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Virtual Border Customs: Prevention of International Online Music Piracy Within the Ever-Evolving Technological Landscape

Lance D. Clouse

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VIRTUAL BORDER CUSTOMS: PREVENTION OF INTERNATIONAL ONLINE MUSIC PIRACY WITHIN THE EVER-EVOLVING TECHNOLOGICAL LANDSCAPE

[Online piracy] is taking food out of my kids' mouths. I've always dreamed about making a living at something that I love to do. And they're destroying my dream.¹

I. INTRODUCTION

With the widespread use of the Internet, piracy of copyrighted materials has threatened the rights of copyright holders everywhere.² One of the earliest and still most prominent targets for the threat of online piracy is sound recordings.³ With the rapid rise and fall of Napster, the world of music distribution may never be the same.⁴ Although Napster was only recently founded in May of 1999, the concept of peer-to-peer sharing technology that Napster developed has exploded into a worldwide phenomenon.⁵ However, the development of this new medium has come at a price; the proliferation of this forum has resulted in the trading of astronomical amounts of unlicensed copyrighted sound recordings throughout the world.⁶

¹ Rap artist Dr. Dre, *quoted in* Jenny Eliscu, *Napster Fights Back*, ROLLING STONE, June 22, 2000, at 29.

² Cynthia M. Cimino, Comment, *Fair Use in the Digital Age: Are We Playing Fair?*, 4 TUL. J. TECH. & INTELL. PROP. 203, 204 (2002). "Piracy," within the context of this paper, is a term used to describe illegal duplication and/or distribution of sound recordings. See Recording Indus. Ass'n of Am. ("RIAA"), *What Is Piracy*, at <http://www.riaa.org/Protect-Campaign-1.cfm> (on file with the Valparaiso University Law Review). "Online piracy is the unauthorized uploading of a copyrighted sound recording and making it available to the public, or downloading a sound recording from an Internet site, even if the recording [is not] resold." *Id.*

³ Cimino, *supra* note 2, at 204 (stating that music has been the most affected thus far by the illegal dissemination of sound recordings over the Internet).

⁴ Matthew Green, *Napster Opens Pandora's Box: Examining How File-Sharing Services Threaten the Enforcement of Copyright on the Internet*, 63 OHIO ST. L.J. 799, 815-16 (2002). "[I]t does not appear that [peer-to-peer] technology will disappear if Napster goes the way of the dodo." *Id.*

⁵ Timothy James Ryan, *Infringement.com: RIAA v. Napster and the War Against Online Music Piracy*, 44 ARIZ. L. REV. 495, 496 (2002). For a description of peer-to-peer sharing, see *infra* Part II.A.3-4.

⁶ Damien A. Riehl, *Peer-to-Peer Distribution Systems: Will Napster, Gnutella, and Freenet Create a Copyright Nirvana or Gehenna?*, 27 WM. MITCHELL L. REV. 1761, 1767 (2001); Ryan, *supra* note 5, at 501. According to a study conducted by the International Federation of the

The problem with this type of technology is that the current copyright laws are ineffective in preventing piracy, and public opinion regarding the copyright infringement has, at best, shown indifference.⁷ In addition, the idea of file sharing that Napster pioneered has sparked a new generation of services, such as Gnutella and Freenet, that are considerably more amorphous and decentralized than their predecessor.⁸ The decentralized nature of the new emerging services makes the task of finding and stopping those responsible for downloading and uploading unlicensed sound recordings even more elusive, even under the latest amendments to the domestic and international copyright laws.⁹ It is the threat of these new technologies and the appropriate actions to be taken on an international level, that still need to be resolved.¹⁰

Ever since the threat of widespread copyright infringement on the Internet became apparent, various international agreements have attempted to protect copyright holders by establishing various definitions of infringement and providing remedies aimed specifically at digital reproduction and distribution.¹¹ Within the last ten years, international agreements, such as the World Intellectual Property Organization Performances and Phonograms Treaty ("WPPT"),¹² and the Agreement on Trade-Related Aspects of Intellectual Property Rights ("TRIPs Agreement"),¹³ have attempted to address and clarify what constitutes copyright infringement in relation to the ever-changing

Phonographic Industry ("IFPI"), there are "five million users on peer-to-peer networks swapping 900 million files" at any one time. Bernhard Warner & Merissa Marr, *Battered Record Execs Set to Face the Music*, YAHOO NEWS, Jan. 17, 2003, at http://story.news.yahoo.com/news?tmpl=story2&u=/nm/20030117/music_nm/media_music_dc (on file with the Valparaiso University Law Review).

⁷ See Albert Z. Kovacs, Note, *Quieting the Virtual Prison Riot: Why the Internet's Spirit of "Sharing" Must Be Broken*, 51 DUKE L.J. 753, 762-68 (2001); see also *infra* Part III.

⁸ Melanie Warner, *The New Napsters*, FORTUNE, Aug. 12, 2002, at <http://www.fortune.com/fortune/personalfortune/articles/0,15114,370121,00.html> (on file with the Valparaiso University Law Review).

⁹ *Id.*

¹⁰ See Jane C. Ginsburg, *Copyright and Control Over New Technologies of Dissemination*, 101 COLUM. L. REV. 1613, 1642-44 (2001) (asking whether copyright protection is still possible with technology constantly evolving, and if so, by what means).

¹¹ See, e.g., World Intellectual Property Organization: Performances and Phonograms Treaty Adopted in Geneva, Dec. 20, 1996, 36 I.L.M. 76 (1997) [hereinafter WPPT].

¹² WPPT, *supra* note 11.

¹³ Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, LEGAL INSTRUMENTS—RESULTS OF THE URUGUAY ROUND vol. 31, 33 I.L.M. 81 (1994) [hereinafter TRIPs Agreement].

intellectual property landscape.¹⁴ However, these newly adopted laws do not aid copyright holders in finding and taking appropriate actions against individual infringers, particularly infringers outside of the United States.¹⁵ The new laws only identify what constitutes liability, but do not propose any actions towards curtailing the continued infringement directly, and are not uniformly adopted.¹⁶

This Note explains the complex realm of the international intellectual property laws, particularly those relating to the protection of sound recordings, as they pertain to the Internet and the technological framework in which online music piracy thrives. This Note begins with an overview of the history of the Internet, including the technological developments that enabled large-scale music piracy, as well as a few of the latest technological safeguards currently being developed to thwart Internet piracy.¹⁷ Then, this Note discusses the United States perspective on the copyright protection of sound recordings and describe the limitations on the reach of United States copyright laws on foreign infringers.¹⁸ Next, the history of international intellectual property agreements is explained in relation to their application, or inapplication, to the protection of sound recordings, and the international attempts to keep pace with the changing intellectual property landscape.¹⁹ After explaining the basic legal and technological issues, this Note analyzes the effectiveness of the current international intellectual property agreements in combating online music piracy, and proposes a solution implementing a combination of technological measures and international treaty amendments for reducing online music piracy.²⁰

II. BACKGROUND OF INTELLECTUAL PROPERTY ISSUES WITH SOUND RECORDINGS

The issues surrounding international copyright protection for sound recordings, in relation to the Internet, require both a summary of the historical evolution of intellectual property rights and a brief explanation of the technological developments of the Internet. This Note begins by

¹⁴ See *infra* Part II.C.2.d, 3.

¹⁵ See Riehl, *supra* note 6, at 1787.

¹⁶ See *infra* Part III.

¹⁷ See *infra* Part II.A.

¹⁸ See *infra* Part II.B.

¹⁹ See *infra* Part II.C.

²⁰ See *infra* Parts III, IV.

briefly explaining the history and technological framework of the Internet and its role in the proliferation of unauthorized international sharing of copyrighted sound recordings.

A. History and Technological Framework of the Internet

The Internet, due to its global presence, has created a forum of communication that thus far has been relatively difficult to regulate. From its infancy, the Internet has resisted regulation from authorities and has created a “net culture” that actively attacks any “encroachments” on its ability to exchange whatever information it chooses, regardless of existing laws. The following sections explain the nature of the Internet and why this new medium of communication has created a “thorn” in the side of copyright holders.

1. Setting the Stage for Peer-to-Peer Sharing Technology

The Internet has rapidly grown in popularity over the last decade, particularly in light of its short history.²¹ The Internet is not a single

²¹ NUA, *How Many Online?*, at http://www.nua.ie/surveys/how_many_online/world.html (last visited Nov. 23, 2003). As of May 2002, it had been estimated that over 580.78 million people have access to the Internet. *Id.* The history of the Internet can be traced back directly to the first computer network. G. PETER ALBERT, JR. & LAFF, WHITESEL & SARET, LTD, *INTELLECTUAL PROPERTY LAW IN CYBERSPACE 10* (1999) [hereinafter *CYBERSPACE*]. J.C.R. Licklider had conceived the concept of a “galactic network” in 1962 that would enable people to interact via computer, and brought the networking concept to the Department of Defense when he became head of the Defense Advanced Research Projects Agency (“DARPA”). TRACY LAQUEY & JEANNE C. RYER, *THE INTERNET COMPANION: A BEGINNER’S GUIDE TO GLOBAL NETWORKING 3* (1993). DARPA, which was later changed to Advanced Research Projects Agency (“ARPA”), facilitated Licklider’s networking idea together with Leonard Kleinrock’s packet switching techniques, resulting in what was known as ARPAnet. *CYBERSPACE*, *supra*, at 10-11; see David Allwies, Comment, *Copyright Infringement on the Internet: Can the Wild, Wild West Be Tamed*, 15 *TOURO L. REV.* 1005, 1010 (1999); Mathias Strasser, *Beyond Napster: How the Law Might Respond to a Changing Internet Architecture*, 28 *N. KY. L. REV.* 660, 664 (2001). But see HARLEY HAHN & RICK STOUT, *THE INTERNET COMPLETE REFERENCE 2* (1994) (stating that ARPA was later changed to DARPA). Initially used as a research tool for testing the concepts of packet switching and computer networking, ARPAnet used a host-to-host protocol that allowed the source and destination computers on the same network to communicate with one another. *CYBERSPACE*, *supra*, at 10-11; see HAHN & STOUT, *supra*, at 2. Packet switching is the process where “messages are broken down into small, easily managed ‘packets’ of data. Thus, each individual packet will contain only a fraction of an overall message being transmitted over the Internet.” *CYBERSPACE*, *supra*, at 14. Each packet also includes a “header,” which is a small portion of the data used to identify the packet. *Id.* The header will include information such as the address of the source computer and destination computer, the identity of the particular packet, and in what order the packet should be placed when the final message is reassembled. *Id.* “The first link in the ARPAnet was

computer network, but is actually an amalgamation of several networks that are interconnected by the common host-to-host protocol known as Transmission Control Program/Internet Protocol ("TCP/IP").²² There is no central control over the Internet, but there is a "hierarchical structure" that allows dissemination of information throughout the global network.²³ While the new global medium of the Internet had allowed

established in 1969 between the Network Measurement Center at UCLA and the Stanford Research Institute." *Id.* at 11. The Internet changed and expanded dramatically, however, when the National Science Foundation ("NSF") introduced NSFNet in 1986. Strasser, *supra*, at 664. The NSFNet, intending to link five major universities throughout the country, "provided a large national 'backbone' for interconnecting smaller regional networks." CYBERSPACE, *supra*, at 12. Having adopted the TCP/IP protocol used by ARPAnet, NSFNet encouraged the development of the nationwide, smaller regional networks for research and academic applications. CYBERSPACE, *supra*, at 12; ELIZABETH LANE LAWLEY & CRAIG SUMMERHILL, INTERNET PRIMER FOR INFORMATION PROFESSIONALS 45 (1993). In limiting the use of NSFNet national backbone strictly to research and educational applications only, the NSF had denied the opportunity of commercial ventures to take advantage of the new developments on the existing networks. CYBERSPACE, *supra*, at 12. In response, commercial enterprises developed many commercial networks that began to parallel and augment NSFNet by using the same TCP/IP protocol. CYBERSPACE, *supra*, at 12-13; LAWLEY & SUMMERHILL, *supra*, at 4. Eventually, the network of computers linked together communicating with a common protocol became the Internet known today. CYBERSPACE, *supra*, at 13. In 1995, however, NSFNet reverted back to being a national research network, which, from that point on, required all Internet backbone traffic to be routed through commercial network providers. *Id.* Within just a few decades, the Internet had grown from a small military tool to a globally commercial phenomenon. Allwies, *supra*, at 1010 (describing the origin of the Internet).

²² LAWLEY & SUMMERHILL, *supra* note 21, at 44-45. In 1972, the InterNetworking Group ("INWG") created the TCP protocol to establish a universal protocol system that would allow host computers on different networks to communicate, which eventually evolved into the TCP/IP protocol suite that is still in wide use today. CYBERSPACE, *supra* note 21, at 12. See generally LAWLEY & SUMMERHILL, *supra* note 21, at 45-51. The "TCP" primarily provides "robust flow control features," while the "IP" is "geared toward simple addressing and forwarding of individual data packets." CYBERSPACE, *supra* note 21, at 12. The TCP/IP system allows computers to describe information electronically to one another in the network. Seanet, *How Does the Internet Work?*, <http://www.seanet.com/help/general/intro.shtml#2> (last visited Nov. 25, 2003). First the information is broken into smaller chunks called packets with information describing to whom and from whom it is being sent. *Id.* The IP protocol determines which route the information will travel through the series of routers. *Id.* Each router examines the destination addresses of each packet that passes through it and sends it on towards its final destination. *Id.* When the packets arrive at their destination, the TCP protocol identifies them and reassembles them in original form. *Id.*

²³ CYBERSPACE, *supra* note 21, at 14. The Internet is a worldwide computer network that is governed by no single legal or governmental entity. Mary Ann Shulman, Comment, *Internet Copyright Infringement Liability: Is an Online Access Provider More Like a Landlord or a Dance Hall Operator?*, 27 GOLDEN GATE U. L. REV. 555, 556 (1997). Instead, the Internet has been loosely self-governed by groups independent of any particular government. Robert E. Litan, *Law and Policy in the Age of the Internet*, 50 DUKE L.J. 1045, 1081 (2001). The high level

text and graphics to be transmitted relatively quickly early in its history, it was not until the late 1990s that sound files were practical for Internet transmission.²⁴ With faster Internet connections more readily available to the average consumer, in conjunction with the development of compression technology that allowed sound files to be compressed even

networks consist of a small number of large-area international, national, and regional networks that are interconnected through devices known as network routers which control the flow of information across the Internet. CYBERSPACE, *supra* note 21, at 14. Within the United States there are numerous high-speed networks owned by major communications companies such as GTE, UUnet, AT&T, MCI, Sprint, and Verio, to name a few. NHBweb, *What is the Internet Backbone*, at <http://www.nhbweb.com/nhbweb-backbone.html> (last visited Nov. 25, 2003). The network routers are interconnected "such that there are multiple 'paths' across the Internet from one router to another." CYBERSPACE, *supra* note 21, at 14. Connected to the high-level "backbone" networks are smaller networks that are connected to other smaller networks and other "backbone" networks through other routers, and so forth. *Id.*; HAHN & STOUT, *supra* note 21, at 11-12. The network routers determine the best possible path for dispersing information and delivering it to its final destination. CYBERSPACE, *supra* note 21, at 14. "Since each individual router is connected to many other routers, data can travel multiple paths to arrive at any given destination [without regard to the actual path traveled]." *Id.* Accessing the Internet can be accomplished by either a direct attach method or through an Internet Service Provider ("ISP"), such as America Online ("AOL"). HAHN & STOUT, *supra* note 21, at 34-35. Direct attach method means that a "host computer running Transmission Control Protocol and Internet Protocol (TCP/IP) software is directly attached to a TCP/IP network, which is interconnected with the rest of the Internet [infrastructure]." CYBERSPACE, *supra* note 21, at 17. Typically, an individual Internet user will use a modem attached to his or her computer to access the ISP's host computer that is directly connected to the TCP/IP network. *Id.*; HAHN & STOUT, *supra* note 21, at 36. Internet service can be provided by "dial-in direct connection" with an ISP, such as in the case of a student using Internet access provided by a university that has its own direct connection to the Internet; or "dial-in terminal mode," such as when an individual uses a computer modem to dial into an ISP computer provided by AOL. CYBERSPACE, *supra* note 21, at 17-18.

²⁴ Robert T. Baker, *Finding a Winning Strategy Against the MP3 Invasion: Supplemental Measures the Recording Industry Must Take to Curb Online Piracy*, 8 UCLA ENT. L. REV. 1, 5-6 (2000). "While typical text files and digital pictures range from 1 to 500 [kilobytes] in size, a pop-song-length digital sound file taken off of a standard [compact disc] in [an uncompressed format] is enormous, ranging from 26 to 40 [megabytes] in size." *Id.* at 5 (footnotes omitted). A kilobyte (KB) is 1,024 bytes, while a megabyte (MB) is 1,024 KB. *Id.* By the mid-1990s, the fastest modems available could only transfer at 33.6 KB per second ("kbps"), which would require hours of download time just for a simple four-minute song. *Id.* Then, as connection speeds increased for consumer use with wide-spread availability of faster services such as 56 kbps modems, DSL, and cable modems, in conjunction with business, library, and university use of "lightning-speed" connections such as ISDN, T1, and T3 lines, the technological ability to transmit sound files over the Internet became more practical. *Id.* at 6.

smaller, the idea of transmitting high-quality sound recordings within a reasonable time period became a reality.²⁵

The format most widely used for transferring and listening to sound files on the Internet is an audio compression technology known as Motion Picture Experts Group-1 Audio Layer 3 ("MP3").²⁶ The compression of the file results in near Compact Disc ("CD") quality sound at a file size one-twelfth its original size, which facilitates uploading and downloading as well as reducing the space needed for file storage.²⁷ Due to its compression capabilities and large variety of adaptations, the MP3 format became very popular among Internet users.²⁸

²⁵ William Sloan Coats et al., *Streaming Into the Future: Music and Video Online*, 670 PLI/PAT 119, 126 (2001).

