had "*not* actively encouraged users to visit infringing third-party websites, and it has not induced or encouraged such websites to serve infringing content in the first place," noting that Perfect 10 had incorrectly

⁵⁸ *Perfect 10 v. Google, Inc.*, 416 F.Supp.2d 828 (C.D.Cal., 2006).

⁵⁹ *Id.* at 852.

⁶⁰ *Id.*

cited the *Grokster* language for “inducement theory” to make an argument for Google’s “material contribution.”⁶¹

Even more recently, Perfect 10, a party ever-familiar with the *Grokster* decision, again brought a suit against an Internet credit card processing company partially for copyright infringement perpetrated by illegally supplying passwords to access their protected website content.⁶² The court agreed that, much in the way *Grokster*’s software did not itself infringe while still enabling users to share copyrighted material, the password-hacking websites could be liable for contributory infringement by “providing passwords that enable users to illegally access websites with copyrighted content.”⁶³ The court compared this activity to *Grokster* instructing users how to engage in an infringing use. However, without being able to show how the websites acquired the passwords or that the websites actually instructed or enabled users to infringe upon copyrights, the court could not hold the defendants liable for as “red flags” of infringement.⁶⁴

In a case brought against Lycos, the operator of an Internet message board, a corporation attempted to compare defamation on the Internet with the *Grokster* ruling that distributors of a device for the purpose of promoting copyright infringement are liable for the infringing acts of third parties.⁶⁵ While the court could see the vague similarity between the scenarios, the plaintiff faced the daunting task of overcoming immunity for free speech over the Internet granted by the Communications Decency Act.⁶⁶ The plaintiff unsuccessfully contended that because Lycos had taken legal actions to protect the free speech of its users, they had induced unlawful activity as

⁶¹ *Id.* at 856.

⁶² *Perfect 10, Inc. v. CCBill LLC*, 481 F.3d 751 (C.A.9 Cal. 2007).

⁶³ *Id.* at 763.

⁶⁴ *Id.* at 764.

⁶⁵ *Universal Commun. Sys. v. Lycos, Inc.*, 478 F.3d 413 (U.S. App. 2007)

⁶⁶ *Id.* at 415, citing 47 U.S.C. § 230.

Grokster had. Ultimately, because the posted messages were not unlawful (unlike the content being shared through the Grokster software), the defendants prevailed with a motion to dismiss all claims.⁶⁷

Interestingly, the *Grokster* tests have now been applied to situations that have nothing to do with the Internet. Such was the case in *Arista Records, Inc. v. Flea World, Inc.*, a contributory infringement and vicarious liability suit brought by a number of record companies against the operators of a flea market.⁶⁸ The plaintiffs contended that by allowing flea market vendors to sell illegally manufactured CD and cassette recordings of their copyrighted music, the defendants “(a) had knowledge of and materially contributed to the vendors’ infringing activity (contributory infringement) or (b) had the ability to supervise and control the direct infringement and financially benefited from it (vicarious liability).”⁶⁹ The court distinguished the case from *Grokster* because the flea market operators were not distributing a device capable of non-infringing uses, and after the point of sale, the defendants had no control over the users’ infringing actions. Furthermore, the court held that because the defendants exerted substantial control over the market by regulating sales of items and managing competition, they actually had more control over the direct infringers.⁷⁰

IV. Current efforts against peer-to-peer copyright infringement

A. Stopping the Trackers

While the BitTorrent software may not hold itself out as a tool to foster infringement, many of the tracker websites that catalog the torrent files continue to openly provide the avenue

⁶⁷ *Id.* at 421.

⁶⁸ 2006 WL 842883 at 1 (D.N.J., 2006).

⁶⁹ *Id.*

⁷⁰ *Id.* at 16. The court continued to explain that the *Grokster* case did not apply directly enough to the flea market to continue analysis of the copyright infringement claim under the inducement test.

to access copyrighted material through the means of the BitTorrent software. For now, these tracker sites look like the main targets to be affected by the *Grokster* inducement test. However, these sites are easily developed and maintained by web developers that need only a fundamental understanding of the technology, so shutting one tracker down doesn't prevent another from popping up in its place. Additionally, many of the tracker sites currently being offered to the public are maintained outside of the United States, so pursuing injunctions to have them shut down presents a complicated task. For the most part, enforcing copyright laws by having the tracker sites removed from the web is up to the local governments of the nation from where the tracker is being maintained.⁷¹ More and more sites tracking torrent files are also becoming members-only, private websites that do not advertise or hold themselves out as distributors of files linking copyrighted material. Instead, they use member-initiated invitations to allow new members to access the torrent files.⁷² This presents the copyright holders with an even greater challenge in finding potential infringers.

