

GLOBAL SOLUTIONS TO PREVENT COPYRIGHT INFRINGEMENT OF MUSIC OVER THE INTERNET: THE NEED TO SUPPLEMENT THE WIPO INTERNET TREATIES WITH SELF-IMPOSED MANDATES

I. INTRODUCTION

*"You should not expect others to be as scrupulous as you, and you may at some time need help from the legal system. When this time comes, your position will be much stronger if you have already taken the necessary steps to formalize your intellectual property ownership."*¹

It is predicted that worldwide Internet usage will grow to 349 million users by the end of 2000.² The Internet³ is a window to the world that provides a myriad of options and problems. The possibilities of opportunities over the Internet seem endless. Everything from shopping, education, recreation, and even retrieving digital musical can be accomplished with the click of a mouse. The number of countries that do not have Internet access is shrinking.⁴ In Asia alone, Internet usage is expected to increase 422% over the next six years.⁵ The expansion of the Internet⁶ provides a huge market for piracy.⁷ The music

1. Lewis C. Lee & J. Scott Davidson, *Intellectual Property for the Internet*, 75 (Lewis C. Lee & J. Scott Davidson eds., Wiley Law Publications 1997).

2. See Q. Todd Dickinson, Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office, Statement, *The Costs of Internet Piracy for the Music and Software Industries*, July 19, 2000. [This is Dickinson's statement before the Subcommittee on Economic Policy and Trade Committee on International Relations].

3. Jennifer Burke Sylva, *Legal and Business Issues in the Digital Distribution of Music: Digital Delivery and Distribution of Music and other Media: Recent Trends in Copyright Law; Relevant Technologies; Emerging Business Models*, 20 Loy. L.A. Ent. L.J. 217, 239 (2000). The Internet was originally created in 1969 as an experimental project called ARPANET. Its purpose was to link the computer networks of the military, defense contractors, and university laboratories conducting defense-related research. See *id.*

4. See Dickinson, *supra* note 2.

5. See *id.*

6. "The Internet is 'a global electronic network, consisting of smaller, interconnected networks, which allows millions of computers to exchange information over telephone wires, dedicated data cables, and wireless links. The Internet links PCs by means of servers, which run specialized operating systems and applications designed for servicing a network environment.'" Universal Studios, Inc. v. Reimerdes, 111 F. Supp. 2d 294, 306 (S.D.N.Y.).

7. See Michael B. Rutner, *The Ascap Licensing Model and the Internet: A Potential Solution to High-Tech Copyright Infringement*, 39 B.C. L. Rev. 1061, 1069 (1998).

industry has suffered a great deal from copyright infringement on the Internet.⁸ Internet Service Providers ("ISPs")⁹ and services such as Napster¹⁰ are being blamed for most of this piracy. I will refer to Napster as an ISP even though a recent court decision said Napster plays a more active role in facilitating file-sharing than an ISP.¹¹ Theories of Third Party Liability for Infringement can apply to both and will therefore be the focus.

This is not a problem that can be isolated in a single country, its reach has no boundaries.¹² Because of the ease and speed of the Internet, piracy over the Internet crosses borders more freely than any other type of commerce or crime.¹³ The copyright holder may very likely be in one country, the violator located in another and the ISP in yet another. Copyright infringement on the Internet is a global problem that begs for global solutions.¹⁴

It is almost impossible to regulate or enforce a crime governed by so many different laws and that crosses many jurisdictions in the process.¹⁵ The music industry is appealing to the courts and the legislature to do something about copyright infringement.¹⁶ Shared information contributes to the growth of a nation's intellectual property and the lack of access to copyrighted material impinges on that basic principle.¹⁷ "Limiting access to the works by means of technological gates and digital envelopes creates a risk of establishing a climate in which only those who pay will benefit from creative

8. See *Reimerdes*, 111 F. Supp.2d at 306. The Recording Industry Association of America reports estimated losses of \$22 billion to the U.S. copyright industries worldwide from piracy. "These losses mean lost income for creative Americans – authors and composers – as well as lost jobs, revenues and foreign royalties for American workers and industry." *Id.*

9. "An ISP is a company or service that connects subscribing users to the Internet, usually in exchange for subscription fees or as part of a company or non-profit organization (e.g., educational institutions, government offices). Each ISP contains a group of users who subscribe to its particular system." Rutner, *supra* note 7, at 1067. See also 17 U.S.C. § 512(k). It defines a service provider as "a provider of online services or network access, or the operator of facilities therefor, and includes an entity offering the transmission, routing, or providing of connections for digital online communications, between or among points specified by a user, of material of the user's choosing, without modification to the content of the material as sent or received." *Id.*

10. *Recording Industry Sues Music Start-up*, CNET, available at <http://news.cnet.com/news/0-1005-202-1485841.html>. (Dec. 7, 1999).

11. See *A&M Records, Inc. v. Napster, Inc.* 114 F. Supp. 2d 896, 919 (N.D. Cal. 2000). The court said that Napster is not an Internet Service Provider because it does not act as a mere conduit for the transfer of files. [The merits of this claim will not be argued in this Note].

12. See Rutner, *supra* note 7, at 1069. "Internet Transmission has been global since the early 1990's." *Id.* at 1068.

13. See *id.* at 1069.

14. See Rutner, *supra* note 7, at 1069.

15. See *id.* Copyright laws generally do not extend beyond the source country's jurisdictional boundaries, unless by international treaty. See *id.*

16. See *id.*

17. See Sylva, *supra* note 3, at 229.

works.”¹⁸ A balance needs to be struck between ensuring that consumers have easy access to music without imposing unreasonable burdens on the technology and still ensuring that the music industry receives the incentive it needs to continue creating new music.

“Copyright provides essential incentives for authors and artists to develop creative new works by ensuring their rights will be respected as they make their works available on-line.”¹⁹ International treaties play a vital role in setting standards to protect copyrights. The two most recent treaties that attempt to do this are the WIPO Internet Treaties.²⁰ The treaties provide protection to domestic works abroad and give authors the exclusive right to authorize their works for availability over the Internet.²¹ The treaties cannot be effective to combat Internet piracy in the music industry unless every country that has Internet access follows the standards set out in the WIPO Internet Treaties. Even with ratification, the treaties still fall short because they lack enforcement standards. The violators not only have to be identified, the proper jurisdiction of law also has to be determined.²² International treaties will clearly provide important standards to protect the music industry, but copyright holders must do everything possible to prevent an infringement in the first place.

The high-speed changes in technology will not allow the music industry to rely on treaties that take years to go into effect, or court decisions that may take just as long and are even more unpredictable. The music industry needs to supplement governments’ intervention by self imposing mandates to prevent infringement. Shutting down ISP’s through court action will not stop the piracy.²³ The music industry must protect itself by implementing prevention devices before their work reaches the international market.

Part II of this Note familiarizes the reader with the problem of copyright infringement over the Internet, specifically in the music industry. It proceeds to discuss existing copyright laws in the United States, Japan, and Great Britain. It further considers the dilemma faced by ISP’s and provides reasons why a courtroom is not the proper battleground. Part III briefly chronicles international copyright protection but focuses on the most recent international treaties, the WIPO Internet Treaties. The major relevant provisions of each

18. *Id.*

19. *WIPO Copyright Treaty: What is it and Why it Was Imperative for the U.S. to Ratify the Treaty*, available at http://www.bsa.org/policy/copyright/wipo_new.html. (Sept. 5, 2000).

20. See *World Intellectual Property Organization Web Page*, available at <http://www.wipo.org/>.

21. See Wendy M. Pollack, Note, *Tuning In: The Future of Copyright Protection for Online Music in the Digital Millennium*, 68 *Fordham L. Rev.* 2445, 2463 (2000).

22. See Rutner, *supra* note 7, at 1069.

23. See Rutner, *supra* note 7, 1070. “Individual infringers often do not have enough assets to make legal action worthwhile. [M]ost infringing parties are not large corporations, but rather individual copies. Consequently, a copyright holder is often left uncompensated for numerous infringements of his or her copyrights.” *Id.*

treaty are addressed. Part IV analyzes the ratification and enforcement problems that arise with relying on international treaties to fight copyright infringement over the Internet, and provides reasons why international treaties should never mandate global enforcement mechanisms. Part V examines possible solutions that copyright holders should use to fight the piracy and suggests that self imposed mandates are the best way to safeguard copyrights in the global environment of the Internet. Part VI concludes the Note by proposing that international treaties should never mandate global enforcement mechanisms for copyright infringement because that should be determined by the societal needs of individual countries. Finally, the Note suggests that the music industry is responsible for protecting its work and should self impose mandates for technical protection of digital music.