²⁶ Ryan, *supra* note 5, at 499. The MP3 format compresses musical WAV files to a 12:1 ratio by eliminating purported "noise" imperceptible to the human ear from the sound recording. Jennifer Gokenbach, *A&M Records, Inc. v. Napster, Inc.: A Case Comment*, 79 DENV. U. L. REV. 259, 260 (2001). *But see* Coats, et al., *supra* note 25, at 126 (stating the compression ratio is 10:1). There are other competing formats used for sound file transmission, such as a2b, realaudio, and liquidaudio, among others, but MP3 has been the most widely used and the most blamed for the majority of online piracy. Gokenbach, *supra*, at 260. MP3's popularity may be attributed to it being originally developed as an open source standard, meaning that the technology was not owned by any single person or group. Ryan, *supra* note 5, at 498-99. The open approach allowed for rapid development of software designed around the MP3 format, unhindered by any restrictions on use. *Id.* A "WAV" file is simply an uncompressed audio format created by Microsoft used for system and game sounds as well as CD-quality audio. Techtarger, *Wave File: A Whatis Definition*, at http://whatis.techtarger.com/definition/0,,sid9_gci213473,00.html (last updated July 24, 2001).

²⁷ Baker, *supra* note 24, at 5-6; Maggie A. Lange, *Digital Music Distribution Technologies Challenge Copyright Law: A Review of RIAA v. MP3.com and RIAA v. Napster*, 45 B.B.J. 14, 15 (2001). "To create an MP3 file, you use a program called a ripper to get a selection from a CD onto your hard disk and another program called an encoder to convert the selection to an MP3 file." Techtarger, *MP3: A Whatis Definition*, at http://whatis.techtarger.com/definition/0,,sid9_gci212600,00.html (last updated Dec. 3, 2002). Ripping and encoding software allows a computer to convert sound from CDs into WAV files. Hisanari Harry Tanaka, *Post-Napster: Peer-to-Peer File Sharing Systems Current and Future Issues on Secondary Liability Under Copyright Laws in the United States and Japan*, 22 LOY. L.A. ENT. L. REV. 37, 42 (2001).

²⁸ The keyword "MP3" has replaced "sex" as the most popular search term on the Internet. *See* Paul Veravanich, *Rio Grande: The MP3 Showdown at Highnoon in Cyberspace*, 10 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 433, 439 (2000); Christopher Jones & Jennifer Sullivan, *More Popular Than Sex*, WIRED NEWS, Oct. 14, 1999, at <http://www.wired.com/news/print/0,1294,31834,00.html>.

2. Napster and the Dawn of Peer-to-Peer Sharing

The MP3 format did not make record companies nervous until a Northeastern University college student named Shawn Fanning developed computer software that allowed MP3s to be easily shared over the Internet.²⁹ Later naming his service Napster, Fanning developed and released his MusicShare Software, which could be downloaded for free from Napster's website to the public over the Internet in 1999.³⁰ Napster allowed its users to (1) make MP3 files stored on individual computer hard drives possessing the software available to other Napster users for copying; (2) search other users' computers for MP3 files; and (3) transfer exact copies of the files over the Internet from one computer to another.³¹ Thus, Napster allowed individuals to interact directly with one another, creating a "peer-to-peer" sharing network.³² Although the Napster site would make a list from the MP3 filenames available on each user's computer, the site itself did not store the MP3 files, but instead the user would exchange files from user to user.³³ Napster was an instant success, with the Napster user base doubling every five to six weeks until it eventually had more than forty million users trading 1.39 billion songs by the Fall of 2000.³⁴

Although Napster users were thrilled by the ease of use and free access to so many different MP3 files through the Internet, musical copyright holders and record companies were horrified at the level of copyrighted, but unlicensed, sound recordings being traded online.³⁵

²⁹ Gokenbach, *supra* note 26, at 259; Riehl, *supra* note 6, at 1766.

³⁰ Gokenbach, *supra* note 26, at 259.

³¹ A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004, 1011 (9th Cir. 2001) (explaining how the Napster service works).

³² Ryan, *supra* note 5, at 500.

³³ *Id.*; see also A&M Records, Inc., 239 F.3d at 1012. Napster created a search index which contained a collective directory of all the filenames of the songs Napster users had stored on their own computers. Michael S. Elkin & Alexandra Khlyavich, *Napster Near and Far: Will the Ninth Circuit's Ruling Affect Secondary Infringement in the Outer Reaches of Cyberspace?*, 27 BROOK. J. INT'L L. 381, 388 (2002). As long as the Napster user's computer who has the desired file on its hard drive (host) is logged on to the Internet, Napster's software would allow a requesting user to transfer a copy of the file from one computer to the other. *Id.*

³⁴ Riehl, *supra* note 6, at 1767; Ryan, *supra* note 5, at 500.

³⁵ Baker, *supra* note 24, at 15. The RIAA referred to Napster as "a haven for music piracy on an unprecedented scale." Bill Holland, *RIAA Sues MP3 Search Site*, BILLBOARD, Dec. 18, 1999, at 9, *quoted in* Baker, *supra* note 24, at 15. Many artists including Garth Brooks, Don Henley, Elton John, Metallica, Puff Daddy, and Dr. Dre have spoken out against the piracy of their respective works being committed through peer-to-peer sharing and have filed legal actions to stop it from occurring. Green, *supra* note 4, at 803.

Recording artists and recording companies receive most of their compensation from the sale of CDs to the public and from licensing fees for reproduction, distribution, digital performance, or other legitimate demands for their recordings.³⁶ Napster, as a free peer-to-peer sharing network of pirated sound recordings, had facilitated music piracy on an unparalleled level, which conversely deprived artists and record companies on an economic level.³⁷ Furthermore, many artists complained that they were losing not only royalty payments for the use of their music, but that they were also deprived of their artistic control.³⁸

Several lawsuits were filed against Napster, most notably *A&M Records, Inc. v. Napster, Inc.*,³⁹ which eventually led to the issuance of an injunction prohibiting Napster from maintaining its service using unlicensed sound recordings.⁴⁰ However, the damage had been done;

³⁶ Ryan, *supra* note 5, at 505. Global record sales have continued to plummet, having fallen 1.4% in 2000, another 5% in 2001, and an additional 9% in 2002 due in part to piracy. Warner & Marr, *supra* note 6. Experts project that record sales will slump another 6% in 2003. *Id.*

³⁷ Tom Spring, *Surfing with U.S. Customs: U.S. Customs Service Tries to Stop the Flood of E-Crime*, NETWORK WORLD FUSION, Oct. 19, 1999, available at 1999 WL 16424187. According to estimates from the United States Custom's Department Cybersmuggling Center, the music industry was "bilked" \$300 million in lost revenues in 1998-1999 due to digital downloads of MP3s. *Id.*; see also *supra* text accompanying note 34 (explaining that the number of sound recordings being exchanged over the Internet has already numbered in the billions).

³⁸ Green, *supra* note 4, at 803. Metallica drummer Lars Ulrich stated, "[t]he bottom line is it's our music and our [master recordings], and we control those. We have the right to make decisions about who we make them available to." *Id.* at 803 n. 30 (first alteration in original) (quoting *Weekend Edition Sunday: Napster: Software Company Being Sued by Several Artists and Record Companies for Copyright Infringement* (NPR radio broadcast, Apr. 23, 2000).

³⁹ 239 F.3d 1004 (9th Cir. 2001).

⁴⁰ *A&M Records, Inc.*, 239 F.3d at 1029 (holding that Napster had secondary liability for the direct copyright infringement of its Napster subscribers). The court stated:

[W]e reiterate that contributory liability may . . . be imposed . . . to the extent that Napster: (1) receive[d] reasonable knowledge of specific infringing files with copyrighted musical compositions and sound recordings; (2) [knew] or should [have known] that such files [were] available on the Napster system; and (3) fail[ed] to act to prevent viral distribution of the works. . . . Conversely, Napster may be vicariously liable when it fails to affirmatively use its ability to patrol its system and preclude access to potentially infringing files listed in its search index.

Id. at 1027. Napster made several defenses including fair use, etc., but this Note is concerned primarily with the international and extraterritoriality aspects of regulating and monitoring peer-to-peer sharing networks through international agreements. See *id.* The decision in *A&M Records, Inc.* is limited in its precedential effect and is used merely to illustrate the origin of and the recording industry's initial response to the new technological medium of peer-to-peer sharing. See generally Gokenbach, *supra* note 26

the proliferation of peer-to-peer sharing of online pirated sound recordings had become firmly rooted within the Internet landscape.⁴¹

In addition, the music industry has tried to respond to the online craze by introducing their own fee-based sites from which to download music, but they have not been as popular as Napster and its progeny.⁴² Some claim that the consumer reluctance, aside from desiring to pay no fees, can partially be attributed to these sites' restrictive formats, which are not in the popular MP3 format and do not allow users to copy, or "burn," the downloaded materials onto CDs or other media devices.⁴³ As a result, several peer-to-peer services offering thousands of infringing copies are still quite popular. Filling the void left by Napster, the next generation of peer-to-peer services exacerbated the myriad of legal issues surrounding Internet file sharing of sound recordings.

3. Peer-to-Peer Sharing after Napster

Peer-to-peer sharing networks can presently be separated into centralized and decentralized networks.⁴⁴ The legal implications of each are quite different, as demonstrated below.

(discussing Napster's affirmative defenses and the ultimate decision of the 9th Circuit). See also 17 U.S.C. § 107 (2000); *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417 (1984) (illustrating the criteria used in determining a fair use under United States copyright law).

⁴¹ Green, *supra* note 4, at 815-16; Ryan, *supra* note 5, at 519-20. Rap artist Chuck-D said that trying to stop peer-to-peer sharing over the Internet was like "trying to stop the rain." Adam Cohen et al., *A Crisis of Content*, TIME, Oct. 2, 2000, at 68. "I could find a new MP3 site once a minute for the rest of the day if I tried," stated a United States custom agent at the Cybersmuggling Center. Spring, *supra* note 37. "It's hard to get the genie back in the bottle," stated Verizon vice president Sarah Deutsch when discussing peer-to-peer sharing. Jefferson Graham, *Kazaa, Verizon Propose to Pay Artists Directly*, May 13, 2002, at <http://www.usatoday.com/tech/news/2002/05/14/music-kazaa.htm> (last visited Nov. 3, 2003).

⁴² See Graham, *supra* note 41.

⁴³ *Id.* "It would be like me opening a video store, charging 10 times what others were charging and only offering videos in the Beta format," said Jim Guerinot, a board member of Don Henley's and Sheryl Crow's Recording Artists Coalition and the manager of No Doubt, Beck, and The Offspring. *Id.* Also, it seems that people generally would rather conveniently download music for free than struggle with constricting licensing agreements for a fee. *Id.* "When I buy a piece of music . . . I should be able to take that content, copy it onto all my computers at home, my laptop, my portable MP3 player . . . basically anything I use to listen to the music that I have purchased," stated Beale Screamer, a hacker who cracked one of Microsoft's Digital Rights Management protections. Darin Stewart, *The Digital-Rights Debate*, ELECTRONIC MUSICIAN, July 1, 2002, available at 2002 WL 5775240.

⁴⁴ Tanaka, *supra* note 27, at 49.

a. Centralized Networks

Napster is a prime example of a centralized network in that it has utilized a central server that indexed the available content on all of the host computers and made it available to other Napster users.⁴⁵ As demonstrated by Napster's legal problems, this type of network is highly susceptible to attack for liability in assisting copyright infringement, assuming jurisdiction over the potential defendant can be established.⁴⁶ Services such as these are more likely to be found to have materially contributed to direct infringers by providing support and indexing that enables users to more readily download unlicensed materials.⁴⁷ The next generation of centralized services after Napster, however, is much more cunning than its predecessor. For example, many centralized services are located or have relocated overseas, outside of the United States' jurisdiction, to continue their services unhindered.⁴⁸ In addition, shortly after the fall of Napster, several other centralized Napster clones were released to fill its shoes, which only multiplied the amount of music piracy and potential costly legal battles for the music industry.⁴⁹

⁴⁵ *Id.*; see *supra* notes 29-33 and accompanying text.

⁴⁶ Elkin & Khlyavich, *supra* note 33, at 395-98. A thorough discussion of jurisdictional issues is beyond the scope of this Note. However, for an in-depth analysis of jurisdictional issues over copyright actions based on online activity, see generally Denis T. Rice, *Copyright Disputes Involving Online Activities*, 717 PLI/PAT 299 (2002).

⁴⁷ Tanaka, *supra* note 27, at 50.

⁴⁸ See Sebastian Mallaby, *Taming the Wild Web*, WASH. POST, Mar. 12, 2001, at A17. The developer of OpenNap, a peer-to-peer sharing service, announced that he would move to an unused anti-aircraft platform floating off the British coast, which had been declared an independent state thirty years before by an eccentric veteran, to continue providing his service to escape liability. *Id.* The "island" is a legally sovereign principality known as Sealand and has no laws governing data traffic with promises that none will ever be enacted. See *The Principality of Sealand*, at <http://www.sealandgov.com> (last visited Nov. 23, 2003); HavenCo, *The Free World Just Milliseconds Away*, at http://www.havenco.com/about_havenco/index.html (last updated July 24, 2001). The service iMesh, a Napster-like service that is based in Israel, is well beyond the reach of United States copyright litigation. Jesse Berst, *Napster Survival Kit: Eight File-Swapping Alternatives*, ZDNET, August 1, 2000, at <http://www.zdnet.com/anchordesk/stories/story/0,10738,2609933,00.html> (on file with the Valparaiso University Law Review). Grokster, based in Nevis, West Indies, is another peer-to-peer service that has relocated offshore to avoid any possible liability that might be imposed on United States' soil. Joseph A. Sifferd, *The Peer-to-Peer Revolution: A Post-Napster Analysis of the Rapidly Developing File-sharing Technology*, 4 VAND. J. ENT. L. & PRAC. 93, 107 (2002).

⁴⁹ Berst, *supra* note 48. Napster knockoffs such as Rapster, iMesh, and Macster, which basically use the same centralized approach pioneered by Napster, have been prolific since Napster's demise. *Id.* For a service purporting to provide a list of available Napster-like services, see Napigator, at <http://www.napigator.com> (last visited Nov. 25, 2003).

Some centralized services, like Madster, have raised the stakes even higher by not only providing centralized servers similar to Napster, but also by providing an encryption format for its users to use when exchanging files.⁵⁰ Madster claims that the encryption prevents it from having either the knowledge or ability to police the activities of its users.⁵¹ Even the centralized networks are evolving to avoid liability, but the decentralized networks may be even more formidable opponents for copyright holders of sound recordings.

b. Decentralized Networks

In the wake of the *Napster* decision, several other services began to surface that did not have a central index or even specific owners of the peer-to-peer software used to exchange the pirated sound recordings.⁵² These networks allow users to share files without using a central server by linking directly in to other users' computers, making it more difficult to pursue copyright violators in court since a network can exist without any person or entity overseeing what is being exchanged.⁵³ The lack of central "authority" controlling and monitoring what is being shared by its users makes a deep-pocketed defendant, like in the *Napster* case, much more elusive for plaintiffs to find and legally pursue, and more difficult for courts to shut down.⁵⁴ In addition, the new services do not simply trade song files anymore; they have expanded to include movies, books, videos, software, and other materials.⁵⁵

One such software currently used for file swapping is Gnutella, an open-source peer-to-peer protocol.⁵⁶ Gnutella is quite different from

⁵⁰ David L. Hayes, *Copyright Liability of Online Service Providers: Part II*, 19 COMPUTER & INTERNET LAW. 15, 15 (2002). The encrypted files on the Madster service, formerly called Aimster, cannot be decrypted by copyright holders under the current laws without potentially risking a violation of anti-circumvention and digital rights management laws, such as the DMCA. *Id.*

⁵¹ *Id.*

⁵² Warner, *supra* note 8.

⁵³ Tanaka, *supra* note 27, at 49.

⁵⁴ Riehl, *supra* note 6, at 1777.

⁵⁵ See, e.g., *id.* at 1776 (explaining how Gnutella, unlike Napster, can be used to search for and exchange any files over the Internet, including music, movies, and software).

⁵⁶ *Id.* Gnutella was written by Justin Frankel, an employee of Nullsoft, which is a subsidiary of AOL. *Id.* at 1774. Frankel released it on the AOL site without AOL's permission, and within a few hours, thousands had downloaded it before it was removed. *Id.* AOL disavowed the posting by their subsidiary's employee as "an unauthorized freelance project." Amy Harmon, *Free Music Software May Have Rattled AOL*, N.Y. TIMES, Mar. 20, 2000, at C4, available at <http://www.nytimes.com/library/tech/00/03/biztech/>

Napster in that it does not rely on any centralized server or service, but instead connects one user directly with another user and so on throughout the chain of Gnutella users, until the first user finds the file for which she is looking.⁵⁷ Therefore, Gnutella-like software creates a request chain that may involve any number of nodes that are connected to exchange files directly without having a centralized service that could be shut down.⁵⁸ Several adaptations of the original Gnutella software, such as the latest version of Morpheus, have become available since it was first released and have been disseminated over the Internet, thereby increasing the number of nodes in various request chains and the files they are willing to exchange.⁵⁹ The decentralized nature of Gnutella and its adaptations creates a network that may not be able to be shut down, even if the providers of the software are sued and/or become insolvent.⁶⁰

Another peer-to-peer software platform, FastTrack, is the underlying software used by such service providers as Grokster and KaZaA to share files with other users on each respective service.⁶¹ FastTrack provides for

articles/20tune.html (last visited Nov. 3, 2003). Gnutella, like the MP3 format, is an open-source protocol, which "describes a programming standard in which everyone that participates agrees to discuss and make any changes publicly. In other words, it is a programming standard over which no one company has proprietary control." *Bristol Tech., Inc. v. Microsoft Corp.*, 114 F. Supp. 2d 59, 68 n.15 (D. Conn. 2000), *vacated by* 250 F.3d 152 (2nd Cir. 2001).