In recent years, the U.S. government has been taking action on its own soil to stop torrent tracking sites, culminating in the major event of shutting down the tracker site Elite Torrents in May of 2005.⁷³ Having noticed the growing problem of copyright infringement occurring through BitTorrent, the U.S. Justice Department has initiated a criminal enforcement action called Operation D-Elite, which targets "individuals committing copyright infringement on a peer-to-peer (P2P) network using BitTorrent technology."⁷⁴ The latest individual targeted by the operation was singled out as an "uploader," or a person "responsible for supplying the network

⁷¹ See *supra* note 46.

⁷² [username] soulxte, *What private BitTorrent tracker sites are the hardest to get into?*, at <http://www.zeropaid.com/news/8720/What+private+BitTorrent+tracker+sites+are+the+hardest+to+get+into%3F/>

⁷³ *Justice Department Announces Sixth Guilty Plea in P2P Piracy Crackdown*, Justice Department Press Releases, April 30, 2007.

⁷⁴ *Id.*

with the first copy of a particular movie or other content that was then made available to the entire network for downloading.”⁷⁵ The uploader, who pleaded guilty to “conspiracy to commit criminal copyright infringement and criminal copyright infringement of a pre-commercial release work in violation of the Family Entertainment Copyright Act,” faces a potential sentence of five years imprisonment and a \$20,000 fine.⁷⁶

While shutting down a tracker site on American soil is a big step for the government, there are still plenty of sites overseas that are out of reach of the Justice Department, and they still currently lack the jurisdiction to actively fight to have the tracker sites removed.

B. Efforts to stop peer-to-peer copyright infringement on college campuses

Around the turn of the last century, college campus networks were known to be the major venues of P2P copyright infringement through the Napster software, largely due to the increased access students had to high-speed internet.⁷⁷ But even as Napster faded away, the illegal music downloading continued. The RIAA issued a press release on May 2, 2007 announcing that it had sent 402 pre-litigation settlement letters to students at 13 different universities. The letters inform the students that they are being sued for copyright infringement and offer a reduced-cost resolution alternative. The announcement cited a study that found that college students were responsible for more than 1.3 billion illegal music downloads in 2006.⁷⁸ Clearly, the problem of copyright infringement through file-sharing is as significant as ever, yet pursuing several hundred students at a time can hardly put a dent in the astounding amount of illegal downloading.

⁷⁵ *Id.*

⁷⁶ *Id.*

⁷⁷ Tanya Schevitz & Vanessa Hua, *Napster Ruling Irks Students*, San Francisco Chronicle, Feb. 13, 2001 at B1.

⁷⁸ *New Wave of RIAA Pre-Lawsuit Letters Targets Music Theft on 13 Campuses*, RIAA Press Release, May 2, 2007, at <http://www.riaa.com/news/newsletter/050207.asp>.

1. Curb Illegal Downloading on College Campuses Act

Well-aware of the copyright infringing problems on college campuses, Rep. Ric Keller, R-Fla., introduced his Curb Illegal Downloading on College Campuses Act of 2007 to the U.S. Congress on March 26, 2007. Citing concerns about too much network bandwidth being allocated for music downloads, Keller said “[i]t’s just plain wrong to steal billions of dollars in intellectual property from hardworking people whose jobs hang in the balance.”⁷⁹

The language of the proposed bill suggests that “programs can be developed that will stop illegal downloading while still maintaining student privacy and academic freedom.”⁸⁰ The bill goes on to say that the most major concerns with illegal downloading are the strain it puts on the network bandwidth and the security issues that downloading presents to networks. The bill has already stirred up controversy because by introducing it to the Committee on Education and Labor, Rep. Keller has implied that funding for the programs suggested by the bill will come out of educational budgets.⁸¹

2. Ohio University nips BitTorrent

While Rep. Keller has taken the initiative to stop the sharing of infringing material on a nation-wide scale, some universities are already tackling the problem themselves. On April 25, 2007, Ohio University issued a press release announcing the prohibition of all P2P file-sharing software, including clients running the BitTorrent technology, on the campus network.⁸²

⁷⁹ Brooks Boliek, *Politician eyes taxpayer money for piracy war*, Reuters, Mar. 29, 2007 at <http://www.reuters.com/article/industryNews/idUSN2934796120070329>.

⁸⁰ Curb Illegal Downloading on College Campuses Act of 2007, H.R. 1689, 110th Cong. § 2(5) (2007).

⁸¹ Boliek, *supra* note 77.

⁸² *Ohio University Announces Changes in File-Sharing Policies*, US States News, April 25, 2007. *See also* <http://technology.ohio.edu/help/blocked-faq.html>.