II. THE INTERNET, THE MUSIC INDUSTRY AND COPYRIGHT INFRINGEMENT

A. *Generally*

It has been argued that copyright law does not make sense in the Internet environment because of the ease of copying and the great difficulty of detecting infringement on the Internet.²⁴ On the other side of the argument are claims that even the most routine functions such as forwarding e-mail and browsing web pages are technical infringements under many country's copyright laws.²⁵ "Obtaining copyright protection for materials requires very little effort. Avoiding infringement is the most challenging task."²⁶

Copyright is a form of protection provided by law. It is defined as a "statutory protection of an artist's or writer's work, giving the creator (or the holder of the copyright) the right to regulate the publication, multiplication, or use of the copyrighted material for a certain period of time. It is an incorporeal right; i.e., a right to something intangible...."²⁷ The ease of which digital music can be accessed and infringed over the Internet threatens the benefits of both the music industry and consumers. Recent lawsuits against ISP's have threatened to restrict advances in technologies and hamper creative works by artists.

Retrieving sound recordings via the Internet is relatively easy, given the right equipment. The technology has already been created and the devices can be purchased at your local computer store. Copyrighted music can be downloaded or uploaded on the Internet. An author or copyright holder can upload the material in order to reach a broad range of users, or a non-copyright

24. See Lee, *supra* note 1, at 77-78.

25. See *id.*

26. *Id.* at 78.

27. Gilbert Law Summaries Pocket Size Law Dictionary 65 (1997).

holder who owns a copy of the work can also upload the material.²⁸ The music is then downloaded by anyone who has access to the Internet and the right technical devices.²⁹ If the work is protected and not uploaded by the copyright holder, a person who downloads the material may be liable for copyright infringement.³⁰

Information on the Internet that is downloaded is copied material, but that may not necessarily mean an infringement of copyright has occurred. A claim of infringement has to be based upon the copyright owner's exclusive rights of reproduction. This right is defined differently among national copyright laws. Liability stems from the fixation of materials on a computer's Random Access Memory when information is viewed on the Internet.³¹ "However, if the copyright owner places his/her work on the Internet, it could be inferred that the owner expects other Internet users to read and download the copyrighted work."³²

"Digital compression technology makes it possible to store audio recordings in a digital format that uses less memory and may be uploaded and downloaded over the Internet."³³ Compression technology allows data that occupies a large amount of space to be compressed into files that can be easily transferred across the Internet and downloaded onto any computer.³⁴ This process appeals to consumers of music who want free access to popular music. A common format used to store the compressed audio files is MP3.³⁵ MP3 files are small and they require little time to transfer information.³⁶ Due to the size of the files and transfer time, they are well suited for transmission over the Internet.³⁷

MP3 is an international format with no ties to a single company.³⁸ This format has become internationally popular, replacing "sex" as the most

28. See Pollack, *supra* note 21, at 2448. Copyright holders typically upload material to reach a broad audience or to promote a forthcoming album. See *id.*

29. See *id.*

30. See *id.* "Piracy is practiced both by individual consumers making copies for their own use, and by 'professionals' who seek to make content available on a wide scale." *Id.*

31. See Douglas Reid Weimer, CRS Report for Congress, *The Copyright Doctrine of Fair Use and the Internet: Caselaw 3* (March 30, 2000).

32. *Id.*

33. *Napster Inc.*, 114 F. Supp.2d at 901.

34. See Pollack, *supra* note 21, at 2449. "These files retain CD-quality sound no matter how many copies are made, and can be played through computer speakers any time the listener wishes to hear them." *Id.*

35. See *id.* "Free MP3 software applications available on the Internet allow users to upload songs from their own CD collections by 'ripping' the files from their CDs and encoding them in MP3 format...." *Id.* at 2450.

36. See *id.* at 2449.

37. See *id.*

38. See Pollack, *supra* note 21, at 2485.

searched word on the Internet.³⁹ MP3 files can be acquired by either downloading audio recordings that are already converted by using an ISP or by using "ripping" software to copy an audio compact disc directly onto a computer hard-drive.⁴⁰ Laws have not had time to catch up with compression technology because it has only been available since 300-MHz processors blasted into the market.⁴¹ The music industry's outrage stems from the fact that ISP's, such as Napster, enable copying and distribution of copyrighted music that has not been authorized.⁴² MP3 offers no protection against unauthorized copying, use, or distribution of music unless it contains a copyright management system.⁴³

B. Existing Laws

An "International Copyright" does not exist.⁴⁴ Copyright protection throughout the world depends largely upon the laws of the particular country where the infringement takes place.⁴⁵ The common practice for those who want to protect their work is to register for protection anywhere it is used, sold, manufactured, or licensed.⁴⁶ This practice is very expensive and usually elusive due to policing and enforcement problems.⁴⁷ A greater problem has developed with the advent of the Internet. It is impossible to predict everywhere digital music will be uploaded or downloaded. A copyright is not expected to understand or monitor copyright laws throughout the world. International treaties and conventions have tried to extend copyright protection in simplified form.⁴⁸ Such treaties fall short of standardizing protection to

39. See *id.* at 2446. MP3 is more likely to be used by unsigned bands who want to get their music to a wide audience. See *id.* at 2450.

40. See *Napster, Inc.*, 114 F.Supp.2d at 901. "ripping software compresses the millions of bytes of information on a typical CD into a smaller MP3 file that requires a fraction of the storage space". *Id.*

41. See Pollack, *supra* note 21, at 2450.

42. See *Riaa/current issues*, available at <http://www.riaa.com/Napster.cfm>. (Sept. 20, 2000).

43. See Pollack, *supra* note 21, at 2450. "Digital rights management is an industry term used to describe the attempt by content providers of copyrighted materials to preserve authorship of a digital work." *Id.*

44. See U.S. Copyright Office, Copyright basics (2000).

45. See *id.* See also Lee, *supra* note 1, at 76. In Germany, the only claim that can be made against a German in respect of an unlawful act perpetrated abroad are those that would be actionable under German law. See *id.* at 244. And this also states that the EU Commission and the U.S. take different views in describing temporary copying of a document from the Internet into a PC. The U.S. describes it as reproduction while it regards keeping data available as dissemination. The EU advocates a right to digital distribution. See *id.*

46. See Lee, *supra* note 1, at 285.

47. See *id.*

48. See U.S. Copyright Office, *supra* note 44.

ensure universal protection and enforcement because it is impossible for them to be comprehensive throughout the world.

The courts in many countries have attempted to get involved with the issue of copyright infringement of music on the Internet, with disappointing results for everyone involved.⁴⁹ This issue is more properly the domain of the legislature than that of the court. When the courts get involved it only makes international standards harder to apply.⁵⁰ Countries talk to one another in efforts to balance global problems and to develop solutions. There are a multitude of examples of international conferences and communications between leaders of countries on global issues.⁵¹ Courts of one country do not discuss the global impact of decisions with courts of other countries. Legislation can be implemented to combat global problems, court decisions only affect its respective jurisdictional boundaries. Even wide sweeping decisions, such as those made by the United States Supreme Court, only affect the jurisdiction of the United States. The Internet has presented new problems and the courts have not had time to catch up. Even though legislation implemented in a particular country generally only affects that particular country, the purpose of legislation often has a global reach.⁵² International standards, such as the WIPO Internet Treaties, cannot be implemented without national legislation.⁵³

1. *United States*

There is no state copyright law in the United States; it is governed exclusively by Title 17 of the U.S. Code.⁵⁴ The limitations of liability relating to material online are set out in § 512.⁵⁵ Congress has enacted legislation to protect copyrights from infringement over the Internet.⁵⁶ This is an ongoing process that requires attention now and well into the future. Sound recordings

49. See generally *Napster, Inc.*, 114 F.Supp.2d 896. The court defers to the legislature. See *id.*

50. See Rutner, *supra* note 7, at 1070.

51. See generally WIPO Webpage, *supra* note 20. (General information and lists of international conventions and treaties).

52. See Rutner, *supra* note 7, at 1070.

53. See WIPO Webpage, *supra* note 20.

54. See Lee, *supra* note 1, at 9.

55. See 17 USCS §512 (2000). (provisions scattered throughout code).

56. See H.R. 3456, 106th Cong. (1999). Known as the "Digital Theft Deterrence and Copyright Damages Improvement Act of 1999," this act amended the Federal copyright law with respect to the statutory damages available for copyright infringement. See *id.* See also, Pub. L. No. 105-304, 112 Stat. 2860 (Oct. 28, 1998). Known as the "Digital Millennium Copyright Act of 1998," this act implements two 1996 World Intellectual Property Organization Treaties: The WIPO Internet Treaties. See *id.* See also U.S. Copyright Office, Copyright Legislation, visited September 27, 2000, available at <http://lcweb.loc.gov/copyright/legislation/archive/>. (This site provides developments in copyright legislation during the 105th Congress and the 106th Congress).

were given protection for the first time in 1971, but public performance rights were not protected until digital technology made the change necessary in 1995.⁵⁷ The United States Constitution grants Congress the enumerated power to give exclusive copyrights to authors, inventors and creators through Article I, Section 8, Clause 8.⁵⁸

The fair use doctrine in copyright law was codified in the Copyright Act of 1976.⁵⁹ The doctrine sets out four criteria to determine if a use is an infringing use: "1) the amount and character of the use; 2) the nature of the copyrighted work; 3) the amount copied in relation to the whole copyrighted work; and 4) the effect of the copying on the potential market for the copyrighted work."⁶⁰ Since American courts have treated the Internet as a form of communication, the four fair use factors are generally applied to determine if an infringement has occurred over the Internet.⁶¹ Therefore, although copyright owners possess various exclusive ownership rights, under certain circumstances, the fair use doctrine permits the unauthorized use of copyrighted works.⁶² It is unclear whether the fair use doctrine applies to online music infringement.⁶³ Although the fair use doctrine can be a defense to some copyright infringements, the doctrine probably will not work as a defense to copyright infringements of digital music because of the verbatim reproduction of the copies.⁶⁴

The Trade-Related Aspects of Intellectual Property Rights ("TRIPS") Agreement was implemented in the United States in 1994 when President Clinton signed the Uruguay Round Agreements Act.⁶⁵ This substantively altered copyright law in the United States because it restored copyright protection to foreign works which are protected by their "source" country but

57. See Arlene Bielefield & Lawrence Cheeseman, *Technology and Copyright Law: A Guidebook for the Library, Research, and Teaching Professions*, 29 (Neal-Schuman Publishers, Inc. 1997).