⁵⁷ Ryan, *supra* note 5, at 518. To perform a search on a Gnutella-type network: users direct their search requests to the next best node of the network, which may or may not be their own computer. The node so contacted then checks whether it has the desired information. If so, it simply sends the information back to the node from which the request has originated. Otherwise, it forwards the request along with the IP address of the original node to another node on the network, which in turn proceeds in the exact same manner, that is, it checks whether it has the information and, depending on whether it does, either returns the information or forwards the package to another node.

Strasser, *supra* note 21, at 697.

⁵⁸ Aric Jacover, Note, *I Want My MP3! Creating a Legal and Practical Scheme to Combat Copyright Infringement on Peer-to-Peer Internet Applications*, 90 GEO. L.J. 2207, 2217 (2002).

⁵⁹ Amy Harmon, *For Many Online Music Fans, Court Ruling is Call to Arms*, N.Y. TIMES, July 28, 2000, at 1A, available at <http://www.nytimes.com/library/tech/00/07/biztech/articles/28napster.html>. Morpheus had originally been running on its own variation of the FastTrack software, but the current version is now based on the open-source Gnutella technology. John Borland, *File Swapping in the Legal Crosshairs*, CNET NEWS.COM, Dec. 2, 2002, at <http://news.com.com/2100-1023-975618.html>.

⁶⁰ See Jacover, *supra* note 58, at 2216-17. "A [decentralized] network cannot be defused by simply holding its creator liable. Some of these software programs are created and circulated by anonymous individuals." Sifferd, *supra* note 48, at 107.

⁶¹ Ryan, *supra* note 5, at 518-19.

faster searching than Gnutella-based services, as well as multiple-source downloads, which is a feature not available on Gnutella.⁶² The design of FastTrack, which utilizes the powerful computers of its users as “supernodes” linked to other supernodes and smaller nodes with no centralized control, makes the FastTrack networks such as KaZaA more elusive to pursue for aiding in copyright infringement than its centralized counterparts.⁶³ Like Gnutella, FastTrack presents similar difficulties in the ability to stop file sharing even if the companies currently marketing the software are put out of business.⁶⁴ Plus, other networks using software similar to, or more advanced than, Gnutella and FastTrack will likely replace the ones that have fallen to the recording industry’s wrath.⁶⁵ The elusiveness of these new generation peer-to-peer services has left copyright holders searching for more effective options.⁶⁶

4. Technological Security Measures to Thwart Internet Piracy

Several industries affected by Internet piracy, including the recording, software, and movie industries, have also been looking for more proactive measures of copyright protection in addition to seeking legal action against infringers.⁶⁷ These industries, frustrated by the amount of copyright piracy on the Internet, and with the slow pace of the legal process, have been working on technological safety measures to protect their copyrighted materials from the hands of the Internet pirates.⁶⁸ Two technologies being explored are “digital watermarking”

⁶² *Id.* “Users with powerful computers serve as distributors of searches, instead of each machine receiving, processing and forwarding searches onto other machines, which [can slow down Gnutella-like services considerably].” *Id.*

⁶³ *Id.* at 519. A “supernode” is a computer with a broadband Internet connection that KaZaA users can choose to become, and are encouraged to do so. Hayes, *supra* note 50, at 16. KaZaA, a service based on the FastTrack software, is presently the most popular file sharing network on the Internet, boasting 176 million downloads of its software so far. See KaZaA, at <http://www.kazaa.com/us/index.htm> (last visited Nov. 23, 2003).

⁶⁴ Peter Jan Honigsberg, *The Evolution and Revolution of Napster*, 36 U.S.F. L. REV. 473, 476 (2002).

⁶⁵ *Id.* Freenet is another software platform that has been gaining popularity for file sharing and is designed to be difficult or impossible to take offline. Riehl, *supra* note 6, at 1787. Also, Freenet utilizes encryption technology to encode the files it transmits over the Internet, making it harder for copyright holders to detect and for service providers to police. *Id.* at 1784-85.

⁶⁶ Riehl, *supra* note 6, at 1784-85.

⁶⁷ Baker, *supra* note 24, at 19.

⁶⁸ *Id.*

and “encryption” technology.⁶⁹ Digital watermarking comes from the field of science known as steganography, which deals with the encoding of digitized information, such as digital rights information, with attributes embedded within the file that are not perceptible in normal use.⁷⁰ In much the same way that paper watermarks are only discernible when held up to the light, digital watermarks are used as identifiers of digital material that can only be detected and recognized by the appropriate “recognition” software.⁷¹ The digital watermark acts as a stamp of authenticity that is permanently affixed to an audio or video file before distribution to allow for detection and tracking.⁷² Digital watermarks ideally will remain encoded within the song file even if (1) the user changes the format, such as copying the song from CD to his computer hard drive, (2) the song file is compressed, such as with MP3 technology, or (3) the song file is encrypted and decrypted.⁷³ To be effective, digital watermarks must remain recognizable even if the watermarked file is converted several times and should result in severe quality degradation of the work if an attempt to remove the watermark is made.⁷⁴ Although digital watermarks have not yet been made hacker-proof, progress has been made in the field and may eventually lead to an effective technological tool to detect and deter Internet piracy.⁷⁵

⁶⁹ Rosemarie F. Jones, *Wet Footprints? Digital Watermarks: A Trail to the Copyright Infringer on the Internet*, 26 PEPP. L. REV. 559, 568-72 (1999).

⁷⁰ *Id.* at 568. Digital watermarks can contain information including the author’s name and e-mail address and security codes, as well as unique reference numbers such as the International Standard Recording Code (“ISRC”). *Id.* at 570. The ISRC “provides a distinctive worldwide identifier for sound recordings—an essential tool for copyright owners to prevent unauthorized use of their works.” RIAA, *International Piracy*, at <http://www.riaa.org/Protect-Int.cfm> (on file with the Valparaiso University Law Review). The RIAA is the United States’ national administrator of the ISRC. *Id.* The process of digital watermarking entails the insertion of “data packets containing additional information about the file directly into the content signal.” Stewart, *supra* note 43.

⁷¹ Jones, *supra* note 69, at 568-72.

⁷² Sifferd, *supra* note 48, at 108.

⁷³ *Id.*; Stewart, *supra* note 43.

⁷⁴ Jones, *supra* note 69, at 569.

⁷⁵ See Riehl, *supra* note 6, at 1792-93. The Secure Digital Music Initiative (“SDMI”), a consortium of over 160 companies seeking effective technological deterrents to digital piracy, challenged hackers to break five proposed systems by offering a \$10,000 prize; two of the five had been compromised, but the results were nevertheless considered promising. *Id.*; RIAA, *Music & the Internet*, at <http://www.riaa.org/Music-SDMI-1.cfm> (on file with the Valparaiso University Law Review). Several companies are now offering their own digital watermarks, having obtained several patents on their design. Tom Krazit, *Digimarc Obtains Patents for Digital Watermarking*, INFOWORLD DAILY NEWS, May 8, 2002, available at 2002 WL 8303305. For example, a group of former Soviet KGB agents are now working for

Another technological measure being implemented is the use of encryption technology to protect copyrighted materials.⁷⁶ Cryptography, the science of encryption, scrambles the digital material by using a mathematical algorithm that can only be unscrambled by using the correct program or password.⁷⁷ The effect of scrambling the material renders the information in the file unintelligible until it has been properly unscrambled.⁷⁸ Encryption can also be employed to prevent the material from being freely duplicated and disseminated, and has been used by the recording and movie industries to restrict copying.⁷⁹ A problem with encryption is that individuals have been able to break many of the encryption codes placed on materials such as Digital Video Discs ("DVDs"), and then the method for cracking the code ("decrypting") is quickly disseminated over the Internet.⁸⁰ However, despite past problems with encryption efforts, the possibilities of its effectiveness and limited success in the past may still warrant exploration and research into its potential as a viable security feature.⁸¹

In the past, the recording and technology industries have not been able to agree on the appropriate technological security measures amicable to both of their respective interests, despite attempts to

a company called Mazur Media that plans to release another digital watermark onto the market that "is woven into the digital data so, even if music is downloaded from the [I]nternet and then 'burnt' on to a new CD, its origins can be traced." Richard Wray, *Former KGB Agents Go to War Against Music Pirates*, THE GUARDIAN, Jan. 6, 2003, available at 2003 WL 2691534.

⁷⁶ Riehl, *supra* note 6, at 1790.

⁷⁷ Baker, *supra* note 24, at 19.

⁷⁸ *Id.*

⁷⁹ Riehl, *supra* note 6, at 1790. One promising encryption technique requires a separate encrypted key for each small portion of a file (i.e., each second of music). *Id.* at 1791. Therefore, one could encrypt a music file that would require hackers to perform the arduous task of breaking nearly 210 encryption schemes (three-and-a-half minute's worth of music—the average length of a pop song) before the music could be utilized. *Id.*; see also U.S. Patent No. 6,081,597 (issued June 27, 2000).

⁸⁰ See, e.g., *Universal Studios, Inc. v. Reimerdes*, 111 F. Supp. 2d 294 (S.D.N.Y. 2000) (suing web-site owners to enjoin them from posting or downloading computer software that decrypted digitally encrypted movies on DVDs); *infra* Part III.A. The encryption code mentioned in the previous suit, called Content Scramble System ("CSS"), was decrypted by a Norwegian fifteen-year-old named Jon Johansen in 1999 so that he could watch DVDs on his Linux operating system. Christian John Pantages, *Avast Ye, Hollywood! Digital Motion Picture Piracy Comes of Age*, 15 TRANSNAT'L LAW. 155, 163-64 (2002).

⁸¹ David Balaban, *The Battle of the Music Industry: The Distribution of Audio and Video Works Via the Internet, Music and More*, 12 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 235, 260-61 (2001).

negotiate among the various industries involved.⁸² Legislation in the United States has been proposed representing the various interests, often favoring one industry over another.⁸³ Although the industries involved have been unable to agree on any uniform standard of protection, they are leery of government intervention, and have spoken out against legislative proposals to regulate or mandate any technological standards.⁸⁴ Despite conflicting interests among commercial and governmental groups on the appropriate technological security measures to implement, both digital watermarks and encryption technology may perhaps be among the answers to copyright holders' woes in the future.⁸⁵

Although copyright holders are exploring the possibilities of fighting technology with technology, they must first look to and understand the applicable laws that provide intellectual property protection for their sound recordings in the first place. This Note will now explain the United States perspective on copyright protection, as a reference point, and its application to and role in international intellectual property protection.

⁸² Declan McCullagh, *Antipiracy Détente Announced*, CNET NEWS.COM, Jan. 14, 2003, at <http://news.com.com/2102-1023-980633.html>.

⁸³ See Consumer Broadband and Digital Television Promotion Act, S. 2048, 107th Cong. (2002). A bill by Senator Fritz Hollings, the "Consumer Broadband and Digital Television Promotion Act," was introduced on March 21, 2002 that would require the entertainment and technology industries to agree on a technological standard that would stop the spread of unauthorized copying of digital video and audio files, or the government will choose a standard for them. *Id.*; see also Peer to Peer Privacy Prevention Act, H.R. 5211, 107th Cong. (2002) (allowing copyright holders to protect their works against peer-to-peer piracy by means of disabling, interfering with, or impairing the distribution of copyrighted materials used on those services). *But see* Digital Media Consumers' Rights Act, H.R. 5544, 107th Cong. (2002) (proposing to amend DMCA to allow circumvention of copy-protected works for personal non-infringing use of copyrighted material).

⁸⁴ McCullagh, *supra* note 82. Despite disagreements in the past, the trade associations representing the recording industry, computer industry, and software industry joined an alliance, stating that they would work together to head off legislative proposals that would impose anticopying standards. *Id.* "A government technology mandate won't solve the problem of online piracy," said Ken Kay, executive director of the computer trade group. *Id.* The movie industry, which has been more aggressive in supporting legislative action, has thus far not joined the newly formed alliance among these industries. *Id.*

⁸⁵ Balaban, *supra* note 81, at 260-61.

B. *National Copyright Protection of Sound Recordings: The United States Perspective*

International copyright law may initially be understood by discussing the nature of territorial and national treatment of copyright protection.⁸⁶ In the United States, for example, the philosophical premise behind copyrights is to encourage, stimulate, and promote the production of literary and artistic works by allowing an author the opportunity to reap the economic rewards of his own ingenuity and labor.⁸⁷ By securing the rights to the author's works, the welfare of the public will be served by receiving access to the works.⁸⁸ From the United States perspective, copyright law protects "original works of authorship, fixed in any tangible medium of expression . . . which . . . can be perceived . . . either directly or with the aid of a machine or device."⁸⁹ The copyright protection provided by United States law expressly extends protection to sound recordings, motion pictures, literary works, musical works, and any accompanying words, among other things.⁹⁰ Once a work is determined to be eligible for copyright protection, United States copyright law affords the copyright holder several exclusive rights in the copyrighted works.⁹¹ The exclusive rights include the rights to: (1) reproduce the copyrighted work, (2) prepare derivative works based on the work, (3) distribute copies of the copyrighted work to the public for sale, rental, lease or lending or other transfer of ownership, and (4) in

⁸⁶ See M.M. BOGUSLAVSKY, COPYRIGHT IN INTERNATIONAL RELATIONS: INTERNATIONAL PROTECTION OF LITERARY AND SCIENTIFIC WORKS 15-19 (David Catterns ed. & N. Poulet trans., 1979).

⁸⁷ MARSHALL A. LEAFFER, INTERNATIONAL TREATIES ON INTELLECTUAL PROPERTY 3 (1997). Samuel Johnson once said, "No man but a blockhead ever wrote except for money." PAUL GOLDSTEIN, INTERNATIONAL COPYRIGHT: PRINCIPLES, LAW, AND PRACTICE 7 (2001) [hereinafter GOLDSTEIN, PRINCIPLES].

⁸⁸ U.S. CONST. art. I, §8, cl. 8 (stating that Congress has the power to "promote the Progress of Science and the useful arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries"); GOLDSTEIN, PRINCIPLES, *supra* note 87, at 7. Under the copyright tradition, the rights in a work are also freely assignable, so that a copyright holder may or may not be the actual author of the work. GOLDSTEIN, PRINCIPLES, *supra* note 87, at 7.

⁸⁹ 17 U.S.C. § 102(a) (2000).

⁹⁰ *Id.* § 102(a)(1), (2), (6), (7). Other works afforded protection are dramatic works, including any accompanying music, choreographic works, pantomimes, graphics, pictorials, sculptural works, and architectural works. *Id.* § 102(a)(3)-(5), (8).

⁹¹ See generally *Id.* § 106 (2000). United States copyright law provides that copyright protection of the exclusive rights for works created after January 1, 1978, shall "subsist[] from its creation and . . . endure[] for a term consisting of the life of the author and 70 years surviving the author's death." *Id.* § 302(a) (2000). In other words, a copyright for a work will remain valid for the author's life, plus seventy years following her death. *Id.*

the case of many copyrighted works, to perform and display the copyrighted work publicly.⁹² Copyright holders of sound recordings are afforded the additional right to perform the work publicly “by means of a digital audio transmission.”⁹³ Copyrights in sound recordings, however, do not include any of the general exclusive rights of public performance or display as generally afforded to “literary, musical, dramatic, [and] choreographic works, pantomimes, and motion pictures and other audiovisual works.”⁹⁴

Although United States copyright laws afford a fairly high degree of protection to copyright holders, this protection does not extend outside United States territorial boundaries.⁹⁵ For example, the Supreme Court in *United Dictionary Co. v. G.&C. Merriam Co.*⁹⁶ held that, under the 1905 Copyright Act requiring copyright notice on works, the omission of copyright notice on works overseas did not constitute infringement.⁹⁷ Justice Holmes stated that “it [was] unlikely that [Congress] would make requirements of personal action beyond the sphere of its control. Especially is it unlikely that [Congress] would require a warning to the public against the infraction of a law beyond the jurisdiction where that

⁹² *Id.* § 106(1)-(5). “Derivative works” are defined as “work[s] based upon one or more preexisting works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgement, condensation, or any other form in which a work may be recast, transformed, or adapted.” *Id.* § 101.

⁹³ *Id.* § 106(6). A digital transmission is defined as “a transmission in whole or in part in a digital or other non-analog format.” *Id.* § 101.

⁹⁴ *Id.* §§ 106, 114(a). Section 114 provides in part:

(a) The exclusive rights of the owner of copyright in a sound recording are limited to the rights specified by clauses (1), (2), (3), and (6) of section 106, and do not include any right of performance under section 106(4). The exclusive right of the owner of copyright in a sound recording under clause (1) of section 106 is limited to the right to duplicate the sound recording in the form of phonorecords or copies that directly or indirectly recapture the actual sounds fixed in the recording. The exclusive right of the owner of copyright in a sound recording under clause (2) of section 106 is limited to the right to prepare a derivative work in which the actual sounds fixed in the sound recording are rearranged, remixed, or otherwise altered in sequence or quality . . . This section does not limit or impair the exclusive right to perform publicly, by means of a phonorecord, any of the works specified by section 106(4).

Id. § 114(a)-(c).

⁹⁵ Curtis A. Bradley, *Territorial Intellectual Property Rights in an Age of Globalism*, 37 VA. J. INT'L L. 505, 523-24 (1997).

⁹⁶ 208 U.S. 260 (1908).

⁹⁷ *Id.* at 264-66.

law was in force.”⁹⁸ Many other cases have reaffirmed the notion that Congress intended the copyright laws to be territorial in nature.⁹⁹ Simply stated, “there can be no violation of U.S. copyright law without an act of infringement within the United States.”¹⁰⁰

Since United States copyright law does not extend beyond its territory, copyright holders in the United States must consider what protections are provided for their works in foreign countries before disseminating their works within and among those foreign countries. United States copyright holders must consider four basic questions before deciding to publish their works in other countries.¹⁰¹ First, the copyright owner must determine whether he or she will be considered the owner of rights in the work under the foreign country’s laws.¹⁰² Second, the copyright owner must determine how the subject matter of the work will be classified under the protecting country’s laws and whether the country extends protection to works of that nature for works originating outside its borders.¹⁰³ For example, many countries do not consider sound recordings to be proper subject matter for copyright, but may provide protection to them under other related rights.¹⁰⁴ Third, the

⁹⁸ *Id.* at 264.

