

Notes

THE DIGITAL PERFORMANCE RIGHT IN SOUND RECORDINGS ACT AND ITS FAILURE TO ADDRESS THE ISSUE OF DIGITAL MUSIC'S NEW FORM OF DISTRIBUTION

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I. INTRODUCTION

Imagine a world without record stores. Before you panic, imagine getting your music on-line at a fraction of the cost. This may appear a bit futuristic, but it is happening today through the availability of digital music on the Internet and cable radio.¹ Congress has made several attempts at passing legislation to address the implications that digital transmission of music over the Internet will have on copyright law.² President Clinton signed into law the Digital Performance Right in Sound Recordings Act of 1995 ("Digital Performance Right Act"),³ which became effective in January of 1996. This is the first law to grant a performance right in sound recordings⁴ and to specifically address digital transmissions, which include cable networks as well as computer transmissions.⁵ This Note will address the possible implications of the Digital Performance Right Act and its effectiveness in addressing the problems with which it was intended to deal.

The position of this Note is that, even with these new measures to give artists a basis for filing suit, the difficulties in regulating private use (or misuse) of digital recordings off cable wires and the Internet far outweigh any benefit granted to the "protected" musicians and the recording industry.⁶ Therefore, unless

1. See N. Jansen Calamita, *Coming to Terms with the Celestial Jukebox: Keeping the Sound Recording Copyright Viable in the Digital Age*, 74 B.U. L. REV. 505, 506-07 (1994).

2. *Id.*

3. 17 U.S.C. §§ 101, 106, 114, 115 (Supp. I 1995).

4. Richard Raysman & Peter Brown, *Internet Copyright Developments*, N.Y. L.J., Jan. 9, 1996, at 3.

5. *Id.*

6. See ED KROL, *THE WHOLE INTERNET* 37 (1992).

Congress acts with foresight, what will most likely arise out of this difficult situation is an entirely new and unregulated system of distributing sound recordings.⁷

II. HISTORY OF THE ACT

The power given to Congress to create copyright law comes from the United States Constitution, which states, "The Congress shall have Power...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."⁸ Since passage of the Copyright Act of 1976 ("Copyright Act"),⁹ technological advancements have altered the way consumers receive their music and thus have made portions of the Copyright Act obsolete.¹⁰ Breakthroughs in music distribution, such as digital music available through cable networks and over the Internet, have brought to the surface concerns about the Copyright Act's viability.¹¹

A. *The Copyright Act of 1976*

The Copyright Act differentiated between musical compositions and sound recordings. It only granted copyright protection for performance rights to the former.¹² This meant that the right to prohibit any unlicensed public performance was held by the copyright owner of the underlying musical composition, but that the copyright owner of the sound recording did not have such a right.¹³ These two owners are not always the same person.¹⁴ The copyright in the musical composition exists to protect the composer's notes and lyrics.¹⁵ On the other hand, a sound recording is the result of combining the musical, spoken, and other sounds onto a disc or other format.¹⁶ Without copyright protection for the sound recording, the performer's actual recorded sounds of a piece of music

7. See Robert Starrett, *Going Gold with Music*, CD-ROM PROF., Jan. 1996, at 94.

8. U.S. CONST. art. I, § 8, cl. 8.

9. 17 U.S.C. §§ 101-1101 (1994 & Supp. I 1995).

10. See Calamita, *supra* note 1, at 514.

11. *Id.* at 506-07.

12. *Id.* at 510-11; see 17 U.S.C. § 114(a) (1994), amended by 17 U.S.C. § 114(a) (Supp. I 1995).

13. Calamita, *supra* note 1, at 510.

14. See *id.* at 510-11.

15. Stuart Talley, *Performance Rights in Sound Recordings: Is There Justification in the Age of Digital Broadcasting?*, 28 BEVERLY HILLS B. ASS'N J. 79, 84 (1994).

16. *Id.*; see 17 U.S.C. § 101 (1994) (amended 1995) (defining "sound recordings" under the Copyright Act).

are not protected.¹⁷ Unfortunately, this left the owners of sound recordings with no legal recourse if they encountered a copyright infringement of their works.¹⁸ Therefore, each time a song was broadcast on the radio, the owner of the musical composition received royalty payments while the owner of the actual sound recording had no right to receive any financial compensation.¹⁹

B. Inability of Prior Regulations to Address Advancements in Digital Music Dissemination

Great debate arose after the passage of Copyright Act because the issue of a performance right in sound recordings was not addressed.²⁰ Since 1976, Congress had considered and rejected legislation to grant such a right on three separate occasions.²¹ Ultimately, Congress declined to address this issue, in part, because the record industry had increasingly profited since passage of the Copyright Act.²² The industry lobby had no persuasive ammunition since the lack of a performance right in sound recordings had not created any economic difficulty.²³ Within the past year, however, the industry has experienced declining sales.²⁴ Large music chains like Wherehouse Entertainment and Camelot Music have filed for protection in bankruptcy court.²⁵ Also, Blockbuster Music closed fifty stores.²⁶ Due to these problems, the record industry is more concerned than ever with the possibility of future profit loss attributable to unregulated copyrighted music on the Internet.²⁷

Industry concerns, increased availability of digital music over the Internet, and Vice President Al Gore's advocacy of the "Information Superhighway," have, again, raised the question of performance rights in sound

17. Talley, *supra* note 15, at 84; see 17 U.S.C. § 114(b) (1994), amended by 17 U.S.C. § 114(b) (Supp. I 1995).

18. Talley, *supra* note 15, at 84.

19. *Id.*; see 17 U.S.C. § 114.