58. U.S. CONST. Art. I, § 8, cl. 8. "To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."

59. See Weimer, *supra* note 31, at 2. "Fair Use means that a copyright owner's exclusive rights are technically violated, but other circumstances justify the violation." *Id.* See also Lee, *supra* note 1, at 72.

60. Weimer, *supra* note 31, at 2.

61. See *id.*

62. See *id.*

63. See Pollack, *supra* note 21, at 2459. "The answer may [d]epend on whether or not an entire song is copied, and most likely turns on whether the use is a private or commercial one." *Id.*

64. See Stacy Snowman & David H. Bernstein, *Protecting Your Intellectual Property* 193, (Practising Law Institute 1997).

65. See *id.* at 147.

which are in the public domain⁶⁶ in the United States.⁶⁷ The Restored Work⁶⁸ is entitled to all the remedies of the United States Copyright Act.⁶⁹ The Act included a single exception to immediate enforcement for reliance parties,⁷⁰ persons who have relied in good faith on the public domain status of the work.⁷¹ In the music section of the Act, compulsory licensing is required.⁷²

The Digital Performance Right in Sound Recordings Act was enacted in 1995.⁷³ This act requires a party to consider both the record company's rights in the recording as well as the underlying music publisher's public performance or distribution rights prior to making a digital transmission of a sound recording.⁷⁴ An interactive service is one of three types of digital performances distinguished in the Act. It defines an interactive service as "one that enables a member of the public to receive, on request, a transmission of a particular sound recording chosen by or on behalf of the recipient."⁷⁵ The Act grants a public performance right to copyright holders of sound recordings when they are digitally performed by an interactive service.⁷⁶ The Act helps to ensure that copyright owners are compensated for distribution of their work by digital transmission.⁷⁷ This provides only limited protection because the only way this can work is if the user is downloading a song from a company that employs a compression technology.⁷⁸

In the United States, copyright protection applies regardless of the nationality or domicile of the author.⁷⁹ The protection also applies if one or more of the authors of the work is a national or domiciliary of the United States⁸⁰ The United States copyright law only offered protection to United

66. *Id.*

67. *See id.* at 147.

68. "The Restored Work will be that remainder of the copyright that the work would have had in the United States, but for the loss of the U.S. copyright." *Id.* at 148.

69. *See id.*

70. *Id.* To qualify as a reliance party you must: "a. used the Restored Work both before and after January 1, 1996; and b. made or acquired copies of the Restored Work before January 1, 1996; c. bought or acquired at any time an interest in a derivative work based upon the Restored Work; or, d. otherwise acquired significant assets (multiple copyrights, bulk assignment, inventory) from another Reliance Party." *Id.*

71. *See id.*

72. *See id.*

73. *See* Pub. L. No. 104-39 (1995).

74. *See id.*

75. *Id.*

76. *See* Pollack, *supra* note 21, at 2454. For example, if a user requests a song from an Internet site that is licensed to release a copy for a fee, the Internet site pays a subscription fee to the record company for allowing that user access. *See id.*

77. *See id.* at 2455.

78. *See id.*

79. *See* U.S. Copyright Office, *supra* note 44.

80. *Id.*

States citizens and residents until 1891.⁸¹ Copyright law in the United States has evolved from a bare bones structure of protection of domestic copyrights, to an intricate system that includes protection for foreign works.

The Digital Millennium Copyright Act of 1998 (DMCA)⁸² implements the WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty in Title I of the Act.⁸³ The Act also has important domestic provisions. Title II, the "Online Copyright Infringement Liability Limitation Act," creates limitations on the liability of online service providers for copyright infringement when engaging in certain types of activities.⁸⁴ The crucial part of this is that it provides "safe harbors" for ISPs under four sets of circumstances.⁸⁵ The Act also includes three other articles that address other significant copyright-related issues.⁸⁶ By providing "safe harbors", "title II of the DMCA forces copyright owners to target the actual infringers, those individuals who upload songs against an artist's will, instead of giving the owners a liability catch-all in the ISPs."⁸⁷ However, this is not a saving grace for ISPs. There are gaps in the Act that may expose ISPs to liability, and since ISPs generally have "deep pockets", the costs of litigation may be justified for copyright holders.⁸⁸

81. See Bielefield, *supra* note 57, at 26.

82. Pub. L. No. 105-304, 112 Stat. 2860 (Oct. 28, 1998).

83. See *id.* See also, Susan A. Mort, Article, *The WTO, WIPO, & the Internet: Confronting the Borders of copyright and Neighboring Rights*, 8 Fordham Intellectual Property, Media & Ent. L.J. 173, 175 (1997). (Although the United States signed the Treaties, it was not among the initial signatories because of limitations in the delegation's negotiating authority).

84. See *id.*

85. See Pollack, *supra* note 21, at 2465. "First, section 512(a) limits the liability of ISPs in transitory digital network communications as long as the ISP is acting automatically with respect to the user and the material.... Second, section 512(b) removes liability for system caching, which is the practice of temporarily storing copies of popular Internet material locally in the ISP's server so that the ISP's users can access that material more readily.... The third limitation on liability is for information residing on systems or networks at the direction of users... Lastly, section 512(d) provides a safe harbor for information location tools. This section applies to hyperlinks, online directories, search engines, and other location tools of that nature." *Id.*

86. See Mort, *supra* note 83, at 176. See also The Digital Millennium Copyright Act of 1998, U.S. Copyright Office Summary (December 1998). Title III, the "Computer Maintenance Competition Assurance Act," creates an exemption for making a copy of a computer program by activating a computer for purposes of maintenance or repair. Title IV contains six miscellaneous provisions, relating to the functions of the Copyright Office, distance education, the exceptions in the Copyright Act for libraries and for making ephemeral recordings, "webcasting" of sound recordings on the Internet, and the applicability of collective bargaining agreement obligations in the case of transfers of rights in motion pictures. Title V, the "Vessel Hull Design Protection Act," creates a new form of protection for the design of vessel hulls. See *id.*

87. Pollack, *supra* note 21, at 2466.

88. See Sylva, *supra* note 3, at 225.

2. *Japan*

Japan's copyright system has its origins of development in 1869 when it enacted the Publishing Ordinance, which provided for protection of copyright and regulation on publishers.⁸⁹ What is now referred to as the Old Copyright Law was enacted in 1899 and is said to be "the first modern copyright law of Japan consistent with the international standard of copyright protections."⁹⁰ Japan has paid attention to developments and advances in technology by revising their copyright law on several occasions. International concerns of copyright protection prompted Japan to reform its copyright system thoroughly and in 1971 the new Copyright Law was enacted.⁹¹ Several amendments have since taken place.⁹²

Japan's Copyright Law⁹³ provides protection to,

"(i) works of Japanese nationals...; (ii) works first published in this country, including those first published abroad and published in this country within 30 days of that first publication; (iii) works not falling within those mentioned in the preceding two items, to which Japan has the obligation to grant protection under an international treaty."⁹⁴

Section 58 of this Act grants copyright protection under the Berne Convention.⁹⁵ When the right expires in the country of origin, it also expires in Japan.⁹⁶ The Act grants both moral and economic rights.⁹⁷ Economic rights

89. See *History of Copyright System in Japan*, visited October 4, 2000, available at http://www.cric.or.jp/cric_e/ecsij/csij2.html.

90. *Id.*

91. See *id.*

92. See *id.* Recent revisions include a 1999 amendment to comply with the WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty. See *id.* See also, The Japan Times, *Law for a New Age*, Sept. 13, 2000. "Copyright law has been amended almost every year on an ad hoc basis since it took effect in 1971 in Japan." *Id.*

93. Law No. 48, Copyright Law of Japan, (Amended through May 12, 1995). (English translation). The purpose statement of the Law states: "The purpose of this Law is, by providing for the rights of authors and the rights neighboring thereon with respect to works as well as performances, phonograms, broadcasts and wire diffusions, to secure the protection of the rights of authors, etc., having regard to a just and fair exploitation of these cultural products, and thereby to contribute to the development of culture." *Id.*

94. *Id.* (Section 2, Scope of Application, Art. 6).