⁹⁹ See, e.g., *EEOC v. Arabian Am. Oil Co.*, 499 U.S. 244, 248 (1991); *Benz v. Compania Naviera Hidalgo, S.A.*, 353 U.S. 138, 147 (1957); *Foley Bros., Inc. v. Filardo*, 336 U.S. 281, 285 (1949); *Subafilms, Ltd. v. MGM-Pathe Communications Co.*, 24 F.3d 1088 (9th Cir. 1994); *Capitol Records, Inc. v. Mercury Records Corp.*, 221 F.2d 657, 662 (2d Cir. 1955); *Am. Code Co. v. Bensinger*, 282 F. 829, 833 (2d Cir. 1922) (citing *Ferris v. Frohman*, 223 U.S. 424 (1912)) (stating that “[t]he copyright laws of one country have no extraterritorial operation, unless otherwise provided”). “It is a longstanding principle of American law ‘that legislation of Congress, unless a contrary intent appears, is meant to apply only within the territorial jurisdiction of the United States.’” *Arabian Am. Oil Co.*, 499 U.S. at 248 (quoting *Foley Bros., Inc.*, 336 U.S. at 285). Courts must “assume that Congress legislates against the backdrop of the presumption against extraterritoriality, [unless] there is ‘the affirmative intention of the Congress clearly expressed.’” *Id.* (quoting *Benz*, 353 U.S. at 147).

¹⁰⁰ *Bradley*, *supra* note 95, at 526.

¹⁰¹ GOLDSTEIN, *PRINCIPLES*, *supra* note 87, § 4.1.

¹⁰² *Id.* In the United States, the copyright in a work vests initially in the author or authors of the work, but may be transferred in whole or in part by any means of conveyance or by operation of law. 17 U.S.C. §§ 201(a), (d)(1).

¹⁰³ GOLDSTEIN, *PRINCIPLES*, *supra* note 87, § 4.1. For example, a copyright holder may have to consider whether he has a copyright in a musical work or the sound recording in which it is fixed in order to know what protections it may be afforded. *Id.*

¹⁰⁴ See *infra* notes 138-39 and accompanying text. Some countries, particularly those following the civil law tradition, often provide protection for the producers of sound recordings under neighboring rights. Bonnie Teller, *Toward Better Protection of Performance in the United States: A Comparative Look at Performer’s Rights in the United States, Under the Rome Convention*, in *INTERNATIONAL INTELLECTUAL PROPERTY ANTHOLOGY* 85 (Anthony D’Amato & Doris Estelle Long eds., 1996). Neighboring rights, also referred to as “[r]ights

copyright owner must determine the scope of his or her rights under the foreign law.¹⁰⁵ Finally, the copyright owner must determine the duration of protection before the copyright protection expires within the foreign country.¹⁰⁶ The following Part explains how countries around the world have attempted to provide similar copyright protection on an international level.

C. *International Intellectual Property Law*

1. Early Agreements Between Nations

Since laws protecting literary and artistic works are traditionally territorial in nature, copyright holders do not have protection against unlicensed copying outside their national borders unless there is an international agreement to the contrary.¹⁰⁷ Territoriality implies that the law of the country in which the infringement occurred will be the applicable governing law.¹⁰⁸ This principle has been the dominating

neighboring to copyright," are rights that are not considered genuine copyrights, and are generally subordinate to copyrights. *Id.* at 86. "They provide a strengthened protection against certain acts of unfair competition which can very loosely be associated with copyright infringements." *Id.*

¹⁰⁵ GOLDSTEIN, PRINCIPLES, *supra* note 87, § 4.1.

¹⁰⁶ *Id.*

These four questions intersect in more or less obvious ways. A negative answer to the first question will obviate inquiry into the remaining three; a negative answer to the second question will obviate inquiry into the last two; and a negative answer to the third question will obviate inquiry into the fourth. Also, the fact that the U.S. work falls into one class rather than another in the protecting country will in some cases control whether . . . the work [is entitled] to protection.

Id.

¹⁰⁷ G. GREGORY LETTERMAN, BASICS OF INTERNATIONAL INTELLECTUAL PROPERTY LAW 12 (2001). The fundamental fact to remember in understanding international intellectual property is that intellectual property rights granted under one nation's laws "vanish abruptly and completely at the national border." *Id.* "Two traditions have historically dominated protection of literary and artistic works around the world:" (1) copyright; and (2) author's right. PAUL GOLDSTEIN, INTERNATIONAL INTELLECTUAL PROPERTY LAW 142 (2001) [hereinafter GOLDSTEIN, INTELLECTUAL PROPERTY]. The copyright tradition is based on a privilege system that allows monopoly rights to publishers, a tradition adopted first in England that spread to the United States and most English-speaking countries. Liz Robinson, Note, *Music on the Internet: An International Copyright Dilemma*, 23 U. HAW. L. REV. 183, 187 (2000). The Author's Right tradition, or "droit d'auteur" in French, granting the author the essential rights of publication and performance, originated in France and spread to continental Europe, Latin America, and the French colonies. *Id.*

¹⁰⁸ BOGUSLAVSKY, *supra* note 86, at 18. A copyright holder can seek to have corresponding rights from one country to another, but these rights are independent of one another and

principle in international law for quite some time.¹⁰⁹ The difficulty arises when a copyright holder of one nation would like to utilize his intellectual property outside his own national borders, but the nation or nations with which the copyright holder would like to transact business does not provide copyright protection to foreign works, or at least to a lesser degree than the copyright holder's own country. The result is that either the foreign nation does not receive access to the work, or the work is brought to the nation and is open to piracy in a land that does not allow a cause of action.¹¹⁰ In fact, early copyright statutes either afforded no protection to works of foreign nationals or required certain formalities before protection would be extended, such as publication within the country.¹¹¹

Due to the obvious drawbacks of not having foreign copyright protection, many countries in the nineteenth century, particularly in Europe, first attempted to cure this effect by entering into bilateral copyright agreements.¹¹² These agreements, or treaties, were premised on the theory of either material reciprocity or national treatment.¹¹³ Near the end of the nineteenth century, however, it became clear that reciprocity agreements had very negative impacts.¹¹⁴ For example, they

may be granted in some countries and not in others. *Id.*; see also GOLDSTEIN, PRINCIPLES, *supra* note 87, at 61.

¹⁰⁹ BOGUSLAVSKY, *supra* note 86, at 17; GOLDSTEIN, PRINCIPLES, *supra* note 87, at 65. "The territorial principle of international personal rights is well established in international private copyright," and dates back to feudalism around the fifteenth century. BOGUSLAVSKY, *supra* note 86, at 17.

¹¹⁰ LETTERMAN, *supra* note 107, at 13. "It is commonplace for the holder of an IP right in one country to complain bitterly about the 'theft' of his or her property in some foreign country where no legal or popular recognition is given to even the existence of such manner of 'property.'" *Id.*

¹¹¹ GOLDSTEIN, INTELLECTUAL PROPERTY, *supra* note 107, at 143; see also BOGUSLAVSKY, *supra* note 86, at 19. "Because of the territorial character of copyright, there are no standards in international law which compel a country to enforce copyright standards in respect of work created beyond the boundaries of the said country." *Id.*

¹¹² Daniel J. Gervais, *The Internationalization of Intellectual Property: New Challenges from the Very Old and the Very New*, 12 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 929, 935 (2002).

¹¹³ GOLDSTEIN, INTELLECTUAL PROPERTY, *supra* note 107, at 143. Material reciprocity means that "Country A would protect works coming from Country B only if Country B gave comparable protection to works coming from Country A." *Id.* National treatment means that a national of a member country must be given treatment no less favorable than that accorded to a party's own nationals, i.e., "Country A would protect works originating in Country B on the condition that Country B would protect works originating in Country A on the same terms it applied to works originating in Country B." *Id.*

¹¹⁴ GRAEME B. DINWOODIE ET AL., INTERNATIONAL INTELLECTUAL PROPERTY LAW AND POLICY 79 (2001).

required a foreign nation to apply unfamiliar copyright laws of other nations that could be quite different than its own, and the agreements allowed for discrimination against foreign copyright holders in comparison to national copyright holders.¹¹⁵ National treatment, in contrast, eliminated the discriminatory effect of reciprocity agreements by requiring both countries of a bilateral agreement to provide the same protections to foreign copyright holders that it provided to its own copyright holders.¹¹⁶ Therefore, national treatment was greatly preferred over reciprocity and has been the preferred approach in most international treaties since the late nineteenth century.¹¹⁷ In addition, many national treatment treaties required a minimum standard of protection that had to be afforded foreign works to be compliant with the bilateral agreement, thus ensuring that the laws governing the works of a nation's copyright holders would provide adequate protection and predictability.¹¹⁸

Bilateral agreements, though a forward step in international copyright protection, had their limitations.¹¹⁹ For example, bilateral agreements varied dramatically in their terms, which required publishers to clumsily analyze whether protection of their works in Country A would receive the same or similar protection in Countries B and C.¹²⁰ Furthermore, if a nation with whom one's own country had a bilateral agreement proceeded to make a bilateral agreement with another nation that included a most-favored-nation clause, the levels of

¹¹⁵ *Id.*

¹¹⁶ LEAFFER, *supra* note 87, at 6. For an example of a bilateral agreement requiring minimum standards of protection, see Agreement on Intellectual Property Between the Government of the United States of America and the Government of the Republic of Hungary, Sept. 24, 1993, U.S.-Hung., T.I.A.S. No. 12138, available at 1994 WL 903468. The treaty provides that "[e]ach party shall . . . protect sound recordings for a term of at least 50 years from first fixation." *Id.* art. II(11)(a).

¹¹⁷ See, e.g., TRIPs Agreement, *supra* note 13, art. 3; DINWOODIE, *supra* note 114, at 79.

To accept the principle of national treatment is implicitly to accept the proposition that states may differ in their substantive laws, but that international cooperation between states on important matters is itself valuable consideration, over and above any special benefits that may accrue in exchange for reciprocal benefits from that state.

DINWOODIE, *supra* note 114, at 79.

¹¹⁸ LEAFFER, *supra* note 87, at 7-8.

¹¹⁹ BÉNÉDICTE CALLAN, PIRATES ON THE HIGH SEAS: THE UNITED STATES AND GLOBAL INTELLECTUAL PROPERTY RIGHTS 16 (1998). "Bilateral [agreements] have been successful in raising IP standards abroad, but they are, in the long run, inefficient. They target one country at a time, work best only in the countries that are most dependent on access to [the other country's market], and result in a patchwork of agreements." *Id.*

¹²⁰ GOLDSTEIN, PRINCIPLES, *supra* note 87, at 18.

copyright protection could shift unexpectedly.¹²¹ In response to these shortcomings, many countries in the late nineteenth century began to enter into multilateral agreements with a number of other countries.¹²² These multilateral agreements created a union of member countries that came to an agreement on common principles on protection of literary and artistic works.¹²³ Although multilateral agreements did not replace national legislation, they imposed certain obligations on one another in the treatment of each other's intellectual property.¹²⁴ A few of the major multilateral agreements and their significance are discussed in the following sections.

2. WIPO and its Administered Treaties

The World Intellectual Property Organization ("WIPO"), one of sixteen specialized agencies of the United Nations ("U.N.") system of organizations, is the "foremost multilateral organization" on intellectual property.¹²⁵ It was created by treaty in "The Convention Establishing the World Intellectual Property Organization of July 14, 1967" ("WIPO Convention"), which was enacted in 1970.¹²⁶ WIPO is considered the central authority for handling and coordinating intellectual property issues in an efficient and cost-effective manner.¹²⁷ WIPO presently administers several international intellectual property treaties,¹²⁸ namely

¹²¹ *Id.* Most-favored-nation ("MFN") status requires that if a country extended certain protections to another country through agreement, that country also had to extend those same protections to other countries with whom the latter country has international, often multilateral, agreements. DINWOODIE, *supra* note 114, at 79. In other words, any advantage a party gives to the nationals of another country must be extended equally to the nationals of all other parties, even if doing so is more favorable than that which it gives to its own nationals. *Id.*

¹²² BOGUSLAVSKY, *supra* note 86, at 21-22; DINWOODIE, *supra* note 114, at 79. "The signing of multi-lateral agreements lessened the importance of bilateral agreements, but . . . did not push them aside." BOGUSLAVSKY, *supra* note 86, at 22 (quotations omitted).

¹²³ Gervais, *supra* note 112, at 935; *see infra* Part II.2-3.

¹²⁴ DINWOODIE, *supra* note 114, at 41.

¹²⁵ LETTERMAN, *supra* note 107, at 26. WIPO was created to promote intellectual property protection throughout the world and to administer the intellectual property unions, such as the Berne Convention. Monique L. Cordray, *GATT v. WIPO*, in INTERNATIONAL INTELLECTUAL PROPERTY ANTHOLOGY 192 (Anthony D'Amato & Doris Estelle Long eds., 1996).

¹²⁶ Convention Establishing the World Intellectual Property Organization, *opened for signature* July 14, 1967, 21 U.S.T. 1749, 828 U.N.T.S. 3 (as amended at Stockholm Sept. 28, 1979); LETTERMAN, *supra* note 107, at 26.

¹²⁷ LETTERMAN, *supra* note 107, at 29.

¹²⁸ The WIPO treaties can be broken into three basic groups: (1) treaties defining internationally agreed basic standards of protection for its member's intellectual property;

the Berne Convention, Rome Convention, Phonograms Convention, WIPO Copyright Treaty, and WIPO Performances and Phonograms Treaty.¹²⁹ All of these are discussed below.

a. The Berne Convention

In 1886, the Convention for the Protection of Literary and Artistic Works,¹³⁰ commonly called the Berne Convention, established the formation of an international union ("Berne Union") that was intended to develop far-reaching and more uniform protection for the rights of authors.¹³¹ The Berne Convention's primary objectives were to require member countries to adopt national treatment for foreign works and protect the rights of translation and public performance.¹³² The Berne Union was created to exist separately from any particular acts of the treaty so that the treaty could be revised with changing conditions in intellectual property without requiring all Union members to adhere to the new acts in order to remain a member.¹³³ In addition, any country

(2) registration treaties that ensure single filing in one member country will have effect in all other relevant member countries; and (3) classification treaties that create systems of organization to allow for easy retrieval of intellectual property information. *Id.*

¹²⁹ CYBERSPACE, *supra* note 21, at 234-38; *see infra* Part II.C.2.a-d (discussing the respective treaties and their applications).

¹³⁰ Berne Convention for the Protection of Literary and Artistic Works, Sept. 9, 1886, as last revised at Paris, July 24, 1971 (amended 1979), 25 U.S.T. 1341, 828 U.N.T.S. 221 [hereinafter Berne Convention].

¹³¹ GOLDSTEIN, INTELLECTUAL PROPERTY, *supra* note 107, at 143. The initial member countries to sign the Berne Convention were Belgium, France, Germany, Haiti, Italy, Liberia, Spain, Switzerland, Tunisia, and the United Kingdom. *Id.*

¹³² GOLDSTEIN, INTELLECTUAL PROPERTY, *supra* note 107, at 143. The Berne Convention provides that "[a]uthors shall enjoy . . . in countries of the [Berne] Union other than the country of origin, the rights which their respective laws do now or may hereafter grant to their nationals, as well as the rights specially granted by this Convention." Berne Convention, *supra* note 130, art. 5(1). Article 8 of the Berne Convention states that "[a]uthors of literary and artistic works protected by this Convention shall enjoy the exclusive right of making and of authorizing the translation of their works throughout the term of protection of their rights in the original works." *Id.* art. 8; *see id.* art. 11 (granting authors of musical works the exclusive right to authorize public performance of their works).

¹³³ *See, e.g.*, Berne Convention, *supra* note 130, art. 26 (stating that any amendment that increases the financial obligations of Union members shall only bind the countries that have accepted the amendments); *see* GOLDSTEIN, PRINCIPLES, *supra* note 87, at 20-21. The Berne Convention has been revised several times: 1896 (Paris), 1908 (Berlin), 1914 (Berne), 1928 (Rome), 1948 (Brussels), 1967 (Stockholm), and 1971 (Paris). CYBERSPACE, *supra* note 21, at 240.

could become a member of the Berne Union, but only by adopting the most recent act of the convention.¹³⁴

In an attempt to accommodate both the author's right of protection from the civil law tradition and copyright protection of the common law tradition, the Berne Convention protects the expression of "literary and artistic works," which it defines as "every production in the literary, scientific and artistic domain, whatever may be the mode or form of its expression."¹³⁵ As a general rule, the Berne Convention leaves the determination of who qualifies as an author of copyright in literary and artistic works to the national laws of its members.¹³⁶ Several countries, including the United States, do not consider the Berne Convention to be self-executing, meaning that the provisions of the Berne Convention only take effect within a member country after that country has enacted it through its own national legislation.¹³⁷ The United States Copyright Act includes sound recordings under its copyright protections as part of its national law.¹³⁸ However, since many countries subscribing to the author's right traditionally did not recognize sound recordings as "literary or artistic works," the Berne Convention did not include sound

¹³⁴ Berne Convention, *supra* note 130, art. 32; GOLDSTEIN, PRINCIPLES, *supra* note 87, at 21.

¹³⁵ Berne Convention, *supra* note 130, art. 2(1).