However, instead of citing a concern for copyright infringement issues, the University attributed the decision to ensuring that all users of the network share the campus bandwidth. “Peer-to-peer file sharing consumes a disproportionate amount of resources, both in bandwidth and human technical support,” said the school’s Chief Information Officer.⁸³ Once the University began monitoring the use of P2P networking two days after the announcement, they planned to disable the internet connection of any computer detected using one of the banned software clients. Understanding that there are still many legitimate uses for P2P technology, the University invites those needing to use BitTorrent for legal purposes to discuss their case with the campus IT department to see if an exception can be made.⁸⁴

However, Ohio University’s decision to ban all P2P networking has triggered some BitTorrent proponents to speak up. By completely banning all P2P software, argues Ashwin Navin, the president of BitTorrent, Inc., the University has closed its doors to significant beneficial technology developments.⁸⁵ As the demand for high-quality streaming content like video on YouTube continues to grow, so will the strain on the existing infrastructure of the Internet. P2P technology, if actively incorporated into web-based activities beyond file-sharing, can ease this strain by distributing the data loads across many global Internet users.⁸⁶ But in the case of Ohio University, Navin says that the “university’s administration has set a terrible precedent for its staff on the desirability of seeking creative ways to support new technologies.”⁸⁷ Navin further suggests that OU students seek the P2P exemption from their IT department for legal and educational ventures like downloading NASA photos for a research paper.⁸⁸

⁸³ *Id.*

⁸⁴ *Id.*

⁸⁵ Navin, *supra* note 56.

⁸⁶ *Id.*

⁸⁷ *Id.*

⁸⁸ *Id.*

V. Other potential solutions

C. Requiring a reasonable means to prevent copyright infringement

To sufficiently incorporate BitTorrent's liability into the doctrines established by the *Sony* and *Grokster* Courts, author Matthew Helton has suggested that the Supreme Court revisit the "staple article of commerce" analysis to modernize the *Sony* law for the digital Internet age.⁸⁹ Instead of trying to determine if a product could threaten a global industry through copyright infringement, Helton writes that the features of a product should be evaluated to see if they contribute to massive copyright infringement.⁹⁰ Furthermore, Helton writes that if a product capable of large-scale copyright infringement is to be labeled a staple article of commerce, it should be required to "incorporate reasonable filtering or preventative methods to curb unauthorized reproduction and distribution of copyrighted materials."⁹¹ Helton hopes that by placing this burden on the software developers, his proposed test would continue to be applicable to future products, even after the eventual fading away of BitTorrent.⁹²

D. Additional protection from the U.S. Copyright Office

Instead of regulating the software itself and making a decision as to whether software like BitTorrent should be held liable for infringement, another solution could be reached by giving the Copyright Office the means and power to better actively police copyright infringement over the Internet. By offering increased protection to registered copyright holders, the judicial and legislative systems could avoid hindering the development of new technologies and rapid

⁸⁹ Matthew Helton, Note, *Secondary Liability for Copyright Infringement*, 40 Colum. J.L. & Soc. Probs. 1, 30 (Fall 2006).

⁹⁰ *Id.* at 32.

⁹¹ *Id.*

⁹² *Id.* at 34.

information sharing. Much like the Judicial task force Operation D-Elite, which targets infringers from one specific tracker site,⁹³ Congress could fund a small department of the Copyright Office to make efforts to battle all torrent tracking sites that market and promote sharing of copyrighted material. Perhaps counter-software could be developed to scan the trackers and cross-check listings with the U.S. Copyright database. To secure funding, the Copyright Office could offer, for a fee additional to their usual registration fees of \$35-45,⁹⁴ specialized service to ensure that employees and technologies are taking active steps to protect their copyrighted material. Certainly movie producers and record companies could afford an increased fee for personalized protection.

VI. Conclusion

Perhaps the legally evasive technology of BitTorrent represents a positive outlook for global technology development. Still, copyright infringement must be reined in as much as possible before it gets even further out of control. But at what level should the sharing of digital media be controlled or prohibited without interfering with free expression and creative collaboration? For every safeguard, there will always be underground technology experts that will have found a way around it. That has been the history of the Internet from its inception. If those software developers had an interest in protecting copyrights equal to that of the rights holders, perhaps they could develop counter-infringement software that hunts out those who should be held liable for infringement. For now, the BitTorrent technology is here to stay, and hopefully the legal scales will eventually begin to tip from excessive copyright infringement

⁹³ See *infra* Part IV.A.

⁹⁴ Copyright Office fee schedule, at <http://www.copyright.gov/docs/fees.html>.

toward utilizing peer-to-peer technology to improve the overall efficiency of information sharing across the globe.