95. See Lee, *supra* note 1, at 271.

96. See *id.*

97. See *id.* at 270. Moral rights are not assignable, and therefore expire upon death of the creator. "The creator has the rights to govern release of the work, to be identified as the creator of the work, and to dictate any alteration in content of the work." *Id.* Economic rights have a different purpose. "[I]t is common practice to assign, exercise, pledge, and transfer

prevent the unauthorized copying of works and are therefore the focus of the music industry when dealing with digital music.⁹⁸

Japan has ratified the WIPO Copyright Treaty, but as of July 15, 2000, it had not ratified the WIPO Performances and Phonograms Treaty.⁹⁹ The current system of copyright law in Japan is based on analog technology, not the new digital.¹⁰⁰ In June 1999, Japan amended its copyright law to prohibit anti-circumvention devices.¹⁰¹ Unlike the WIPO Internet Treaties and United States copyright law, Japan's copyright law does not regulate copies made at home or in libraries for limited private use.¹⁰² Japan has taken steps to implement the WIPO Internet treaties.¹⁰³ WIPO is working closely with Japan to help them meet these goals.¹⁰⁴

The proliferation of karaoke in Japan exposed Japan to outrage over copyright infringement of musical works. A 1980 claim by the Japanese Association of Music Composers and Players against a karaoke¹⁰⁵ establishment demonstrated Japan's commitment to protecting copyrights.¹⁰⁶ The Fukuoka High Court found that the karaoke devices were "provided on a commercial basis to draw in customers," therefore royalties should be paid.¹⁰⁷

3. Great Britain

Prior to the first national copyright statute, authors who wanted to protect their work had to be members of the Company of Stationery.¹⁰⁸ A letters patent was granted only on rare occasions to those who were politically well connected.¹⁰⁹ This practice forced many great authors to sell their manuscripts outright to a member of the company for a very small amount.¹¹⁰

economic rights." *Id.*

98. *See id.* at 271.

99. *See Actions in Respect of Treaties Administered by WIPO Not Yet in Force*, available at <http://www.wipo.int/treaties/ip/index.html>.

100. *See Law for a New Age*, THE JAPAN TIMES, Sept. 13, 2000.

101. *See id.*

102. *See id.*

103. *See id.*

104. *See WIPO to Beef up Japanese Internet address arbitrators*, JAPAN COMPUTER INDUSTRY SCAN, Sept. 11, 2000. WIPO recently doubled the number of Japanese arbitrators in order to handle future disputes on Internet domain names. *Id.*

105. *See Roderick Seeman, Karaoke to Pay Royalties*, THE JAPAN LAWLETTER (August 1984). "Karaoke devices are basically 8-track stereo cartridge players which take the music from popular hits and put them on tape without the professional singers. Instead of the professional singers, the people using the microphone equipped with the device can sing to the accompaniment of the taped music." *Id.*

106. *See id.*

107. *See id.*

108. *See Bielefield and Cheeseman, supra* note 57, at 10.

109. *See id.*

110. *See id.*

The Statute of Queen Anne, which was passed in 1710, is the foundation for copyright law in both England and the United States.¹¹¹ This was the first time rights of an author were explicitly recognized.¹¹² The Copyright, Designs and Patents Act of 1988, which now includes several amendments, is the main copyright legislation in Great Britain today.¹¹³ European Community, "EC",¹¹⁴ Directives have guided the amendments of this Act.¹¹⁵ The European Union does not protect sound recordings under copyright law.¹¹⁶ A Directive was issued in 1992 to try and harmonize the protection of databases and create a *sui generis*¹¹⁷ form of protection.¹¹⁸

The question of placing liability for copyright infringement on the Internet on ISP's in Great Britain has been discussed but has not been implemented. The proposals that have been developed call for "clearly defined, tightly drawn exceptions to such liability on grounds of practicability."¹¹⁹ This clearly demonstrates the reluctance to place blame on ISP's and inhibit the Internet.

Great Britain was not a signatory on either of the WIPO Internet Treaties, nor did it ratify either.¹²⁰ Great Britain's absence from the international treaties does not mean it has abandoned copyright protection across international borders. The Copyright (Application to Other Countries) Order 1999¹²¹ is a Statutory Instrument that came into force on July 22, 1999.¹²² The Order sets out specifically to which countries the Copyright, Designs and Patents Act of 1988 applies. Countries who are given protection in respect to all works except broadcasts and cable programs include countries who are either parties to the Berne Copyright Convention, the Universal Copyright Convention or the Agreement establishing the World Trade

111. See *id.* at 10-11. "The full title of the act was 'A Bill for the Encouragement of Learning, by Vesting the Copies of Printed Books in the Authors or Purchasers of Such Copies, during the times therein mentioned.'" *Id.* at 11.

112. See *id.*

113. See *The Patent Office Web Page, Further information about UK and EU copyright legislation*, (visited October 18, 2000) <http://www.patent.gov.uk/dpolicy/furtinfo.html>.

114. Lee, *supra* note 1, at 271. (interestingly, there was no mention of copyright in the EC founding treaties).

115. See *id.*

116. See Dorothy Schrader, *Intellectual Property Protection for Databases at the International Level: Copyright and Sui Generis Forms of Protection*, CRS Report for Congress 5 (March 17, 1999).

117. Of its own kind or class, unique or peculiar. BLACK'S LAW DICTIONARY, (7th ed. 1998).

118. See Schrader, *supra* note 116, at 7.

119. Lee, *supra* note 1, at 244.

120. See Lee, *supra* note 1. See also, Mort, *supra*, note 83 (according to the terms of the Treaties, any WIPO member could sign on until December 31, 1997).

121. The Copyright (Application to Other Countries) Order, (1999) SI 1999/1751.

122. See *id.*

Organization, which includes the United States and Japan.¹²³ Countries who are given full protection for sound recordings include countries that are either parties to the Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organization, or are Member States of the European Community. Japan is included but the United States is not.¹²⁴

C. *Internet Service Providers*

Claims of copyright infringement over the Internet may be brought on many different levels. An infringement action might be brought against an ISP who provides copyrighted material at its site, a user who downloads the software, and maybe a network operator who allows transmission of the materials over its system.¹²⁵ The intricacy of the Internet makes the physical placement of information at any given time difficult. It is generally impossible to determine the path of communication.¹²⁶

ISP's are not ignoring the threat of being shut down. Many are taking steps to try and safeguard their service through their terms of use and copyright policies.¹²⁷ Although these steps are commendable to show the Providers' awareness of the problem, it is unlikely that they alone will stop copyright infringement over the Internet. ISP's are simply the easiest entities to identify and are therefore targets for lawsuits.

1. *Third Party Theories of Liability*

The easiest way to demonstrate the dilemma faced by ISP's is to view it through problems that have recently arisen in the United States. The three basic theories of copyright infringement are direct infringement, contributory infringement, and vicarious liability.¹²⁸ However, these are only theories used in the United States and therefore are not adaptable to other countries. These theories will do nothing to protect domestic work abroad, they are examined only to demonstrate the inherent problem faced in any jurisdiction in the United States. Contributory infringement and vicarious liability are the two

123. *See id.*

124. *See id.*

125. *See Lee, supra* note 1, at 200.

126. *See id.*

127. *See generally, Napster Copyright Policy*, (visited October 3, 2000) <http://www.napster.com/terms/>. (providing information on the basic privacy policies of Napster, Inc. and terms of use, which includes a form to fill out for claims of copyright infringement). In order to download the Napster software, a user must agree to Napster's copyright policy. The terms make the user responsible for any copyright infringement and warns the user that access to Napster will be cut off upon notification of such infringement. *See id.*

128. *See Pollack, supra* note 21, at 2455.

theories that apply to ISP's.¹²⁹ A theory of direct infringement is usually reserved for single infringers, and since one person is unlikely to have "deep pockets", copyright holders will likely sue an ISP.¹³⁰ The appeal of using third party liability theories, such as contributory infringement and vicarious liability, in the Internet environment stems from the fact that single direct infringers are difficult to identify.¹³¹

To prevail on a theory of contributory infringement, the copyright holder must show the following three things: "(1) a direct infringement occurred, (2) the defendant knew or had reason to know of the infringing activity, and (3) the defendant substantially participated in the infringement by inducing, causing, or materially contributing to its occurrence."¹³² It is hard to predict what kind of activity will meet the threshold of knowledge that is required to prevail on this theory.¹³³

Vicarious liability for copyright infringement¹³⁴ against ISPs is the other theory of liability that may be used. You must show that the ISP "(1) is in a position to supervise the infringing activity, and (2) has a financial stake in the infringing activity."¹³⁵ There are inherent problems in prevailing on such a claim. The first element may be dependent upon the user agreement provided by an ISP. If the agreement claims to be able to terminate a user's access at will, the element will probably be satisfied.¹³⁶ However, the agreement may not be that specific or clear enough to easily establish this element. The second element may be satisfied if an ISP charges any fees to download or if it receives advertising revenue.¹³⁷ This theory may apply to some legitimate ISPs, but it will not apply to ISPs that are providing access to digital music on a purely anonymous basis.¹³⁸

129. *See id.* at 2456. To prove direct infringement one must show "(1) he or she has a valid copyright, and (2) the defendant copied the work.... Infringement occurs even when only one copy of a work is made, for example, where a consumer reproduces a copy solely for private purposes." *Id.*

130. *See id.*

131. *See id.* at 2457.