¹³⁶ "The Convention does not define 'author' but establishes a presumption that it is he who is entitled to bring action to assert the copyright in the work The courts are left to give precise meaning to this general expression." WIPO, GUIDE TO THE BERNE CONVENTION FOR THE PROTECTION OF LITERARY AND ARTISTIC WORKS (PARIS ACT, 1971) 93 (1978); GOLDSTEIN, PRINCIPLES, *supra* note 87, at 25, 205. United States copyright law, while not defining the term "author," states that the "[c]opyright owner," with respect to any one of the exclusive rights comprised in a copyright, refers to the owner of that particular right." 17 U.S.C. § 101; *see id.* § 106.

¹³⁷ *See, e.g.*, 17 U.S.C. § 104(c). The United States Copyright Act explains that:
No right or interest in a work eligible for protection under this title may be claimed by virtue of, or in reliance upon, the provisions of the Berne Convention, or the adherence of the United States thereto. Any rights in a work eligible for protection under this title that derive from this title, other Federal or State statutes, or the common law, shall not be expanded or reduced by virtue of, or in reliance upon, the provisions of the Berne Convention, or the adherence of the United States thereto.

Id.

¹³⁸ *Id.* § 102(7). United States copyright law first extended protection to sound recordings in 1971. Act of Oct. 15, 1971, Pub. L. No. 92-140, § 1(b), 85 Stat. 391 (codified at 17 U.S.C. § 5(n), repealed in 1976); *see also* Robinson, *supra* note 107, at 199. A sound recording is defined as "[a work] that result[s] from the fixation of a series of musical, spoken, or other sounds, . . . regardless of the nature of the material objects, such as disks, tapes, or other phonorecords, in which [it is] embodied." 17 U.S.C. § 101. A phonorecord is only the material object in which a sound recording is fixed. *Id.*

recordings within its explicit copyright protections.¹³⁹ The United States became a member of the Berne Convention in 1989, adhering to the Paris Act of 1971, the most recent act at the time.¹⁴⁰ As of July 15, 2002, 151 countries adhere to one or more of the Berne Convention revisions, with the majority adhering to the Paris Act of 1971.¹⁴¹

The Berne Convention provides for various remedies that member nations have against other member nations that do not comply with the agreement, including the ability to bring a suit in the International Court of Justice for dispute resolution.¹⁴² A copyright holder, believing that his

¹³⁹ GOLDSTEIN, *PRINCIPLES*, *supra* note 87, at 24. A widespread belief in many civil law countries is that "only flesh-and-blood creators qualify as authors." *Id.* The Berne Convention does afford protection to the underlying musical compositions themselves, however, with or without words. Berne Convention, *supra* note 130, art. 2(1).

¹⁴⁰ CYBERSPACE, *supra* note 21, at 239.

¹⁴¹ WIPO, *Members of the Berne Convention*, at <http://www.wipo.int/treaties/documents/english/word/e-berne.doc> (last updated Oct. 15, 2003). The following countries are members of the Berne Union: Albania, Algeria, Antigua and Barbuda, Argentina, Armenia, Australia, Austria, Azerbaijan, Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Belize, Benin, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Bulgaria, Burkina Faso, Cameroon, Canada, Cape Verde, Central African Republic, Chad, Chile, China, Colombia, Congo, Costa Rica, Côte d'Ivoire, Croatia, Cuba, Cyprus, Czech Republic, Democratic People's Republic of Korea, Democratic Republic of the Congo, Denmark, Djibouti, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Equatorial Guinea, Estonia, Fiji, Finland, France, Gabon, Gambia, Georgia, Germany, Ghana, Greece, Grenada, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Holy See, Honduras, Hungary, Iceland, India, Indonesia, Ireland, Israel, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kyrgyzstan, Latvia, Lebanon, Lesotho, Liberia, Libyan Arab Jamahiriya, Liechtenstein, Lithuania, Luxembourg, Madagascar, Malawi, Malaysia, Mali, Malta, Mauritania, Mauritius, Mexico, Micronesia, Monaco, Mongolia, Morocco, Namibia, Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Oman, Pakistan, Panama, Paraguay, Peru, Philippines, Poland, Portugal, Qatar, Republic of Korea, Republic of Moldova, Romania, Russian Federation, Rwanda, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Senegal, Serbia and Montenegro, Singapore, Slovakia, Slovenia, South Africa, Spain, Sri Lanka, Sudan, Suriname, Swaziland, Sweden, Switzerland, Tajikistan, Thailand, The former Yugoslav Republic of Macedonia, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Ukraine, United Kingdom, United Republic of Tanzania, United States of America, Uruguay, Venezuela, Zambia, and Zimbabwe. *Id.*

¹⁴² Berne Convention, *supra* note 130, art. 6; *see also* Howard P. Goldberg, *A Proposal for an International Licensing Body to Combat File Sharing and Digital Copyright Infringement*, 8 B.U. J. SCI. & TECH. L. 272, 289 (2002). The Berne Convention provides:

(1) Any dispute between two or more countries of the Union concerning the interpretation or application of this Convention, not settled by negotiation, may, by any one of the countries concerned, be brought before the International Court of Justice by application in conformity with the Statute of the Court, unless the countries concerned agree on some other method of settlement. . . .

works are being infringed in another member country, must state a grievance with his own country's government officials in the hope that they will attempt to confront the infringing country's government on his behalf.¹⁴³ However, member countries may choose to opt out of the dispute settlement provision upon accession and simply promise to adhere to the terms of the Convention.¹⁴⁴ The Berne Convention was monumental in establishing a forum for multilateral protection for literary and artistic works; however, it did not address the concerns of sound recording producers.¹⁴⁵

b. The Rome Convention

Since the Berne Convention did not include sound recordings in its protection, except for the underlying musical work, many countries wanted to reach an agreement on the rights that a producer of sound recordings should be afforded.¹⁴⁶ These "rights neighboring to copyright," or "neighboring rights" for short, are in addition to and separate from copyright and author's rights in the civil law tradition.¹⁴⁷ In 1961, the initial contracting parties signed the International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations, which came to be called the "Rome

(2) Each country may, at the time it signs this Act or deposits its instrument of ratification or accession, declare that it does not consider itself bound by the provisions of paragraph (1). With regard to any dispute between such country and any other country of the Union, the provisions of paragraph (1) shall not apply.

(3) Any country having made a declaration in accordance with the provisions of paragraph (2) may, at any time, withdraw its declaration by notification addressed to the Director General.

Berne Convention, *supra* note 130, art. 33(1-3). For more on the International Court of Justice, see Robert M. Blunt, *Bootlegs and Imports: Seeking Effective International Enforcement of Copyright Protection for Unauthorized Musical Recordings*, 22 HOUS. J. INT'L L. 169, 182 (1999).

¹⁴³ See generally Robinson, *supra* note 107, at 191-92. Despite Article 33 of the Berne Convention providing that disputes could be brought before the International Court of Justice, not one such dispute has been brought in over forty five years. Doris Estelle Long, *Copyright and the Uruguay Round Agreements: A New Era of Protection or an Illusory Promise?*, in INTERNATIONAL INTELLECTUAL PROPERTY ANTHOLOGY 209-10 (Anthony D'Amato & Doris Estelle Long eds., 1996).

¹⁴⁴ Berne Convention, *supra* note 130, art. 33(2).

¹⁴⁵ See *infra* Part II.C.2.b.

¹⁴⁶ See, e.g., Rome International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organisations, Oct. 26, 1961, pmb., 496 U.N.T.S. 43 [hereinafter Rome Convention].

¹⁴⁷ Teller, *supra* note 104, at 85; see *supra* note 43 and accompanying text.

Convention.”¹⁴⁸ The Rome Convention was significant because it provided protection to producers of phonograms by granting them “the right to authorize or prohibit the direct or indirect reproduction of their phonograms.”¹⁴⁹

In addition to recognizing a right for producers of sound recordings, the Rome Convention also requires that sound recordings receive national treatment, equitable remuneration if a work is used without permission, and a minimum term of twenty years from the date of fixation before going into the public domain.¹⁵⁰ Like the Berne Convention, the Rome Convention allows member countries to extend the minimum terms of protection nationally, provided that they afford the same protection to foreign works under a national treatment theory.¹⁵¹ The Rome Convention provides dispute resolution in the same manner as the Berne Convention, through the International Court of Justice established by the U.N., unless the disputing countries agree to another mode of settlement.¹⁵² Unlike the Berne Convention, however,

¹⁴⁸ Teller, *supra* note 104, at 85.

¹⁴⁹ Rome Convention, *supra* note 146, art. 10. The Rome Convention defines “producer of phonograms” as “the person who, or the legal entity which, first fixes the sounds of a performance or of other sounds.” *Id.* art. 3(c).

¹⁵⁰ *Id.* arts. 2(l)(b), 10, 12, 14. Article 2(l)(b) provides that “national treatment shall mean the treatment accorded by the domestic law of the Contracting State in which protection is claimed . . . to producers of phonograms who are its nationals, as regards phonograms first fixed or first published on its territory.” *Id.* art. 2(l)(b). Article 10 states that “[p]roducers of phonograms shall enjoy the right to authorize or prohibit the direct or indirect reproduction of their phonograms.” *Id.* art. 10. Article 12 states:

If a phonogram published for commercial purposes, or a reproduction of such phonogram, is used directly for broadcasting or for any communication to the public, a single equitable remuneration shall be paid by the user to the performers, or to the producers of the phonograms, or to both. Domestic law may, in the absence of agreement between these parties, lay down the conditions as to the sharing of this remuneration.

Id. art. 12. Article 14 states:

The term of protection to be granted under this Convention shall last at least until the end of a period twenty years computed from the end of the year in which: (a) the fixation was made-for phonograms and for performance incorporated therein; (b) the performance took place-for performances not incorporated in phonograms; [and] (c) the broadcast took place-for broadcasts.

Id. art. 14.

¹⁵¹ *Id.* arts. 2, 14.

¹⁵² *Id.* art. 30. The agreement provides the following:

Any dispute which may arise between two or more Contracting States concerning the interpretation or application of this Convention and

the Rome Convention does not contain an “opt out” provision allowing member countries to avoid dispute settlement.¹⁵³ Although it was not as widely adopted as the Berne Convention, the Rome Convention provides protection to sound recordings in seventy-six countries as of October 15, 2003.¹⁵⁴

c. Phonograms Convention

In response to the developments in technology since the creation of the Berne and Rome Conventions, particularly the emergence of the compact tape cassette, WIPO promulgated the Geneva Convention for the Protection of Producers of Phonograms Against Unauthorized Duplication of Their Phonogram in 1971 to deter piracy of sound recordings.¹⁵⁵ Later known as the Phonograms Convention, the treaty

which is not settled by negotiation shall, at the request of any one of the parties to the dispute, be referred to the International Court of Justice for decision, unless they agree to another mode of settlement.

Id.

¹⁵³ *Id.* arts. 30-31; see Berne Convention, *supra* note 130, art. 33.

¹⁵⁴ WIPO, *Treaties and Contracting Parties*, at <http://www.wipo.int/treaties/documents/english/word/k-rome.doc> (last updated Oct. 15, 2003). The following countries are members of the Rome Convention: Albania, Argentina, Armenia, Australia, Austria, Barbados, Belarus, Belgium, Bolivia, Brazil, Bulgaria, Burkina Faso, Canada, Cape Verde, Chile, Colombia, Congo, Costa Rica, Croatia, Czech Republic, Denmark, Dominica, Dominican Republic, Ecuador, El Salvador, Estonia, Fiji, Finland, France, Germany, Greece, Guatemala, Honduras, Hungary, Iceland, Ireland, Israel, Italy, Jamaica, Japan, Kyrgyzstan, Latvia, Lebanon, Lesotho, Liechtenstein, Lithuania, Luxembourg, Mexico, Monaco, Netherlands, Nicaragua, Niger, Nigeria, Norway, Panama, Paraguay, Peru, Philippines, Poland, Portugal, Republic of Moldova, Romania, Russian Federation, Saint Lucia, Serbia and Montenegro, Slovakia, Slovenia, Spain, Sweden, Switzerland, The former Yugoslav Republic of Macedonia, Togo, Ukraine, United Kingdom, Uruguay, and Venezuela. *Id.* The United States has never been a member to the Rome Convention, purportedly because the United States does not want to grant performance rights in sound recordings as required by the Convention. See Johnthan Franklin, *Pay to Play: Enacting a Performing Right in Sound Recordings in the Age of Digital Audio Broadcasting*, in INTERNATIONAL INTELLECTUAL PROPERTY ANTHOLOGY 93 (Anthony D'Amato & Doris Estelle Long eds., 1996).

¹⁵⁵ Convention for the Protection of Producers of Phonograms Against Unauthorized Duplication of Their Phonograms, *opened for signature* Oct. 29, 1971, 25 U.S.T. 309, 866 U.N.T.S. 67, art. 4 [hereinafter Phonograms Convention]; see also Dave Laing, *Copyright and the International Music Industry*, in MUSIC AND COPYRIGHT 22, 30-31 (Simon Frith ed., 1993) (stating that the Phonograms Convention was designed to deal specifically with piracy and counterfeiting of pre-recorded cassettes); Robinson, *supra* note 107, at 192 (explaining that the Phonograms Convention was designed to address piracy as a result of the arrival of the compact tape cassette). As of October 15, 2003, the Phonograms Convention includes the following countries: Argentina, Armenia, Australia, Austria, Azerbaijan, Barbados, Belarus, Brazil, Bulgaria, Burkina Faso, Chile, China, Colombia, Costa Rica, Croatia, Cyprus, Czech Republic, Democratic Republic of the Congo, Denmark, Ecuador, Egypt, El

provides a minimum term of twenty years of protection from the first fixation or first publication of a phonogram.¹⁵⁶ The protection is given to the producer of the phonogram, which is the first person or legal entity to fix the sounds of a performance.¹⁵⁷ The Phonograms Convention requires contracting states to protect producers of phonograms who are nationals of other contracting parties from the unauthorized duplication for the purpose of distribution to the public without consent from the producer.¹⁵⁸ The treaty also prohibits the importation of such duplicates for public distribution.¹⁵⁹ Although providing no dispute resolution provision, the Phonograms Convention requires the contracting states to implement the provisions of the treaty into their own respective domestic laws, but allows each country to do so by copyright protection, unfair competition laws, or penal sanctions.¹⁶⁰ The most effective form

Salvador, Estonia, Fiji, Finland, France, Germany, Greece, Guatemala, Holy See, Honduras, Hungary, India, Israel, Italy, Jamaica, Japan, Kazakhstan, Kenya, Kyrgyzstan, Latvia, Liechtenstein, Lithuania, Luxembourg, Mexico, Monaco, Netherlands, New Zealand, Nicaragua, Norway, Panama, Paraguay, Peru, Republic of Korea, Republic of Moldova, Romania, Russian Federation, Saint Lucia, Serbia and Montenegro, Slovakia, Slovenia, Spain, Sweden, Switzerland, The former Yugoslav Republic of Macedonia, Togo, Trinidad and Tobago, United Kingdom, United States of America, Ukraine, Uruguay, and Venezuela. WIPO, *Treaties and Contracting Parties*, at <http://www.wipo.int/treaties/documents/english/word/o-phongr.doc> (last updated Oct. 15, 2003).

¹⁵⁶ Phonograms Convention, *supra* note 155, art. 4. Article 4 states:

The duration of the protection given shall be a matter for the domestic law of each Contracting State. However, if the domestic law prescribes a specific duration for the protection, that duration shall not be less than twenty years from the end either of the year in which the sounds embodied in the phonogram were first fixed or of the year in which the phonogram was first published.

Id.

¹⁵⁷ *Id.* art. 1(b). “[The] producer of phonograms means the person who, or the legal entity which, first fixes the sounds of a performance or other sounds . . .” *Id.* (quotations omitted).

¹⁵⁸ *Id.* art. 2. Article 2 states:

Each Contracting State shall protect producers of phonograms who are nationals of other Contracting States against the making of duplicates without the consent of the producer and against the importation of such duplicates, provided that any such making or importation is for the purpose of distribution to the public, and against the distribution of such duplicates to the public.

Id.

¹⁵⁹ *Id.* For statutory language, see *supra* note 158.

¹⁶⁰ Phonograms Convention, *supra* note 155, art. 3. Article 3 states:

The means by which this Convention is implemented shall be a matter for the domestic law of each Contracting State and shall include one or more of the following: protection by means of the grant of a copyright

of protection is copyright, which is the preferred choice of the United States, the United Kingdom, and countries formerly in the British Commonwealth.¹⁶¹ The least effective form available, arguably, is penal sanction, which has a higher burden of proof than is normally required in a civil action and requires more judicial and law enforcement cooperation to be effective for deterrence purposes.¹⁶²

With the emergence of digital technologies and the Internet, however, the Phonograms Convention did not adequately address the new technologies such as non-profit MP3 sharing, which prompted WIPO and member countries to reconvene in an attempt to adapt to the needs of the new technological environment.¹⁶³

d. WIPO Copyright Treaty and WIPO Performances and Phonograms Treaty

Recognizing that many of the prior multilateral agreements, such as the Berne and Rome Conventions, did not adequately address the intellectual property issues brought about by the emergence of the Internet, WIPO began negotiations among U.N. member countries to address the new technological advances in a manner that would protect copyright holders' works more effectively in the digital age.¹⁶⁴ Following the negotiations, WIPO adopted the WIPO Copyright Treaty ("WCT")¹⁶⁵ and the WIPO Performances and Phonograms Treaty ("WPPT")¹⁶⁶ on December 20, 1996, to combat copyright infringement over the Internet.¹⁶⁷ Similar to the Berne and Rome Conventions, the

or other specific right; protection by means of the law relating to unfair competition; protection by means of penal sanctions.

Id.

¹⁶¹ STEPHEN M. STEWART, INTERNATIONAL COPYRIGHT AND NEIGHBOURING RIGHTS § 9.07 (2d ed. 1989); Robinson, *supra* note 107, at 193. The United States provides for both civil and criminal actions for copyright infringement. See 17 U.S.C. §§ 501-512 (2000).

¹⁶² STEWART, *supra* note 161, at § 9.11.