132. *Id.* at 2456.

133. *See Sylva, supra* note 3, at 226.

134. "The common law doctrine of vicarious liability for copyright infringement imposes liability upon one party for the infringing actions of another party". Charles S. Wright, *Actual Versus Legal Control: Reading Vicarious Liability For Copyright Infringement into the Digital Millennium Copyright Act of 1998*, 75 Wash. L. Rev. 1005, 1008 (2000).

135. Pollack, *supra* note 21, at 2457.

136. *See Sylva, supra* note 3, at 225.

137. *See id.* at 225-226.

138. *See* Title 17 USC §512(a) stating: "(a) Transitory digital network communication – A service provider shall not be liable for monetary relief, or, except as provided in subsection (j), for injunctive or other equitable relief, for infringement of copyright by reason of the provider's transmitting, routing, or providing connections for, material through a system or network controlled or operated by or for the service provider, or by reason of the intermediate and transient storage of that material in the course of such transmitting, routing, or providing

2. *The Courtroom Should Not be a Battleground for Fighting Piracy*

Court cases are not consistent in finding liability and therefore have not produced a clear doctrinal rule.¹³⁹ Identifying an infringing party over the Internet is extremely difficult. The search usually leads to an ISP.¹⁴⁰ Many times an ISP may be unwilling to divulge its list of subscribers to track down the infringer.¹⁴¹ Even if the list is obtained, it probably consists of pseudonyms (also known as "handles"), and may not include real names or addresses.¹⁴² Evidence that an infringement occurred is hard to prove even if the identity of the suspected infringer is revealed.¹⁴³ Assuming that an infringer can even be identified, one major problem faced by copyright holders occurs when the infringer lives in a different country. The rights holder may have no choice but to have a judgment rendered in a foreign country. This allows even more control to be lost than if in the same jurisdiction because the copyright holder is now subjected to a foreign jurisdiction's control.

The music industry, namely the Recording Industry Association of America ("RIAA")¹⁴⁴, has shut down more than 2000 pirate sites in a little over two years.¹⁴⁵ The court room battles that resulted in these shut downs occurred after the infringer who held a copy work was identified; however, the technology they used could not find the infringer who posted the unauthorized files in the first place.¹⁴⁶ Courts should not decide the scope of copyright protection. This is an unwarranted form of judicial legislation. The United States Supreme Court iterated this premise when it stated, "sound policy, as well as history, supports our consistent deference to Congress when major technological innovations alter the market for copyrighted materials. Congress has the constitutional authority and the institutional ability to accommodate fully the varied permutations of competing interests that are inevitably implicated by such new technology."¹⁴⁷ A New York District Court has

connections . . ." *Id.*

139. *See generally* Pollack, *supra* note 21, at 2457-2458. (provides examples of the various court decisions).

140. *See* Rutner, *supra* note 7, at 1067. To enforce copyright protection, the holder has to locate the source of the infringing transmission and an ISP is usually that source. *See id.*

141. *See id.*

142. *See id.* There is no requirement that ISPs divulge its lists by request. *See id.*

143. *See id.* This is a problem because user's accounts are usually shared with other people and anyone with access to the account could be the infringer. *See id.*

144. RIAA, *supra* note 42. (RIAA is a group of recording artists).

145. *See* Pollack, *supra* note 21, at 2469.

146. *See id.* The RIAA uses Web crawler technology that conducts daily searches for unauthorized musical material. *See id.*

147. *Sony Corp. of America v. Universal City Studios, Inc.* 464 U.S. 417, 431 (1984).

upheld this premise in *Universal Studios, Inc. v. Reimerdes*.¹⁴⁸ In that case, the court stated, "clashes of competing interests like this are resolved by Congress."¹⁴⁹

Some commentators believe that the courts are crucial to saving music copyrights.¹⁵⁰ They do concede that the courts have exhibited sympathy toward both sides of the copyright balance, making the decisions highly fact specific.¹⁵¹ The problem with using the courts is that they are slow, unpredictable, and not uniform, especially from an international point of view. Ever changing technology will bring issues of first impression before the court in record numbers. The court decisions will not fix the problem because copycat software or modified software will constantly spring up. In cases where temporary restraining orders were granted against allegedly pirating sites, the sites disappeared.¹⁵² The Internet reaches the global community, and without uniform international standards, the problem will reach the United States through another country.

Supporters of ISPs base their right of operation on the fact that ISPs serve as a means to share information.¹⁵³ The opposition claims that companies like Napster encourage misconduct.¹⁵⁴ Even if the music industry prevails in shutting down a single company like Napster through court action, there will be more copycat software to replace it.¹⁵⁵ ISPs should not be held responsible for providing the means by which copyright infringement takes place when it is the individual violator's fault for choosing to use the information in the wrong way.¹⁵⁶ It is not fair to put the liability on the service provider. Liability should be placed on the violator not the provider.

148. See *Reimerdes*, *supra* note 6, at 346.

149. *Id.*

150. See Pollack, *supra* note 21, at 2483.

151. See *id.* "Thus far, courts have exhibited sympathy toward both sides of the copyright balance, which means that ultimately cases will turn on their individual facts." *Id.*

152. See *id.* at 2469. File transfer protocol technology allows Web pages to be easily obscured and spring up in different places daily. See *id.*

153. See *id.* Napster claims that it allows a "substantial non-infringing use" because it allows legitimate music reading of unknown bands and other unprotected music. See *id.* at 2475.

154. See *id.* at 2475. The RIAA claims that Napster is commercially benefiting from copyright infringement without touching the stolen goods. See *id.*

155. See Rutner, *supra* note 7. (for a general discussion of software).

156. See 17, USC 101, The Berne Convention Implementation Act of 1988. (This Act Amended Title 17 of the United States Code). Berne places the liability on the actual infringing party, not the ISP. See *id.*

III. INTERNATIONAL TREATIES AFFECTING THE MUSIC INDUSTRY ON THE INTERNET

A. *Brief History*

The Berne Convention for the Protection of Literary and Artistic Works was created in 1886¹⁵⁷ and set a minimum standard of copyright protection for its contracting parties.¹⁵⁸ This treaty, like the WIPO Internet Treaties, establishes a system whereby member states implement minimum standards that ensure the operation of the Berne Convention through adoption of their domestic laws.¹⁵⁹ The United States revised its copyright law in 1976 to bring the United States more in line with the copyright laws of other countries so it could eventually join the Berne Convention.¹⁶⁰ It was not until 1988 that the Berne Convention was implemented in the United States.¹⁶¹

The World Intellectual Property Organization (WIPO) is an international body, under the United Nations, responsible for promoting the protection of intellectual property rights throughout the world.¹⁶² WIPO was created in 1967 to promote the protection of intellectual property worldwide. Countries, including the U.S., look to WIPO to create treaties that establish a basic standard of intellectual property protection worldwide.¹⁶³

In December 1996, the international community adopted two treaties created by WIPO, the WIPO Copyright Treaty¹⁶⁴ and the WIPO Performances and Phonograms Treaty, collectively called the WIPO Internet treaties.¹⁶⁵ Although these treaties are of vital importance to the music industry for combating Internet piracy, the treaties are not conclusive in stopping the piracy. As of July 2000, only 19 of the required 30 countries have ratified the WIPO Copyright treaty¹⁶⁶ and only 16 of the required 30 countries have ratified the WIPO Performances and Phonograms treaty.¹⁶⁷

157. Robert M. Blunt, Comment, *Bootlegs and Imports: Seeking Effective International Enforcement of Copyright Protection for Unauthorized Musical Recordings*, 22 Hous. J. Int'l. L. 169, 177 (Fall 1999). Berne is the oldest multilateral copyright convention. *See id.*

158. *See* Mort, *supra* note 83, at 183.

159. *See* Blunt, *supra* note 157, at 178.

160. *See* Bielefield and Cheeseman, *supra* note 57, at 26-27. The United States was not a signatory to the Berne Convention in 1887 because it could not meet the convention's standards. *See id.* at 26.

161. *See* The Berne Convention Implementation Act of 1988, *supra* note 156. This Act amended title 17 of the United States Code. *See id.*

162. *See id.*

163. *See id.*

164. WIPO Webpage, *supra* note 20.

165. *See id.*

166. WIPO Copyright Treaty, December 20, 1996.

167. *See* WIPO Performances and Phonograms Treaty, December 20, 1996.