¹⁶³ See *infra* Parts II.C.2.d, Part III.A.1.

¹⁶⁴ See WPPT, *supra* note 11, opening statement; Goldberg, *supra* note 142, at 290.

¹⁶⁵ WIPO Copyright Treaty, Adopted in Geneva, December 20, 1996, 36 I.L.M. 65 (1997) [hereinafter WCT].

¹⁶⁶ WPPT, *supra* note 11.

¹⁶⁷ Robinson, *supra* note 107, at 194. Both the WCT and WPPT have the following members: Argentina, Belarus, Bulgaria, Burkina Faso, Chile, Colombia, Costa Rica, Croatia, Czech Republic, Ecuador, El Salvador, Gabon, Georgia, Guatemala, Guinea, Honduras, Hungary, Jamaica, Japan, Kyrgyzstan, Latvia, Lithuania, Mali, Mexico, Mongolia, Nicaragua, Panama, Paraguay, Peru, Philippines, Republic of Moldova, Romania, Saint Lucia, Senegal, Serbia and Montenegro, Slovakia, Slovenia, Togo, Ukraine, and United States of America. See WIPO, *Treaties and Contracting Parties*, at

WCT and the WPPT require that minimum standards of protection be applied to digital technology.¹⁶⁸ The treaties also prohibit the circumvention of technological safeguards established to control access to and prevent unauthorized copying of copyrighted works.¹⁶⁹ Furthermore, both acts prohibit altering, changing, or removing electronic rights management information.¹⁷⁰

<http://www.wipo.int/treaties/general/parties.html> (last updated Oct. 15, 2003). In addition, Albania and Poland are members of the WIPO Performances and Phonograms Treaty, and Cyprus and Indonesia are members of the WIPO Copyright Treaty. *Id.*

¹⁶⁸ See, e.g., WCT, *supra* note 165, art. 4 (classifying computer programs as literary works protected under article 2 of the Berne Convention); WPPT, *supra* note 11, art. 17(2) (granting a term of protection to the producers of sound recordings of at least fifty years from publication or first fixation); see also Robinson, *supra* note 107, at 194.

¹⁶⁹ WCT, *supra* note 165, art. 11; WPPT, *supra* note 11, art. 18. Article 18 of WPPT provides:

Contracting Parties shall provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used by performers or producers of phonograms in connection with the exercise of their rights under this Treaty and that restrict acts, in respect of their performances or phonograms, which are not authorized by the performers or the producers of phonograms concerned or permitted by law.

WPPT, *supra* note 11, art. 18. The WCT substitutes the term "authors" for "performers or producers of phonograms," but the rest of the provisional language is congruent to the WPPT. See WCT, *supra* note 165, art. 11; see also Robinson, *supra* note 107, at 194.

¹⁷⁰ WCT, *supra* note 165, art. 12(1); WPPT, *supra* note 11, art. 19(1). Article 19 of WPPT provides:

Contracting Parties shall provide adequate and effective legal remedies against any person knowingly performing any of the following acts knowing, or with respect to civil remedies having reasonable grounds to know, that it will induce, enable, facilitate or conceal an infringement of any right covered by this Treaty:

(i) to remove or alter any electronic rights management information without authority;

(ii) to distribute, import for distribution, broadcast, communicate or make available to the public, without authority, performances, copies of fixed performances or phonograms knowing that electronic rights management information has been removed or altered without authority.

WPPT, *supra* note 11, art. 19(1). The WCT defines "rights management information" as: information which identifies the work, the author of the work, the owner of any right in the work, or information about the terms and conditions of use of the work, and any numbers or codes that represent such information, when any of these items of information is attached to a copy of a work or appears in connection with the communication of a work to the public.

WCT, *supra* note 165, art. 12(2). The WPPT defines rights management information somewhat differently as:

The WPPT offers additional protection for the producers of sound recordings. The WPPT grants producers of sound recordings several exclusive rights, including the right of reproduction, the right of distribution, the right to authorize commercial rental, and the right of making phonograms available to the public.¹⁷¹ Under the treaty, the copyright holder of a sound recording is allowed a term of protection of fifty years from first publication or fifty years after fixation if not published.¹⁷² The WPPT goes beyond what the Rome and Phonograms Conventions protected by providing requirements and solutions for questions raised by new economical and technological developments that were not present when the prior international agreements were ratified.¹⁷³ The treaty was designed to supplement prior international agreements, like the Rome Convention, by promulgating rules that could adequately address the new technologies and by expressly stating that it does not supplant or prejudice any prior international agreements

information which identifies the performer, the performance of the performer, *the producer of the phonogram*, . . . or information about the terms and conditions of use of the performance or phonogram, and any numbers or codes that represent such information, when any of these items of information is attached to a copy of a fixed performance or a phonogram or appears in connection with the communication or making available of a fixed performance or a phonogram to the public.

WPPT, *supra* note 11, art. 19(2) (emphasis added); see also Robinson, *supra* note 107, at 194.

¹⁷¹ WPPT, *supra* note 11, arts. 11-14. The treaty defines a producer of phonograms as "the person, or the legal entity, who or which takes the initiative and has the responsibility for the first fixation of the sounds of a performance or other sounds, or the representation of sounds." *Id.* art. 2(d). A phonogram is defined as "the fixation of the sounds of a performance or of other sounds, or of a representation of sounds, other than in the form of a fixation incorporated in a cinematographic or other audiovisual work." *Id.* art. 2(b). Article 14 of the WPPT explains the right of making phonograms available by stating that "[p]roducers of phonograms shall enjoy the exclusive right of authorizing the making available to the public of their phonograms, by wire or wireless means, in such a way that members of the public may access them from a place and at a time individually chosen by them." *Id.* art. 14.

¹⁷² *Id.* art. 17(2). Article 17(2) states:

[t]he term of protection to be granted to producers of phonograms under this Treaty shall last, at least, until the end of a period of 50 years computed from the end of the year in which the phonogram was published, or failing such publication within 50 years from fixation of the phonogram, 50 years from the end of the year in which the fixation was made.

Id.

¹⁷³ WPPT, *supra* note 11, opening statement. The Preamble states that the Contracting Parties "Recogniz[e] the need to introduce new international rules in order to provide adequate solutions to the questions raised by economic, social, cultural and technological developments." *Id.*

among contracting parties.¹⁷⁴ Furthermore, any WIPO member country can become a member of the treaty if it so chooses.¹⁷⁵ The treaty simply requires the contracting parties to adopt the provisions of the treaty into each contracting party's national laws and to adequately enforce the terms of the agreement to deter and prevent infringement.¹⁷⁶

Despite the new WIPO treaties' attempts at curtailing international copyright piracy, the effectiveness of the WIPO-administered treaties for some member countries is still in doubt. Although the WIPO is most favored by developing countries because of the belief that it is a much friendlier forum for concerns, many developed countries, including the United States, have been dissatisfied with efforts to combat copyright and related rights issues under the WIPO.¹⁷⁷ The developed nations

¹⁷⁴ *Id.* art. 1. Article 1 provides:

(1) Nothing in this Treaty shall derogate from existing obligations that Contracting Parties have to each other under [the Rome Convention].

(2) Protection granted under this Treaty shall leave intact and shall in no way affect the protection of copyright in literary and artistic works. Consequently, no provision of this Treaty may be interpreted as prejudicing such protection.

(3) This Treaty shall not have any connection with, nor shall it prejudice any rights and obligations under, any other treaties.

Id.

¹⁷⁵ *Id.* art. 26. "Any Member State of WIPO may become party to this Treaty." *Id.* art. 26(1).

¹⁷⁶ *Id.* art. 23. The Treaty states:

(1) Contracting Parties undertake to adopt, in accordance with their legal systems, the measures necessary to ensure the application of this Treaty.

(2) Contracting Parties shall ensure that enforcement procedures are available under their law so as to permit effective action against any act of infringement of rights covered by this Treaty, including expeditious remedies to prevent infringements and remedies which constitute a deterrent to further infringements.

Id. The United States adopted certain provisions of the WPPT and WCT by enacting the Digital Millennium Copyright Act ("DMCA") (codified as 17 U.S.C. §§ 1201, 1202 (2000)). Unlike the Berne Convention, which is not self-executing under United States' laws, the WPPT provision regarding sound recordings *can* be a basis for eligible protection. *See id.* § 104(d). Section 104(d) provides that "Notwithstanding the provisions of subsection (b), no works *other than sound recordings* shall be eligible for protection under this title solely by virtue of the adherence of the United States to . . . the WIPO Performances and Phonograms Treaty." *Id.* (emphasis added).

¹⁷⁷ Long, *supra* note 143, at 209. Many developing countries worry that tougher enforcement of intellectual property laws would allow richer countries to maintain technological and informational advantages to the detriment of poorer, developing countries. Rama John Ruppenthal, Note, *TRIPs Through the Far East: High Tech Product Piracy and the Need for Alternative Regional Solutions*, 20 WIS. INT'L L.J. 143, 157 (2001).

have sensed indifference coming from the WIPO regarding their concerns, and some have feared that developing nations are seeking to lessen, rather than increase, protection for intellectual property.¹⁷⁸ Due to frustrations with inadequate enforcement of WIPO-administered treaties, the developed nations began to consider another forum in which they could seek redress regarding improprieties on intellectual property issues, even before the WPPT was promulgated.¹⁷⁹

3. World Trade Organization: The TRIPs Agreement

Following the Uruguay Round of multilateral trade negotiations for the General Agreement on Tariffs and Trade ("GATT") in 1994, the World Trade Organization ("WTO") was established as the successor to the international agency that administered the GATT.¹⁸⁰ As part of its newly established duties, the WTO was entrusted with the enforcement of the TRIPs Agreement.¹⁸¹ The TRIPs Agreement has been called "the most important development in international intellectual property law" for its establishment of universally recognized minimum standards for intellectual property protection, as well as providing for effective international dispute resolution procedures.¹⁸²

¹⁷⁸ Long, *supra* note 143, at 209. Some developing countries view the enactment of international copyright laws that protect and restrict the use of intellectual property as a direct threat to their ability to compete in the world economy, especially in the present technology-driven global environment. Marshall A. Leaffer, *Protecting United States Intellectual Property Abroad: Toward a New Multi-lateralism*, in INTERNATIONAL INTELLECTUAL PROPERTY ANTHOLOGY 386 (Anthony D'Amato & Doris Estelle Long eds., 1996). For example, Indonesia and Malaysia provide protection for foreign works only if they are published in their respective countries within thirty days of being published abroad or the works are not entitled to protection; in some Middle Eastern countries, foreign works are not protected at all. *Id.*

¹⁷⁹ Long, *supra* note 143, at 209; Pantages, *supra* note 80, at 174.

¹⁸⁰ Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations, Apr. 15, 1994, LEGAL INSTRUMENTS—RESULTS OF THE URUGUAY ROUND vol. 1, 33 I.L.M. 1125 (1994) [hereinafter Final Act]; LETTERMAN, *supra* note 107, at 29.

¹⁸¹ Charles R. McManis, *Intellectual Property and International Mergers and Acquisitions*, 66 U. CIN. L. REV. 1283, 1286 (1998); see *supra* note 13 (stating the full name for the TRIPs Agreement). The contracting parties to the TRIPs Agreement recognized that widely varying standards in IP protection and enforcement, along with the lack of a multilateral framework of principles and rules, had been a source of much tension in international trade relations. WTO, *A Summary of the Final Act of the Uruguay Round*, at http://www.wto.org/wto/english/docs_e/legal_e/ursum_e.htm (last visited Nov. 25, 2003).

¹⁸² McManis, *supra* note 181, at 1286.

The TRIPs Agreement was promulgated, in part, in response to the inability of “economically developed countries to increase the minimum [protection] standards of the Berne Convention and other intellectual property treaties,” and the lack of effective recourse for a member’s failure to comply with the terms of the prior agreements.¹⁸³ In addition, the ambiguity as to which version of the Berne Convention a member country belonged made the true uniformity of copyright protection quite difficult.¹⁸⁴ The TRIPs Agreement attempted to solve this problem by requiring all signatories of the TRIPs Agreement to adhere to the first twenty-one articles of the 1971 Paris Text of the Berne Convention and the Appendix, excluding Article *6bis* which provided for an author’s moral rights.¹⁸⁵ Furthermore, the TRIPs Agreement also required member countries to accord national treatment to its members, as well as a most-favored-nation clause to further expand equal intellectual property protection to foreign nationals.¹⁸⁶

The most significant provision of the TRIPs Agreement in relation to this Note concerns the protection of sound recordings for producers of phonograms. The TRIPs agreement provides producers of phonograms the right to control reproduction of their phonograms, with all of the enforcement provisions afforded to other copyrights, providing protection for at least fifty years from when the recording was fixed.¹⁸⁷

The most remarkable aspect of the TRIPs agreement is its dispute resolution mechanism. The TRIPs Agreement requires that general minimum obligations of enforcement procedures are available under member country’s national laws so as to permit effective action against

¹⁸³ GOLDSTEIN, PRINCIPLES, *supra* note 87, at 52-53.

¹⁸⁴ *Id.*

¹⁸⁵ TRIPs Agreement, *supra* note 13, art. 9(1). Article 9(1) states, “Members shall comply with Articles 1 through 21 of the Berne Convention (1971) and the Appendix thereto. However, Members shall not have rights or obligations under this agreement in respect of the rights conferred under Article *6bis* of that Convention or of the rights derived therefrom.” *Id.*; see also Berne Convention, *supra* note 130, art. *6bis*. Article *6bis*(1) provides:

Independently of the author’s economic rights, and even after the transfer of the said rights, the author shall have the right to claim authorship of the work and to object to any distortion, mutilation or other modification of, or other derogatory action in relation to, the said work, which would be prejudicial to his honor or reputation.

Berne Convention, *supra* note 130, art. *6bis*(1).

¹⁸⁶ TRIPs Agreement, *supra* note 13, arts. 3-4.

¹⁸⁷ *Id.* art. 14(2), (5). The TRIPs Agreement states that “producers of phonograms shall enjoy the right to authorize or prohibit the direct or indirect reproduction of their phonograms.” *Id.* art. 14(2).

any act of infringement of intellectual property rights covered by the TRIPs Agreement.¹⁸⁸ The TRIPs Agreement also requires that the procedures not be unnecessarily complicated or costly, nor entail unreasonable time limits or unwarranted delays.¹⁸⁹ The TRIPs Agreement requires members to provide “adequate remedies through administrative and judicial channels” accessible to both resident and foreign national copyright holders to redress intellectual property violations covered by the agreement.¹⁹⁰ If a member country does not comply with these provisions, a national’s own government can assert these rights on an individual copyright holder’s behalf using the Dispute Settlement Understanding (“DSU”) elaborated in Articles XXII and XXIII of GATT 1994, linking intellectual property protection and compliance with strong trade implications and possible sanctions for non-compliance.¹⁹¹ With 146 members to the agreement, the TRIPs Agreement’s influence and effect is considerably far-reaching.¹⁹² Having

¹⁸⁸ *Id.* art. 41(1). Article 41(1) provides:

Members shall ensure that enforcement procedures . . . are available under their law so as to permit effective action against any act of infringement of intellectual property rights covered by this Agreement, including expeditious remedies to prevent infringements and remedies which constitute a deterrent to further infringements. These procedures shall be applied in such a manner as to avoid the creation of barriers to legitimate trade and to provide for safeguards against their abuse.

Id.

¹⁸⁹ *Id.* art. 41(2). Article 41(2) provides that “[p]rocedures concerning the enforcement of intellectual property rights shall be fair and equitable. They shall not be unnecessarily complicated or costly, or entail unreasonable time-limits or unwarranted delays.” *Id.*

¹⁹⁰ *Id.* art. 42; see also Ruppenthal, *supra* note 177, at 157.

¹⁹¹ TRIPs Agreement, *supra* note 13, art. 64(1); see also Final Act, *supra* note 180, arts. 22-23; J.H. Reichman, *Enforcing the Enforcement Procedures of the TRIPs Agreement*, 37 VA. J. INT’L L. 335, 339 (1997); Ruppenthal, *supra* note 177, at 157-58; WTO, *Settling Disputes*, at http://www.wto.org/english/thewto_e/whatis_e/tif_e/disp1_e.htm (on file with the Valparaiso University Law Review). A discussion on the procedures involved in the dispute resolution provisions of the WTO and TRIPs Agreement is beyond the scope of this Note. For a thorough analysis of dispute settlement procedures applicable to the TRIPs Agreement, see generally DAVID PALMETER & PETROS C. MAVROIDIS, *DISPUTE SETTLEMENT IN THE WORLD TRADE ORGANIZATION* (1999).

¹⁹² As of January 1, 2002, the following countries are members of the WTO and the TRIPs Agreement: Albania, Angola, Antigua and Barbuda, Argentina, Armenia, Australia, Austria, Kingdom of Bahrain, Bangladesh, Barbados, Belgium, Belize, Benin, Bolivia, Botswana, Brazil, Brunei Darussalam, Bulgaria, Burkina Faso, Burundi, Cameroon, Canada, Central African Republic, Chad, Chile, China, Colombia, Congo, Costa Rica, Côte d’Ivoire, Croatia, Cuba, Cyprus, Czech Republic, Democratic Republic of the Congo, Denmark, Djibouti, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Estonia, European Communities, Fiji, Finland, Former Yugoslav Republic of Macedonia, France, Gabon, The Gambia, Georgia, Germany, Ghana, Greece, Grenada, Guatemala, Guinea, Guinea Bissau,

established the historical and technological framework of Internet piracy and the current environment for international copyright protection, this Note next analyzes the effectiveness of the current legal and technological measures being implemented to thwart Internet piracy in relation to the changing cyberscape.