The ability to reproduce a physical copy of a music file or re-transmit it to millions of others via the Internet through digital technology gave rise to a diplomatic conference in Geneva in December 1996.¹⁶⁸ The conference negotiated, agreed upon and adopted the WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty.¹⁶⁹ Since traditional copyright principles are based upon national borders, the Internet made it necessary to adopt new standards of Copyright protection if international treaties were going to be followed for Copyright infringement protection.¹⁷⁰ The WIPO Internet Treaties are the first international treaties that deal specifically with copyright infringement over the Internet.¹⁷¹

B. *WIPO Internet Treaties*

The WIPO Internet Treaties were not swept into adoption at the Diplomatic Conference. The debate followed two general paths. On one side of the aisle was the group referred to as "copyright purists."¹⁷² The "copyright purists" supported the extension of traditional copyright principles to digital technologies.¹⁷³ The other side consisted of the group called the "innovators."¹⁷⁴ The "innovators" championed the loose application or modification of current theory.¹⁷⁵ The lobbying efforts of each group, and the influence each side held at the Conference, shaped the adopted versions of the treaties. By ratifying the WIPO Internet treaties, the contracting parties provide a standard level of protection for nationals of the other contracting parties as they do for their own citizens.¹⁷⁶ Some countries already provide these standards in their local Copyright laws, but for those countries that do not, this is a vital step in protecting copyrights abroad.

The WIPO Internet Treaties were adopted to address the problems of copyright infringement on the Internet. Both treaties recognize the right of distribution of copies, but they allow national legislation to determine the territorial effect of the exhaustion of rights with the first sale of a copy.¹⁷⁷ In agreed statements to both treaties, it was agreed that, "[i]t is understood that

168. See e-mail from Jorgen Blomqvist, Director, Copyright Law Division, World Intellectual Property Organization (September 27, 2000), on file with author.

169. See *id.*

170. See *id.*

171. See *id.*

172. See Mort, *supra* note 83, at 192. "The purists believe 'that copyright laws provide the best protection for the upcoming boom in electronic commerce and information transfer'. Without stronger protections, they argue, there will be no incentive to develop new material to sate the appetite of the emerging global-information infrastructure." *Id.*

173. See *id.*

174. See *id.* at 193.

175. See *id.* at 194.

176. See *id.*

177. See WIPO Press Release No. 106, Geneva (December 20, 1996), on file with author.

the storage of a protected work in digital form in an electronic medium constitutes a reproduction within the meaning of Article 9 of the Berne Convention."¹⁷⁸ The treaties give the copyright holder the ability to decide whether their work will go onto the Internet at the beginning of the process.¹⁷⁹

1. *WIPO Copyright Treaty*

On December 20, 1996, the international community adopted the WIPO Copyright Treaty.¹⁸⁰ The preamble to the Treaty states:

Desiring to develop and maintain the protection of the rights of authors in their literary and artistic works in a manner as effective and uniform as possible, [*r*]ecognizing the need to introduce new international rules and clarify the interpretation of certain existing rules in order to provide adequate solutions to the questions raised by new economic, social, cultural and technological developments, [*r*]ecognizing the profound impact of the development and convergence of information and communication technologies on the creation and use of literary and artistic works, [*e*]mphasizing the outstanding significance of copyright protection as an incentive for literary and artistic creation, [*r*]ecognizing the need to maintain a balance between the rights of authors and the larger public interest, particularly education, research and access to information, as reflected in the Berne Convention.¹⁸¹

This Treaty "supplements the Berne Convention by providing copyright protection while considering the need for the free flow of information."¹⁸² The drafters of the Treaty were careful not to take away any of the existing provisions Berne had established.¹⁸³ The provisions in the Treaty do not provide enforcement mechanisms; therefore, enforcement is left up to the individual countries.

The Copyright Treaty provides legal remedies against circumvention of technological measures and copyright management information placed on

178. E-mail from Jorgen Blomqvist, *supra* note 168.

179. *See id.*

180. *See* WIPO Copyright Treaty, December 20, 1996, CRNR/DC/94.

181. *Id.*

182. Mort, *supra* note 83, at 196.

183. *See* Blunt, *supra* note 157, at 177. Berne does not grant protection of copyright in the country of origin, it provides for national treatment. *See id.*

protected works.¹⁸⁴ However, individual countries have to first implement the anti-circumvention measures.¹⁸⁵ Anti-circumvention laws are the most beneficial remedies available to stop copyright infringement of digital music on the Internet.¹⁸⁶

The scope of the WIPO Copyright treaty encompasses that set out in Article 2 of the Berne Convention.¹⁸⁷ Article 4 and 5 of the Treaty confirms the protections established in the Berne Convention to computer programs and databases.¹⁸⁸ The Treaty does not firmly establish a right of distribution. Article 6 provides an exclusive Right of Distribution to authors but allows member states to independently determine under which conditions the Right of Distribution will apply.¹⁸⁹

At the initial stages of the Convention to adopt the Treaty, there were some problems. One of the drafts presented to the Convention contained a provision that met widespread criticism in the Internet community. The Right of Reproduction that is contained in Article 9 of the Berne Convention, if adopted, would have arguably made it a copyright infringement to merely access a web page containing protected works without the consent of the author.¹⁹⁰ This is because any computer has to temporarily store and therefore, reproduce a web pages' content in its random access memory in order to make it viewable for the user.¹⁹¹ In addition, most browsers also store a temporary copy of each accessed webpage in a cache directory on the computer's hard disk.¹⁹² The lobbying efforts of groups, such as Internet Service Providers, managed to get this provision deleted from the final draft. Instead, there was an agreement reached which was attached to the Treaty to attempt to clarify Article 1(4) which states: "It is understood that the storage of a protected work in digital form in an electronic medium constitutes a reproduction within the meaning of Article 9 of the Berne Convention."¹⁹³ Notwithstanding the Right of Reproduction, the fact that it was not included in the Treaty, and the

184. See WIPO Copyright Treaty, *supra* note 180. Article 11 of the treaty provides that contracting states:

shall provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used by authors in connection with the exercise of their rights under this Treaty or the Berne Convention and that restrict acts, in respect of their works, which are not authorized by the authors concerned or permitted by law." *Id.*

185. For example, in the United States, the anti-circumvention laws were not effective until October 28, 2000. See Sylva, *supra* note 3, at 235.

186. See *id.*

187. See WIPO Copyright Treaty, *supra* note 180.

188. See *id.*

189. See *id.*

190. See Mort, *supra* note 83, at 174.

191. See *id.*

192. See *id.*

193. Agreed Statement concerning the WIPO Copyright Treaty, available at <http://www.eblida.org/ewp/exceptions/wipo/ct.htm>

negotiation process that took place, indicates that it is left up to the member states to apply the Reproduction Rights of author's to digital mediums.

Attached to the Treaty were agreed statements concerning nine of the Articles. The statement regarding Article 1(4) further states: "The reproduction right, as set out in Article 9 of the Berne Convention, and the exceptions permitted thereunder, fully apply in the digital environment, in particular to the use of works in digital form."¹⁹⁴

Enforcement is an area where much debate erupted. Two provisions were considered, but neither was adopted.¹⁹⁵ Article 14 of the Treaty only requires punishment and prevention of infringement based on what each authority deems necessary to ensure the Treaty's application.¹⁹⁶

2. *The WIPO Performances and Phonograms Treaty*

On December 20, 1996, the international community adopted the WIPO Performances and Phonograms Treaty in addition to the WIPO Copyright Treaty. The preamble to this treaty states:

Desiring to develop and maintain the protection of the rights of performers and producers of phonograms in a manner as effective and uniform as possible, *Recognizing* the need to introduce new international rules in order to provide adequate solutions to the questions raised by economic, social, cultural and technological developments, *Recognizing* the profound impact of the development and convergence of information and communication technologies on the production and use of performances and phonograms, *Recognizing* the need to maintain a balance between the rights of performers and producers of phonograms and the larger public interest, particularly education, research and access to information.¹⁹⁷

The Treaty protects the rights of performers of literary or artistic works and of phonogram producers. It has been criticized for only covering "the various rights of performers and producers in a recorded work, while leaving copyright issues, such as a composer's interest in his song, to the Berne Convention".¹⁹⁸ This Treaty is vital to the protection of performances and

194. *Id.*

195. See Mort, *supra* note 83, at 202. ("Alternative A incorporated by reference the TRIPs Agreement's articles 41 through 61 via an annex which would have formed an 'integral' part of the treaty. Alternative B instead required that the contracting parties integrate articles 41 through 61 into their national laws.") *Id.*

196. See *id.* This was the position the U.S. wanted adopted. See *id.*

197. WIPO Performances and Phonograms Treaty, available at <http://www.wipo.org/>.

198. Mort, *supra* note 83, at 205.

phonograms in digital form.¹⁹⁹

IV. THE PROBLEM WITH RELYING ON THE WIPO INTERNET TREATIES TO FIGHT COPYRIGHT INFRINGEMENT IN THE MUSIC INDUSTRY

A. *The Treaties Cannot be Internationally Effective Unless all Countries Ratify*

The United States Department of Commerce has recognized the importance of reaching the necessary threshold of thirty countries to sign each of the WIPO Internet Treaties. The Secretary of Commerce committed the Department to work internationally in the hopes that this goal will be met.²⁰⁰ The Internet is no longer used only for educational and research purposes, it is primarily viewed as a business opportunity.²⁰¹ International treaties are the best way to extend copyright protection across borders in the form of laws, but if the music industry wants to protect its work to the fullest potential, it is not enough for the music industry to let international treaties fight the piracy. Implementing treaties takes years and they will never keep abreast of the demands of the technology being addressed.²⁰²

Treaty ratification is important because of the standards²⁰³ it sets, but the passage of two international treaties will not stop Internet piracy of digital music. Even if the necessary thirty countries ratify the treaty, it is still only thirty countries that claim they will rise up to these standards. The Treaties necessarily give a lot of leeway to the member states to apply their own national laws.²⁰⁴ The Treaties may set a standard but they do not guarantee the uniformity that most people intuitively expect when an "international" treaty is referenced. Self imposed mandates to prevent copyright infringement and enforce national laws are necessary supplements to the WIPO Internet Treaties.