III. PROBLEMS WITH ENFORCEMENT OF COPYRIGHT LAWS ON THE INTERNET

Problems still exist in combating Internet piracy, despite efforts by several governmental and commercial entities to diminish its occurrence. The software and services facilitating Internet piracy of sound recordings have continually become more complex, and many courts and legislatures throughout the world have not been able to fit these new technologies neatly into the traditional copyright "box," which has led to inconsistent results. The purpose of copyright protection has been frustrated by this new piracy juggernaut, and so far the response by intergovernmental and commercial entities has not been effective in balancing the interests of copyright holders and consumers as intended by the philosophy behind copyrights.¹⁹³ This Note addresses several of the inadequacies of the current international agreements, the nature in which peer-to-peer services have been outpacing existing copyright laws, and the present imbalance between accessibility and copyright protection that has created setbacks to uniform copyright protection.

Guyana, Haiti, Honduras, Hong Kong (China), Hungary, Iceland, India, Indonesia, Ireland, Israel, Italy, Jamaica, Japan, Jordan, Kenya, Republic of Korea, Kuwait, Kyrgyz Republic, Latvia, Lesotho, Liechtenstein, Lithuania, Luxembourg, Macao (China), Madagascar, Malawi, Malaysia, Maldives, Mali, Malta, Mauritania, Mauritius, Mexico, Moldova, Mongolia, Morocco, Mozambique, Myanmar, Namibia, Netherlands—For the Kingdom in Europe and for the Netherlands Antilles, New Zealand, Nicaragua, Niger, Nigeria, Norway, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Qatar, Romania, Rwanda, Saint Kitts and Nevis, Saint Lucia, Saint Vincent & the Grenadines, Senegal, Sierra Leone, Singapore, Slovak Republic, Slovenia, Solomon Islands, South Africa, Spain, Sri Lanka, Suriname, Swaziland, Sweden, Switzerland, Chinese Taipei, Tanzania, Thailand, Togo, Trinidad and Tobago, Tunisia, Turkey, Uganda, United Arab Emirates, United Kingdom, United States of America, Uruguay, Venezuela, Zambia, and Zimbabwe. WTO, *Organization Members and Observers*, at http://www.wto.org/english/thewto_e/whatis_e/tif_e/org6_e.htm (last visited Nov. 23, 2003). The following countries are observers negotiating for membership into the WTO: Algeria, Andorra, Armenia, Azerbaijan, Bahamas, Belarus, Bhutan, Bosnia and Herzegovina, Cambodia, Cape Verde, Equatorial Guinea, Ethiopia, Holy See, Kazakhstan, Lao People's Democratic Republic, Lebanese Republic, Nepal, Russian Federation, Samoa, Sao Tome and Principe, Saudi Arabia, Serbia and Montenegro, Seychelles, Sudan, Tajikistan, Tonga, Ukraine, Uzbekistan, Vanuatu, Vietnam, and Yemen. *Id.*

¹⁹³ See *supra* notes 87-88 and accompanying text.

A. *Shortcomings to International Copyright Enforcement*

The most prominent international agreements on intellectual property law, namely the WIPO-administered treaties and the TRIPs Agreement, have aided in the international recognition of copyright protection for literary and artistic works.¹⁹⁴ However, weak enforcement provisions, outdated definitions of copyright infringement, and inconsistent adoption of existing intellectual property agreements among nations have hindered uniform copyright protection, particularly for sound recordings. The relationship between the current international agreements and the protection of sound recordings on the Internet reveals several inadequacies.

1. *Inadequacies in the Current Agreements*

The current international agreements are ineffective in adequately protecting sound recordings on the Internet for several reasons. First of all, no effective system of accountability exists under WIPO to hold member countries that are not fulfilling their obligations under the WIPO-administered treaties responsible for inadequate enforcement.¹⁹⁵ The only possible remedy an individual copyright holder has when he believes his works are being infringed in another member country is to state a grievance with his own country's government officials in the hope that they will attempt to confront the infringing country's government on his behalf.¹⁹⁶ However, not a single dispute has been brought in over forty-five years.¹⁹⁷ Therefore, a copyright holder of a sound recording may have no recourse against a foreign infringer in a member country that only claims to adhere to any one of the WIPO-administered treaties but fails to uphold the terms of the agreement.

For example, the Berne Convention offers an "opt-out" provision regarding dispute resolution proceedings brought before the International Court of Justice.¹⁹⁸ The opt-out provision may demonstrate that the framers never intended the treaty to have a strong enforcement obligation but rather more of an agreement to agree.¹⁹⁹ Thus, the Berne

¹⁹⁴ See *supra* Part II.C.2-3.

¹⁹⁵ Long, *supra* note 143, at 210.

¹⁹⁶ See generally Robinson, *supra* note 107, at 191-92.

¹⁹⁷ Long, *supra* note 143, at 210.

¹⁹⁸ Berne Convention, *supra* note 130, art. 33(2)-(3); see *supra* note 144 and accompanying text.

¹⁹⁹ Robinson, *supra* note 107, at 192.

Convention is impotent when a member country simply fails to implement and/or honor the provisions of the agreement.²⁰⁰ In addition, the Berne Convention only protects the underlying musical work, not the producer's copyright in the sound recording.²⁰¹ The lack of protection for the producers places the burden on the artist to police his copyright instead of the recording studio, which would likely be in a better position and have more resources to protect the sound recording, especially abroad. Thus, the Berne Convention does not create a friendly forum for adequately protecting sound recordings.

The Rome Convention, although providing protection for producers of sound recordings, is also ineffective. The Rome Convention, having a similar method of dispute resolution as the Berne Convention, suffers the same shortcomings in regards to providing relief to individual copyright holders.²⁰² Furthermore, since only seventy-six countries have adopted the Rome Convention, the protection it provides for sound recordings does not cover as large of a geographic area as some of the other agreements mentioned in this Note. Therefore, sound recordings are still vulnerable to piracy in several countries around the world, including other Berne Union countries that are not members of the Rome Convention.²⁰³

The Phonograms Convention, another WIPO-administered treaty, is only partially applicable to online piracy of sound recordings and is as equally ineffective in the new online environment as its predecessors. The Phonograms Convention was designed to combat public distribution of sound recordings for commercial purposes, and making copies for personal use and/or distributing them on the Internet for free is not considered distribution.²⁰⁴ Therefore, peer-to-peer sharing among users for free would likely not create a violation. Plus, the Phonograms Convention does not expressly address digital technologies such as MP3s and Internet use, which have changed how sound recordings can be copied and distributed.²⁰⁵ Furthermore, the Phonograms Convention does not provide any remedies whatsoever against contracting states that do not comply with the provisions of the treaty, making

²⁰⁰ *Id.*

²⁰¹ See *supra* notes 142-46 and accompanying text.

²⁰² See *supra* notes 152-53 and accompanying text.

²⁰³ See *supra* note 154 and accompanying text.

²⁰⁴ See *supra* notes 158-59 and accompanying text.

²⁰⁵ Robinson, *supra* note 107, at 194. For a description of MP3s and file sharing that utilizes MP3 technology, see *supra* Part II.A.

enforcement of the Phonograms Convention by and against its members unrealistic.²⁰⁶

The most recent treaties created by WIPO, the WCT and WPPT, do attempt to address copyright protection in the digital world, and, like the Phonograms Convention, do not provide for any dispute resolutions for enforcing the agreements. Plus, only forty-two countries officially adopted either of the new agreements, which lessens their effectiveness, especially in the global context of the Internet.²⁰⁷ Therefore, under the WIPO-administered treaties, including the Berne Convention, Rome Convention, Phonograms Convention, WCT, and WPPT, copyright holders of sound recordings have little solace in copyright laws in countries that have little incentive to spend resources enforcing anti-piracy laws.²⁰⁸

In contrast, the TRIPs Agreement, enforced by the WTO, does have a strong dispute settlement provision with the threat of possible sanctions against a country for non-compliance.²⁰⁹ It also expressly provides protection for sound recordings in member countries.²¹⁰ However, the TRIPs Agreement was promulgated before the threat of Internet piracy of sound recordings became a reality, and thus, does not provide for any means of protecting digital content in an effective and enforceable manner. Although the TRIPs Agreement and the WTO are likely the best forum in which to effectively enforce copyright agreements, no technological security measure provision exists such as those found in the WPPT prohibiting anti-circumvention of digital rights management, which could be beneficial for pursuing online hackers. Therefore, the TRIPs Agreement may not ensure adequate protection for foreign works using technological security measures. Without a single international treaty that addresses the issues surrounding sound recordings on the Internet with strong enforcement provisions, uniform copyright protection of sound recordings online seems unlikely, leading to inconsistent results.

²⁰⁶ See generally Phonograms Convention, *supra* note 155 (providing no provision that addresses dispute resolution of any kind).

²⁰⁷ See *supra* note 167 (listing the countries represented in both the WCT and WPPT).

²⁰⁸ Laing, *supra* note 155, at 31.

²⁰⁹ See *supra* notes 188-91 and accompanying text.

²¹⁰ See *supra* note 187 and accompanying text.

2. Inconsistent Adoption of Existing Intellectual Property Legislation

Another setback to uniform copyright protection on the Internet is the inconsistent adoption of current international agreements among different countries. While several countries may have adopted the more widely followed multilateral agreements like the Berne Convention, some countries have not adopted the more specific treaties promulgated to address the new technologies, including the Internet.²¹¹ For example, the United States and Norway are members of the Berne and Phonograms Conventions, as well as the TRIPs Agreement, but between the two, only the United States is a contracting party to the WCT and WPPT.²¹² Unlike the WCT and WPPT, the Berne Convention, Phonograms Convention, and the TRIPs Agreement do not explicitly provide for a cause of action against someone circumventing a copyright holder's technological measures, nor against distributing the circumvention techniques to others.²¹³ These differences have led to disparities in copyright protection for digital works. In Norway, for example, Jon Lech Johansen, the Norwegian teenager responsible for circumventing the encryption on DVDs and distributing the software over the Internet, was acquitted of charges that he was directly or contributorily liable for copyright infringement.²¹⁴ Lacking explicit legislation like the WCT or WPPT that prohibits anti-circumvention, the Norwegian court held that Johansen had not violated any copyright laws.²¹⁵ It seems that the Norwegian court was more receptive to acts of

²¹¹ See *supra* Part II.C.2.

²¹² See *supra* notes 141, 155, 167, 192 (listing the countries that are members of each respective treaty).

²¹³ See *supra* Part II.C.2-3.

²¹⁴ City of Oslo, Norway v. Johansen, No. 02-507 M/94 (Oslo First Instance Court, 2003), available at http://www.eff.org/IP/Video/DeCSS_prosecutions/Johansen_DeCSS_case/20030109_johansen_english_decision.rtf (unofficially translated by Professor Jon Bing, Norwegian Research Center for Computers and Law). The Oslo Court determined that Johansen was entitled to access the information on a DVD that he had purchased, even if the movies were viewed in a different way than the producer had intended, regardless of whether he had to break the encryption in order to play it. *Id.* The court determined that he did not possess any decrypted DVDs that he had not actually purchased prior to the decryption, and, therefore, he was not guilty of infringement. *Id.* Furthermore, the court held that his decryption software was useful for both legal and illegal uses, and, therefore, distributing the software was not a crime either. *Id.*; see *supra* note 80.

²¹⁵ Johansen, No. 02-507 M/94, available at http://www.eff.org/IP/Video/DeCSS_prosecutions/Johansen_DeCSS_case/20030109_johansen_english_decision.rtf. Johansen's attorney, Halvor Manshaus, stated that "[i]f a person's motive is to solely encourage or solicit illegal actions, then it would be illegal [to distribute the anti-circumvention software,]" but the court found that there was no evidence Johansen's motives were of this

circumvention of technological safety measures for personal use, even if other countries took a different view.

In contrast, the United States legal system, which has ratified the anti-circumvention measures of the WCT and WPPT, has not been as lenient.²¹⁶ In *Universal City Studios, Inc. v. Reimerdes*,²¹⁷ the Southern District of New York permanently enjoined a website owner from posting the same decryption software designed by Johansen in Norway, or from including hyperlinks to other websites that made the software available.²¹⁸ The *Reimerdes* court determined that the website owners had violated the anti-circumvention provisions of the DMCA as intended by Congress to prevent copyright piracy.²¹⁹

The conflicting rulings from these two countries are illustrative of the discrepancies in international copyright protection that can result when two or more countries' intellectual property laws are incongruent. In Norway, it appears that a person is free to produce and distribute throughout the world software that has been prohibited in the United States. The likely result is that people in the United States and beyond will receive the illegal software from Norway and similar-minded countries where it is perfectly legal to use and distribute over the Internet, as long as there is no "illegal motive."²²⁰ In turn, the copyright holder will have no recourse against someone like Johansen in his home country of Norway unless the laws are changed.²²¹ The soundness of the anti-circumvention provisions aside, the differences in protection provided by these two countries, which are co-members of several

nature. Gillian Law, *Defendant Acquitted in DVD Hacking Case*, PC WORLD.COM, Jan. 7, 2003, at <http://www.pcworl.com/news/article/0,aid,108462,00.asp>.

²¹⁶ See 17 U.S.C. §§ 1201-1202 (2000) (ratifying the anti-circumvention and digital management information provisions of the WCT and WPPT); see also *supra* note 176..

²¹⁷ 111 F. Supp. 2d 294 (S.D.N.Y. 2000), *aff'd*, 273 F.3d 429 (2d Cir. 2001).

²¹⁸ *Id.* at 344-45.

²¹⁹ *Id.* at 346; see *supra* note 176 (explaining the origin of DMCA). The *Reimerdes* court stated:

Indeed, the likelihood is that this decision will serve notice to others that "the strong right arm of equity" may be brought to bear against them absent a change in their conduct and thus contribute to a climate of appropriate respect for intellectual property rights in an age in which the excitement of ready access to untold quantities of information has blurred in some minds the fact that taking what is not yours and not freely offered to you is stealing.

Reimerdes, 111 F. Supp. 2d at 344-45.

²²⁰ See *supra* note 215 and accompanying text.

²²¹ See *infra* Part III.B.

international intellectual property agreements, create dramatic repercussions in enforcement of copyright laws on the Internet. The cunning peer-to-peer services now available have been able to work their way through the gaps of the existing international agreements.

B. New Peer-to-Peer Services Outpacing Existing Laws

Several of the new peer-to-peer services have been outmaneuvering and/or outpacing many of the traditional copyright laws protecting sound recordings, including those that have been promulgated to defend against them. First, many peer-to-peer services, especially centralized services, have purposely relocated from countries with stricter copyright laws, such as the United States, to countries with little or no restrictions in order to avoid being held accountable for infringing use of their services.²²² Being located outside of the United States, for example, creates a mountainous obstacle for United States copyright holders to overcome, since even if a judgment is given in their favor in the United States, compelling the foreign-located peer-to-peer service provider to satisfy the judgment may be impossible. Some countries do not provide for direct and automatic enforcement of another country's civil judgments, requiring copyright holders to pursue a judgment order through the other country's legal system, which could ultimately decide not to honor and enforce the judgment.²²³ The process could take years of costly legal expenses for each separate case, which may or may not result in the halting of the peer-to-peer service provider's assistance in copyright infringement.

Furthermore, while the litigation is winding its way through the judicial system, the service is likely to still carry on business as usual, since one country's authority to levy injunctions generally stops at its borders.²²⁴ The best outcome would result in the service provider being shut down and a large amount of damages being awarded against it, but even with such an ideal outcome, the process of reaching that goal could be tenuous. By the time a favorable judgment is reached and enforced,

²²² See *supra* note 48 and accompanying text.

²²³ John Borland, *Ruling Bolsters File-Traders' Prospects*, CNET NEWS.COM, March 28, 2002, at <http://news.com.com/2100-1023-870396.html>. For example, the Dutch Court of Appeals held that KaZaA BV, the Netherlands-based peer-to-peer software provider, was not liable "for the illegal actions of the people using its software." *Id.* If the Netherlands courts do not hold that KaZaA is liable for actions brought in their own courts, they likely will not honor contradicting foreign decisions either. *Id.*

²²⁴ See *supra* Part II.B.

the service provider may have become insolvent from expensive legal costs, thus leaving the copyright holder with limited satisfaction. In addition, while one service provider is being challenged and/or toppled, another service with compatible software may likely take its place by attracting all of the preceding service provider's "customers" and establishing their service in another file-sharing-friendly country. Thus, the whole process starts over without diminishing the amount of piracy on the Internet. Although a judgment against one service provider may serve as precedent for other infringement cases within individual countries, the effectiveness of such reactive measures to piracy as civil and criminal actions seems limited and discouraging.

A second threat that has been controversial in the existing legal climate is the amorphous nature of decentralized services, such as KaZaA and Gnutella.²²⁵ The decentralized services have attempted to avoid liability by creating an online environment in which they do not have control over, or the ability to monitor, the file sharing of its users. Many peer-to-peer developers have designed their services around existing copyright principles in order to fall through the cracks of the legal system.²²⁶ Although several courts may find a way to apply existing copyright laws to the decentralized services, there will likely be conflicting results in several different countries and jurisdictions.²²⁷

²²⁵ See *supra* notes 197-211 and accompanying text.

²²⁶ See Fred von Lohmann, *IAAL: Peer-to-Peer File Sharing and Copyright Law After Napster*, ELECTRONIC FRONTIER FOUND., at http://www.eff.org/IP/P2P/Napster/20010309_p2p_exec_sum.html (last visited Nov. 23, 2003). Mr. Lohmann, senior staff attorney with the Electronic Frontier Foundation, suggested:

A few general guidelines for P2P developers [that] can be derived from an analysis of contributory and vicarious copyright infringement principles [in order to escape liability for its service:

1. Your two options: total control or total anarchy.
2. Better to sell stand-alone software products than on-going services.
3. Can you plausibly deny knowing what your end-users are up to?
4. [Determine] [w]hat. . . your substantial nonfringing uses [are].
5. Disaggregate functions.
6. Don't make your money from the infringing activities of your users.
7. Be open source.
8. Do not be a direct infringer: make and store no copies.
9. Do not build any "circumvention devices" into your product.
10. Don't use someone else's trademark in your name.

Id.