B. *Global Enforcement Mechanisms are not Included*

Most countries will not stand for a uniform system of laws, and there is no reason they should. There are inherent enforcement problems that cannot be addressed by a collage of member states. "Laws reflect the culture and social attitudes of the people governed by the laws. Must universal legal standards be adapted to such different laws; or must the local laws be adapted

199. See E-mail from Blomqvist, *supra* note 168.

200. See Dickinson, *supra* note 2, at 3.

201. See Lee, *supra* note 1, at 77.

202. See Lee, *supra* note 1, at 161.

203. Standard is defined as "any specification of technology that has been approved or adopted for widespread use." *Id.* at 153.

204. See Blunt, *supra* note 157, at 177.

to fit the universal standards?"²⁰⁵ It has been suggested that the "inequalities in domestic legislation could not only make enforcement of these treaties difficult, but also stifle the growth of the Internet as a means of commerce."²⁰⁶

It is impossible for one global standard to satisfy the culture of a vast number of nations. International treaties should set standards, but the individual nations should provide laws that uphold its cultural needs while still complying with a minimum standard of protection for copyright holders. Although international treaties like the WIPO Internet Treaties are useful to set standards for countries to reach up to and to bring awareness to international concerns, other means are needed to fight copyright infringement over the Internet.

Once the copyright holder or anyone else places a work on the Internet, it can be accessed by anyone who subscribes to the Internet anywhere in the world. It is impossible for a copyright holder to know and prepare for each individual national law. The ease, speed, and accuracy of copying at multiple anonymous locations pose a serious obstacle to effective enforcement of any copyright laws, especially those set out in international treaties.

Enforcement of copyright laws under the WIPO Internet Treaties is left to the national laws of each country.²⁰⁷ Even with ratification of the WIPO Internet Treaties, global enforcement mechanisms need to be implemented. One solution that has been suggested to make enforcement effective is to implement the TRIPS Agreement enforcement mechanisms into the WIPO Internet Treaties.²⁰⁸ TRIPS enforcement power comes from the dispute resolution process offered by GATT.²⁰⁹ Under this process, disagreements on trade issues are resolved by committees, which become legally binding obligations.²¹⁰ This is not the best solution because it is impossible to determine if the country will penalize the infringer.²¹¹

The best way to protect digital music on the Internet is for the copyright holders to protect their work before it reaches the market.²¹² Technological advances on the Internet will constantly develop new methods to make more information available to people. Unfortunately, this brings the question of copyright infringement into focus. By staying one step ahead of the possible infringer, copyright holders are in a better position to protect their work. The WIPO Internet Treaties provided a vital role of awareness and education of the problem, which are both major components of prevention.

205. Lee, *supra* note 1, at 285.

206. Mort, *supra* note 83, at 216.

207. See Agreed Statement, *supra* note 193.

208. See Blunt, *supra* note 157, at 190.

209. See *id.*

210. See *id.* at 191.

211. See *id.* The hearings also tend to long and drawn-out, averaging forty-five months. See *id.*

212. See Rutner, *supra* note 7, at 1080.

V. ENFORCEMENT BY PREVENTION

The United States and Japan issued a joint statement on electronic commerce in 1998, which called for the private sector to lead in the development of electronic commerce.²¹³ It also provided that unnecessary regulations or restrictions on electronic commerce should be avoided, and encouraged self-regulation through enforcement mechanisms developed by the private sector.²¹⁴ Since the growth of electronic commerce is dependent upon the protection of intellectual property rights,²¹⁵ these same standards of regulation should be adopted to fight copyright infringement over the Internet. The music industry must strive to develop and implement techniques that have no boundaries. Laws define the minimum standards of copyright protection, there is nothing to stop anyone from setting a higher standard.²¹⁶ It is not the responsibility of international treaties to mandate provisions for digital security controls. If the music industry wants to protect itself it must self impose mandates.

Many copyright holders will never give up the fight to protect their work. The suggestion by the author Blunt that the music industry should cut losses and join those who are distributing digital works is a good starting point but the solution needs to go further.²¹⁷ The music industry needs to beat the infringers at their own game. They need to make it almost impossible to infringe upon protected work and make it possible to find those who do infringe.²¹⁸ A conglomerate of record companies can combine resources, financially and innovatively, and take the upper hand. Some parts of the music industry are taking advantage of the Internet marketplace.²¹⁹ But this will not stop infringement of works by those who do not want to or can not take advantage for some reason. There is reluctance by many to enter the online world.²²⁰ Therefore, the music industry must stay one step ahead of everyone else.

Copyright infringement will be a problem even with technical protection because infringers can bypass the protection devices with other technical

213. See Clinton-Hashimoto Statement on Electronic Commerce, USIS Washington File (May 20, 1998).

214. See *id.*

215. See *id.*

216. See Lee, *supra* note 1, at 75.

217. See Blunt, *supra* note 157, at 208.

218. See Lee, *supra* note 1, at 247. It is rumored that there are programs being developed that can recognize on the Internet whether a computer contains a pirated program and can immediately transmit a virus which will paralyze the whole computer. The use of this technology may bring up constitutional problems that have not been addressed. See *id.*

219. See SDMI, visited November 13, 2000, available at <http://www.sdmi.org>.

220. See *id.*

devices.²²¹ Technical protection devices increase a copyright holder's protection but they are insufficient without legal support.²²² Therefore they must be combined with international standards to give the maximum amount of protection to digital music.

1. Education

Education should not be overlooked as a tool to fight infringement. The RIAA has implemented a program called "Soundbyting," which informs users "that music, including the sound recordings and the underlying musical composition, is copyrighted property and is not freeware."²²³ WIPO is helping to raise this public awareness, not only through the Internet Treaties, but also by involving itself in a "long term demystification program."²²⁴ Public education and awareness must be undertaken to prevent and control copyright infringement of digital music.²²⁵

2. Tracking Devices

Identifying an infringer is one of the most challenging tasks faced by copyright holders.²²⁶ Existing laws cannot be enforced if the infringer is not identified. Digital watermarking is a compression technology used "to encode within the digital format data about the author, the copyright date, and permitted uses of the material."²²⁷ A version of this technology is made available through the company Liquidaudio.²²⁸ Once an infringer is caught, the watermark provides the information. Copyright holders must embed watermarks on their work so infringers can then be tracked, identified, and assessed a royalty revenue.²²⁹ This is a great tool for the music industry to employ; however, it does not safeguard against all unauthorized copying because it does not prevent the first copy.²³⁰ There is also concern that using

221. See Neil Smith and Andrew V. Smith, *Technical Protection Devices and Copyright Law*, 3 B.U. J. SCI. & TECH. L. 7 para. 3 (1997).

222. See *id.*

223. Sylva, *supra* note 3, at 240.

224. See E-mail from Blomqvist, *supra* note 168.

225. See *id.*

226. See *id.*

227. Pollack, *supra* note 21, at 2451. "Digital watermarking is commonly known for its use on paper money . . ." *Id.*

228. See *id.*

229. See Sylva, *supra* note 3, at 227.

230. See Pollack, *supra* note 21, at 2451. "Used in conjunction with tracking tools . . . copyright owners are able to track down and prosecute infringers. It enjoys popularity because it does not limit consumers' fair use rights as much as other rights management technologies, unless it is employed in conjunction with access control methods." *Id.*

technology to limit access to creative work will only benefit those who pay.²³¹ Watermarking is a crucial tool because it can help identify the actual violator and place blame on the individual infringer rather than an ISP.

3. *Rights Management Technology*

The success of the recent introduction of rights management technologies is thus far unknown, but the idea is promising.²³² Combined with tracking tools, these technologies are the best means to prevent copyright infringement of music over the Internet.