²²⁷ For example, an appeals court in the Netherlands overturned a lower court's ruling that KaZaA was liable for copyright infringement, holding that KaZaA cannot be

Every jurisdiction that does not find that a service is infringing will likely become a safe haven to which many services will relocate and continue unabated.²²⁸ The result could be devastating for copyright holders throughout the world, since they would have no recourse against infringement within sharing-friendly nations except through governmental action from their own countries through international agreements and/or imposed sanctions.²²⁹ Without an applicable provision within an international agreement between the copyright holder's country and the file-sharing-friendly nation, and an effective enforcement provision, the copyright holder will be helpless to stop the services from facilitating mass copyright infringement.²³⁰

In addition, decentralized services may not be able to be shut down, since the software is merely distributed to users who can exchange files amongst themselves without assistance from the software developer or service provider.²³¹ The inability to shut down the use of the software would force copyright holders to pursue each individual infringer using the software for illegal purposes and file suit against them, which could number in the millions.²³² Furthermore, with many new software developers incorporating encryption technology into their programs, copyright holders could be unable to identify what files are being exchanged and unable to circumvent the encryption without risking liability themselves in countries that have adopted anti-circumvention provisions, such as those found in the WPPT.²³³ For these reasons, copyright holders are at a severe disadvantage under the current international copyright laws.

Aside from the thought of receiving sound recordings for free by outpacing copyright laws, the rebellion of peer-to-peer services against the recording industry may also be an example of the differing views on

responsible for the illegal actions of the people who use their software. See Borland, *supra* note 223, at <http://news.com.com/2100-1023-870396.html>; *supra* Part III.A.2.

²²⁸ See Borland, *supra* note 223, at <http://news.com.com/2100-1023-870396.html> (speculating that the Netherlands may be a safe haven for file-swapping services following a favorable Dutch court ruling for software provider KaZaA); *supra* note 223 and accompanying text.

²²⁹ See *supra* Part II.C.2-3.

²³⁰ See *supra* Part III.B.

²³¹ See *supra* notes 60, 64 and accompanying text.

²³² See *supra* note 63 (describing the number of software downloads KaZaA boasts to have distributed).

²³³ WPPT, *supra* note 11, arts. 18-19; see *supra* notes 169-70 and accompanying text.

the proper balance between accessibility of works for the public and providing proper copyright protection.

C. *Imbalance Between Accessibility and Copyright Protection*

Under the theory of copyright, at least from the United States perspective, both the copyright holder of a work and society as a whole will benefit from the dissemination of the author's work by allowing the author to receive pecuniary compensation upon releasing his work to the public.²³⁴ However, when a copyright holder's works are being pirated, particularly on such a scale as on the Internet, the author may become reluctant to distribute his works in a manner that has been more susceptible to piracy. The copyright holder's fear of piracy, in turn, creates an imbalance between accessibility of his works to the public and the protection of the copyright holder's exclusive rights.²³⁵ Copyright holders are forced into balancing between providing the public access to their works, thus opening themselves to piracy, and safeguarding their works to prevent piracy by limiting access.²³⁶ Either the public is receiving the benefit of the work without adequately compensating the copyright holder, or the public's access is detrimentally limited by the copyright holder in order to protect his or her works. Internet piracy of sound recordings is an example of the former; copy-protected CDs using encryption technology that overly limit consumer's ability to use the works are examples of the latter.

The recording industry has attempted to thwart Internet piracy by applying technological measures such as encryption to prevent copyrighted digital content from being copied and distributed over the Internet.²³⁷ Some applications of technological measures, however, prevent consumers from using the copyrighted materials in ways in which they have become accustomed. By limiting access through tougher security measures, the copyright holders run the risk of alienating consumers. For example, some copy-protected CDs have prevented many consumers from being able to change the format of the sound recordings to play on several different devices, such as their

²³⁴ See *supra* notes 87-88 and accompanying text.

²³⁵ See *supra* notes 87-88 and accompanying text.

²³⁶ Stewart, *supra* note 43. "Listeners want to be able to enjoy the music they have legitimately purchased whenever, wherever, and however they like. Keeping your music protected while protecting the interests of your audience is the central struggle of online music." *Id.*

²³⁷ See *supra* Part II.A.4.

computers, DVD players, and MP3 portable players.²³⁸ The limited use has resulted in consumer backlash and has increased consumers' desire to circumvent the new safety measures.²³⁹ The technological measures that substantially limit consumer accessibility, such as the copy-protected CDs, tip the imbalance created by the mass Internet piracy back to the other extreme, to the detriment of consumers everywhere. Although these safety measures do dramatically lessen the chance that the sound recordings will be pirated, the consumer's expectations that legally purchased copyrighted materials be readily accessible in a convenient and affordable manner are substantially impaired.

In addition, pursuing legal actions against individual infringers in an attempt to deter piracy may only further alienate consumers and will surely result in high court costs and legal fees that may not result in any satisfaction of a judgment against often-insolvent defendants.²⁴⁰ Currently, public opinion does not seem to support increasing the criminal penalties against individuals who are merely downloading or uploading material for personal use that is already on the Internet at the click of the mouse.²⁴¹ Therefore, it is financially and socially impracticable to pursue all the copyright infringers directly through the process of litigation.²⁴² From the startling number of pirated sound recordings being exchanged globally over the Internet, and with the generations of new services that have been increasing at an exponential rate, it seems clear that the current domestic and international legal deterrents have proven to be insufficient.²⁴³ The new services available

²³⁸ See, e.g., Jacover, *supra* note 58, at 2237-38 (explaining how many consumers have purchased a copyrighted work and use devices such as the Diamond Rio playback device and accompanying software to change the format of the sound recording from CD to MP3 in order to play the material on the portable device). The music industry sold its first locked CD in the fall of 2001, which prevented users from ripping or copying it onto a PC. Honigsberg, *supra* note 64, at 506. The copy-protected CD sparked consumer fury, including lawsuits claiming that the CDs interfered with their fair use of the legally purchased sound recording. *Id.*

²³⁹ See Sifferd, *supra* note 48, at 106 (describing the "anti-industry sentiment" and radicalized nature prevalently underlying many of the peer-to-peer services); *supra* Part III.B.

²⁴⁰ Green, *supra* note 4, at 823-24; see also Glynn S. Lunney, Jr., *The Death of Copyright: Digital Technology, Private Copying, and the Digital Millennium Copyright Act*, 87 VA. L. REV. 813, 826 (2001).

²⁴¹ See generally Bruce R. Poquette, Note, *Information Wants to Be Free*, 22 HAMLINE J. PUB. L. & POL'Y 175 (2000) (stating how many people, especially students, are "up in arms" over being deprived of the right to download music).

²⁴² See Lunney, *supra* note 240, at 826.

²⁴³ See *supra* Part III.A-B.

for file sharing simply do not fit comfortably within the traditional territorial approach to copyright protection. Therefore, another broader approach is necessary.

IV. MARRIAGE OF INTERNATIONAL AGREEMENTS AND TECHNOLOGICAL SAFEGUARDS

The Internet has become a global phenomenon that requires international, not just regional, attention.²⁴⁴ Since the Internet has a worldwide presence, the only true way to effectively address copyright issues is to consider them in the context of international enforcement. This Note's proposition lessens the need for finding the direct offenders and focuses, instead, on finding and controlling the materials themselves. If the means by which the offenders trade the unlicensed materials is severely impaired, the number of infringement issues will be attenuated.

It seems clear that peer-to-peer services have been outpacing and circumventing the proposed legal solutions for preventing such behavior.²⁴⁵ A more preventative approach to copyright protection, which would preserve the rights of copyright holders while minimally affecting legitimate consumer use, is required. As an alternative to the arduous task of pursuing individual copyright infringers on a massive scale, this Note suggests the implementation of a few technological and legal mechanisms to secure sound recordings on the Internet. Two amendments to the TRIPs Agreement may help alleviate the current problem of Internet piracy of sound recordings: (1) an amendment implementing digital watermarks as a uniform standard for detecting and intercepting infringing materials on the Internet throughout TRIPs-member countries, and (2) an amendment providing protection against circumventing and/or tampering with technological security measures.

A. Amend the TRIPs Agreement to Require Implementation of Technological Security Measures

The United States and a large number of other countries are members of the TRIPs Agreement, which has strong sanction provisions and dispute settlement mechanisms.²⁴⁶ Therefore, the TRIPs Agreement would be the most effective forum in which to incorporate newer

²⁴⁴ See *supra* Part II.A.1.

²⁴⁵ See *supra* Part III.A-B.

²⁴⁶ See *supra* Part II.C.3.

intellectual property provisions to combat online piracy.²⁴⁷ The TRIPs Agreement should be amended to establish a technological security standard utilizing digital watermarks and “recognition” software to prevent Internet piracy from occurring. The digital watermark could be implemented and infused into sound recordings so that it would make unauthorized copyrighted materials more easily discernible but allow non-marked materials and old format players to be compatible with the new system.²⁴⁸ The special recognition software designed to detect digital watermarks could then be used to identify and differentiate between licensed and unlicensed copies of copyrighted material based on the information encoded within digital watermarks. The software would be designed to detect the watermarks and remove the unlicensed material by intercepting it as it passes through the Internet infrastructure.²⁴⁹ This system of copyright protection is less intrusive to legitimate consumer uses than other forms of technological safety measures, such as restrictive encryption formats, without the need to replace the media devices every time a new security measure is implemented.²⁵⁰

After the TRIPs Agreement members have chosen the watermark-based technological security standard to be used, the TRIPs Agreement should require members of the agreement to incorporate accommodation for the new security format into each country’s copyright laws. The new TRIPs Agreement provision would require all Internet access providers, or other important participants in the main Internet infrastructures, within each respective country to implement the recognition software mentioned above in their servers and routers, allowing for updates as the technology evolves or becomes obsolete.²⁵¹ The software would then be used to automatically identify unlicensed copyrighted materials passing through the servers, routers, and other major Internet components and prevent them from reaching their destination, whether entering or exiting a TRIPs member country.²⁵² Thus, the software

²⁴⁷ See *supra* Parts II.C.3, III.A.

²⁴⁸ See *supra* Part II.A.4.

²⁴⁹ See *supra* notes 21-23 and accompanying text (explaining how information is transmitted through the Internet).

²⁵⁰ See *supra* Part III.C.

²⁵¹ Much like home security has evolved from the skeleton key and lock to computerized surveillance systems, digital security measures, such as this Note has proposed, must also be able to adapt and evolve as hackers become more cunning. No system is likely to be completely hacker-proof, but allowing for advances in technology by updating the security measures at reasonable intervals may substantially deter Internet piracy.

²⁵² See *supra* Part II.A.1, 4.

would create a “firewall” that would act like a virtual border customs, preventing unlicensed materials from going in or out of the “Virtual Border.”

AMENDMENT TO THE TRIPs AGREEMENT

PART VIII: ENFORCEMENT OF RIGHTS BY TECHNOLOGICAL REGULATIONS

Article 74

Obligations of Technological Security Standards Governing Digital Transmissions

Members shall, in formulating or amending their laws and regulations, adopt a uniform and effective technological security standard, agreed upon by the Members, for the purpose of identifying and intercepting copyright and related rights material distributed or received, through direct or indirect reproduction, without authority, in violation of the rights provided in this Agreement, by means of Internet transmission or other digital transmission now known or later developed. Members shall institute any updates, revisions, or adaptations to the technological security standard within a reasonable period of time as necessary to ensure uniform intellectual property protection among Members, subject to the other terms of this Agreement.

Members shall, in formulating or amending their laws and regulations, mandate and regulate all Internet Access Providers to implement the adopted technological security standards established by the Members of this Agreement into their servers, routers, or other important components within and among the main networking infrastructures, subject to any updates, revisions, or adaptations as will be determined by national law, for the purposes set forth in paragraph 1. Members shall require Internet Access Providers to implement the technological security standards in a manner that effectively encompasses data transmissions sent or received from within or without each Member’s territory. As used in this Article, “Internet Access Provider” means any Internet access provider, interconnected network provider, or any other provider of a digital network now known or later developed, whether operated by an individual or organization, for profit or non-profit.

Commentary

Paragraph 1 establishes the obligation of adopting the new technological security standard by TRIPs members, while paragraph 2 mandates the manner in which it will be implemented. The advantage

of this technological approach would enable consumers to use the legally purchased, digitally-watermarked sound recordings in many of the same ways as the currently unprotected materials, including the ability to change to other digital formats, like MP3, and play them on several of the media players popular today.²⁵³ The only restriction placed on the consumer would be on transmitting unlicensed materials over the Internet, which would be electronically intercepted by the proposed software once it is detected.

Under this proposition, substantially fewer unlicensed materials could be sent through the Internet, at least in participating countries, without being intercepted. Enforcing copyright laws indirectly with preventative, proactive measures that stop piracy before it starts would alleviate the need to prosecute large numbers of individual consumers. Furthermore, it would allow producers of copyrighted materials to feel secure in putting their materials on the Internet, which could stimulate economic growth. The recording industry would not feel compelled to incorporate overly restrictive technological measures, such as copy-protected CDs, that inhibit consumers' legitimate uses.²⁵⁴ Without the necessity to pursue legal actions against the many would-be infringers in the general public, the focus could then be turned to addressing a smaller group of misfits – potential hackers.

B. Amend the TRIPs Agreement to Require Ratification of Anti-Circumvention Measures

Although the trading of unlicensed sound recordings by the general public could be substantially curtailed by implementing the measures described above, the threat posed by hackers desiring to circumvent the proposed technologies would still be present. Therefore, measures aimed at pursuing and halting circumvention of technological safety measures must also be implemented on a uniform scale.²⁵⁵ To address this threat, the TRIPs Agreement should be amended to include anti-circumvention and digital rights management provisions similar to those found in the WCT and WPPT to prevent hacking.²⁵⁶

²⁵³ See *supra* text accompanying note 240 (describing the importance of avoiding alienating consumers with overly restrictive formats).

²⁵⁴ See *supra* Part III.C.

²⁵⁵ See *supra* Part III.A.2.

²⁵⁶ See *supra* notes 169-70 and accompanying text (describing the provisions addressing anti-circumvention of technological safety measures).

Article 75

Obligations of Protecting Technological Measures

Members shall provide adequate legal protection and effective legal remedies against the circumvention of technological security measures including, but not limited to, digital watermarks and/or encryption technology that are used by authors of literary and artistic works, performers, or producers of phonograms in connection with the exercise of their rights under this Agreement to prevent unauthorized use of their works and to restrict acts that are not authorized by the performers or the producers of phonograms concerned or permitted by law.

Members shall provide adequate and effective legal remedies against any person performing any of the following acts with knowledge, or having reasonable grounds to know, that it will induce, enable, facilitate, or conceal an infringement of any right covered by this Treaty:

to remove or alter any electronic rights management information without authority;

to distribute, import for distribution, broadcast, communicate, or make available to the public, without authority, performances, copies of fixed performances, or phonograms knowing that electronic rights management information has been removed or altered without authority.

As used in this Article, "rights management information" means information which identifies the performer, the performance of the performer, the producer of the phonogram, the phonogram, the owner of any right in the performance of the phonogram, or information about the terms of information that is attached to a copy of a fixed performance or a phonogram or appears in connection with the communication or making available of a fixed performance or a phonogram to the public.

Commentary

Paragraph 1 prohibits circumvention of technological security measures such as encrypted materials. Paragraph 2 prevents tampering with or removing digital rights management information, such as information found encoded within a digital watermark. By focusing the civil suits, criminal prosecutions, and injunctions on the hackers who circumvent the technological security measures, instead of the ordinary consumer, these provisions would help limit the amount of litigation and

lessen consumer backlash problems.²⁵⁷ With fewer suits against the ordinary consumer being necessary under the technological standard mentioned above, copyright holders could focus nearly all of their legal efforts on preventing hackers from tampering with their security features and distributing the circumventing techniques over the Internet. With the stronger enforcement implications under the TRIPs Agreement, member countries would have a stronger incentive to enforce the anti-hacking provisions.²⁵⁸ In turn, hackers may be more hesitant to crack the security features and then tell the world how it was done, which could lessen the amount of hacking being performed and result in more uniform copyright protection for sound recordings. Thus, a balance between copyright protection and public dissemination could be maintained, even online.²⁵⁹

V. CONCLUSION

Peer-to-peer technology may one day provide a wide range of legitimate, non-infringing uses that will likely prove to be extremely beneficial to society, including the music industry.²⁶⁰ However, until copyright holders can feel safe in releasing their works onto the new global medium, the world will be deprived of its full potential. Implementing the technological security measures on a global scale, in conjunction with uniform enforcement of copyright laws among international agreement members, will be a good step in the right direction. By diminishing the need for civil and criminal actions to enforce copyright protection, the use of preventative technological security measures provides a much more amicable approach than pursuing infringers directly. The problem of Internet piracy is analogous to a leaking dam that is flooding the world with infringing materials to the detriment of copyright holders and the public in general. Although it is unlikely that any single preventative measure will stop all the "leaks," plugging the big holes with measures such as digital watermarks and amending the TRIPs Agreement, as this Note has proposed, may minimize the damage. Perhaps turning technology around on the hackers and pirates will make the Internet safe for the legal and prolific distribution of sound recordings by maintaining the

²⁵⁷ See *supra* Part III.C.

²⁵⁸ See *supra* Parts II.C.2-3, III.A-B.

²⁵⁹ See *supra* notes 87-88 and accompanying text.

²⁶⁰ Sifferd, *supra* note 48, at 108.

desirable balance between copyright protection and public dissemination of ideas.²⁶¹

Lance Clouse*

²⁶¹ “You can compete with free, if free is a pain in the ass,” said Malcolm Maclachlan, an analyst with IDC, and added that subscription services will catch on if they are convenient and they have a wide range of content. Leander Kahney, *Carracho II: Napster with a Plan*, WIRED NEWS.COM, Feb. 17, 2001, at <http://www.wired.com/news/technology/0,1282,41868,00.html>.

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