Cryptographic ciphers, or encryption, are a real solution to prevent protected work from being digitally transmitted. This is a security measure that can be implemented which makes it almost impossible to break the code.²³³ One way functions in cryptographic ciphers are used in electronic networks.²³⁴ "A one way function is a mathematical function that is relatively easy to compute in one direction, but computationally infeasible to undo without knowing a secret."²³⁵ Messages are encrypted by the cryptographic ciphers from their original text to an encrypted state.²³⁶ This is not the most effective way to stop infringement of digital music because once a recipient receives a legitimate copy, it can be uploaded and duplicated.²³⁷ If this technology were placed on digital music before it reaches the market, piracy of the protected work would be greatly inhibited. Anti-circumvention laws hold infringers liable if they try to unscramble these devices.²³⁸

A digital envelope, or digital box, uses encryption technology and authentication techniques to guarantee that only licensed consumers can gain access.²³⁹ A user must pay a fee to decode the envelope or box.²⁴⁰ The fee can

231. See Sylva, *supra* note 3, at 229.

232. See Pollack, *supra* note 21, at 2451.

233. See Lee, *supra* note 1, at 58.

234. See *id.*

235. *Id.*

The security of cryptographic ciphers is rooted in the mathematical strength and ability of the one-way function to withstand computational brute force in attempting to undo a function. One example of a mathematical function used in cryptographic ciphers is an exponential function, whereby the security is based on the difficulty of calculating discrete logarithms." *Id.*

236. See *id.*

237. See Sylva, *supra* note 3, at 226. The copyright infringement is being created by the proposed recipients of the material, such as members of the public who upload the material to their websites. See *id.*

238. See Pub. L. No. 105-304, *supra* note 82. The United States has anti-circumvention provisions in the DMCA. See *id.*

239. See Pollack, *supra* note 21, at 2451-2452. This is referred to as persistent encryption because "the content is decrypted and accessible only while specific authorized users are using it for the amount of time for which they have rightfully obtained access." *Id.*

240. See *id.* at 2451.

be a one-time listening fee, a twenty-four-hour listening fee, or a copy can be purchased.²⁴¹ If a copy is purchased, it can be recorded on a CD or left on the hard drive.²⁴² This method ensures that copyright holders will be compensated; however, in some jurisdictions, it may raise controversy over the restrictions it places on fair use rights and on copyrighted work that is in the public domain.²⁴³

An excellent example of how to implement this technology to protect digital music is demonstrated through the situation that was recently faced by the advent of digital movies. Digital versatile disks ("DVDs") contain motion pictures in digital form and are used for private home viewing.²⁴⁴ Motion picture companies insisted on an access control to prevent the increased risk of unauthorized reproduction because of this new digital format.²⁴⁵ A Content Scramble System ("CSS") is an "encryption-based security and authentication system that requires the use of appropriately configured hardware... to decrypt."²⁴⁶ CSS has been licensed to hundreds of DVD player manufacturers around the world.²⁴⁷ In October 1999, a software utility called DeCSS was offered on ISPs that enables users to break the CSS encryption.²⁴⁸ The Motion Picture Association of America ("MPAA") demanded that ISPs and identified individuals remove DeCSS from their servers.²⁴⁹ The MPAA took legal action and the court ruled that DeCSS was a circumvention measure since it "effectively controls access to plaintiffs' copyrighted movies because it requires the application of information or a process, with the authority of the copyright owner, to gain access to those works."²⁵⁰ If the music industry implements encryption technology as the motion picture industry has done, possible infringers will be less likely to circumvent the access controls for fear of being caught.

4. Organizations

Organizations such as the Federation Against Software Theft (FAST)²⁵¹ raise the awareness of piracy and lobby government to make revisions in

241. *See id.*

242. *See id.*

243. *See id.* at 2452.

244. *See Universal Studios, Inc., v. Reimerdes*, 82 F. Supp. 2d 211, 214 (S.D.N.Y. 2000). Like digital music, copies made from DVDs do not degrade and are therefore targets for copyright infringement. *See id.*

245. *See id.*

246. *Id.*

247. *See id.*

248. *See id.*

249. *See Universal Studios*, 82 F. Supp. 2d at 214.

250. *Id.* at 216

251. *The Federation Against Software Theft homepage*, visited October 16, 2000, available at <http://www.fast.org.uk/Client130/Faster.nsf/lookup/introhome.html>.

copyright laws.²⁵² Since they are working on a narrower basis than international treaties, their goals are more likely to be met in that limited capacity. FAST is different from organizations such as the RIAA because it represents both software publishers and end-users. Most organizations only represent one side of the debate. This may be a step toward the suggestion that "If you can't beat 'em, join 'em"²⁵³ This is not necessarily the best way to solve the problem.

Secure Digital Music Initiative ("SDMI") is an organization that includes members such as RIAA representatives, record labels, America Online, AT&T, and Microsoft.²⁵⁴ Oddly enough, the Executive Director of SDMI is the digital engineer and original developer of the MP3 compression format.²⁵⁵ The objective of the organization is to set technological standards for management information in digital music distribution.²⁵⁶ To reach this goal, SDMI has developed a two part plan as follows: "(1) a series of technological rules that all digital music devices and programs must follow in order to affix the 'SDMI compliant' label to their products and play SDMI-owned content; and (2) a rights management system that will most likely consist of a system of digital watermarking."²⁵⁷ The rules SDMI develops are not legal mandates, but the most powerful players in the music industry belong to it. Therefore, it is very likely that much of the popular music will be encoded according to its rules.²⁵⁸ This is an excellent format for self imposed mandates. The obstacles faced by SDMI include the slow pace of developing its standards and the flexibility and popularity of MP3's.²⁵⁹ Consumers are not eager to join a secure format of protected work when it is available for free. However, if copyright holders only make their work available with encryption technology the consumers will have little or no choice.

Many record companies are offering digital download sites on the Internet or licensing services, such as MP3.com.²⁶⁰ There are no foolproof techniques to stop copyright infringement of musical works via the Internet, but there are steps the copyright holder can take to make it harder for infringement to take place and prevent the infringement. Combining tracking tools with rights management technology sends a message to infringers that the music industry is playing the same game, and it is playing to win.

252. *See id.* FAST was set up by the British Computer Society's Copyright Committee and it works to influence legislation in Great Britain. *See id.*

253. Blunt, *supra* note 157, at 208. The author suggests that the music industry should cut losses and join those who are distributing digital works. *See id.*

254. *See* Pollack, *supra* note 21, at 2473. *See also* Sylva, *supra* note 3, at 234. There is a fee to join SDMI and a company must meet certain other criteria. *See id.*

255. *See* Sylva, *supra* note 3, at 233.

256. *See* Pollack, *supra* note 21, at 2473.

257. *Id.* at 2473.

258. *See id.*

259. *See id.*

260. *See* Riaa, *supra* note 42.

VI. CONCLUSION

International treaties should not mandate global enforcement mechanisms for copyright infringement because this would inhibit the sovereignty of each individual country to set its own laws. On the other hand, we should be mindful of the usefulness the WIPO Internet Treaties provide in setting standards. These standards set a bar for countries to reach. They also present an awareness of the problem of copyright infringement. One of the main characteristics of infringement of digital music is that it is not limited to one single national territory. International standards are necessary to bring traditional copyright laws into the new digital age.

There is a big problem in identifying a copyright infringer of digital works, but holding the ISPs responsible is not a fair way to solve the problem. The international community recognized this by keeping the blame on the violator, as was also provided for in the Berne convention. Even countries that have discussed putting the blame on ISPs, and who are not signatories of the WIPO Internet Treaties, such as Great Britain, have recognized the problems and opposition of doing so and have shied away from the idea.

It is clear that the courts are not the best place to fight copyright infringement over the Internet. Litigation is expensive, time consuming, and unpredictable. There needs to be a foundation of laws, and those are reflected in the WIPO Internet Treaties. Laws should not be revised which would hold the ISPs responsible, like many court cases are trying to do. The WIPO Internet Treaties provide international standards, but enforcement is clearly a problem. Therefore, prevention techniques such as education, watermarking, and encryption need to be developed through the vices of the copyright holders and organizations like SDMI.

Copyright holders must take precautions when putting their work on the market. A step-by-step approach of enforcement by prevention is the best available tool. There is nothing to stop anyone from setting a higher standard than the one set by law. The Internet serves as an invaluable tool for creative work to reach the public. Since the Internet is so easily accessed throughout the world, methods of copyright infringement prevention need to start at the source. The music industry can prevent infringement by making it almost impossible to copy protected work.

Education to promote awareness of the problem of copyright infringement will help foster support for the importance of protecting works; and digital security controls, such as watermarking and encryption, will help prevent infringement of digital music. Technology advancement has become a war between innovators, and the end of this war is nowhere in sight. The copyright holders must implement technology to protect their work. When this technology is overcome by new technology, as it most likely will be, local legislation must govern how to handle the change. International laws, such as the anti-circumvention provisions for access controls in the WIPO Internet

treaties, harmonize those standards. The challenge is not to win the war; it is to win as many battles as possible.

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* J.D. Candidate, 2002, Indiana University School of Law – Indianapolis; B.A., 1999, History, Indiana University – Fort Wayne. Thank you to my mom, dad, and brother for your faith in me, patience with me, and love for me. Mom, thank you for reading all of my drafts and never complaining, you are a wonderful source of support and inspiration. To my husband, Chris, thank you for your enduring patience and understanding while I pursue my career and for sharing your life with me. I would also like to thank the Honorable Jeffrey Heffelfinger for suggesting the idea of writing on this timely topic.