20. See Calamita, *supra* note 1, at 506-07.

21. Commercial Use of Sound Recordings Amendment, H.R. 1805, 97th Cong. (1981); Sound Recording Performance Rights Amendment, H.R. 997, 96th Cong. (1979); Performance Rights Amendment of 1977, H.R. 6063, 95th Cong.; see Calamita, *supra* note 1, at 507.

22. Calamita, *supra* note 1, at 513; see Bill Holland, *Music Business Urges Congress to Adopt Performance Right*, BILLBOARD, Apr. 3, 1993, at 6; see also Bill Holland, *RIAA Looking to Congress for Performance-Right Bill*, BILLBOARD, Feb. 23, 1991, at 4, 79.

23. Calamita, *supra* note 1, at 513.

24. Richard Harrington, *1996 Turned Down the Volume on Record Sales*, WASH. POST, Jan. 8, 1997, at C1.

25. *Id.*

26. *Id.*

27. *Id.*

recordings.²⁸ The National Information Infrastructure Task Force ("Task Force") was formed by President Clinton in February, 1993, to implement a new vision for the National Information Infrastructure, a term encompassing the interactive networks of the present, such as the Internet, and those of the future.²⁹ The 1994 "Green Paper" was the Task Force's preliminary report for updating the law on intellectual property, and the "White Paper," written in 1995, was its final report.³⁰ Contributory copyright infringement and the liability of on-line service providers were discussed in the "White Paper."³¹ These two reports were reflective of the debate leading to the passage of the Digital Performance Right Act.³²

In the "White Paper," the Task Force recommended that, unless Congress held on-line services open to strict liability for any and all copyright infringement, there would be no motivation for service providers to educate their subscribers and to reduce incidents of copyright infringement.³³ With the threat of strict liability, on-line services might have an incentive to develop solutions to prevent infringement.³⁴ Without such a threat, copyright holders might have no recourse for violations since the subscribers who are the direct infringers are often difficult to identify or have no financial resources to pay damages.³⁵

These recommendations, which are largely consistent with what the "Green Paper" had suggested, have been criticized for leaving on-line service providers open to excessive liability.³⁶ Some fear that such a threat will drive up the prices of such services, which goes against the purpose behind the National Information Infrastructure of widespread dissemination of information at an affordable cost.³⁷ If the services are held responsible for monitoring all the information that flows in and out of their system, a chilling effect might stunt the growth of what some consider a great public forum for free speech.³⁸ These were

28. See Jay L. Bergman, *Digital Technology Has the Music Industry Singing the Blues: Creating a Performance Right for the Digital Transmissions of Sound Recordings*, 24 SW. U. L. REV. 351, 359 (1995) (discussing reasons for new legislative debate over performance rights in sound recordings); Calamita, *supra* note 1, at 506-07 (same).

29. Douglas J. Masson, *Fixation on Fixation: Why Imposing Old Copyright Law on New Technology Will Not Work*, 71 IND. L.J. 1049, 1055 (1996).

30. Adam P. Segal, *Dissemination of Digitized Music on the Internet: A Challenge to the Copyright Act*, SANTA CLARA COMPUTER & HIGH TECH. L.J. 97, 122 (1992).

31. Raysman & Brown, *supra* note 4, at 3.

32. Segal, *supra* note 30, at 121-22.

33. INFORMATION INFRASTRUCTURE TASK FORCE, INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE 66, 122-24 (1995); see also *Religious Tech. Ctr. v. Netcom On-Line Communication Servs.*, 907 F. Supp. 1361, 1373 n.19 (N.D. Cal. 1995) (citing INFORMATION INFRASTRUCTURE TASK FORCE, *supra*).

34. INFORMATION INFRASTRUCTURE TASK FORCE, *supra* note 33, at 66, 122-24.

35. *Id.*

36. Segal, *supra* note 30, at 123.

37. *Id.*

38. *Religious Tech. Ctr.*, 907 F. Supp. at 1377-78.

all factors taken into consideration when Congress passed the Digital Performance Right Act.

C. The Digital Performance Right in Sound Recordings Act of 1995

Congress enacted the Digital Performance Right Act in November of 1995, in part, to grant artists and copyright owners the right to collect royalties for public performance of their sound recordings, including digitally transmitted sound recordings,³⁹ which the Copyright Act did not provide.⁴⁰ The forms of digital transmission afforded protection⁴¹ include direct cable, satellite broadcasts, the Internet, and other on-line services.⁴² The Act provides that, as long as the initial transmission is licensed, no additional license is needed for retransmissions.⁴³ This assumes, however, that retransmissions are approved by the original broadcaster and are sent simultaneously with the original program.⁴⁴ Therefore, to prevent copyright infringement, the Act sets out to regulate these initial transmissions.⁴⁵

The purpose behind the Act is two-fold. First, it will work with the existing Copyright Act to provide added protection against copyright infringement of digital music, specifically sound recordings.⁴⁶ Second, it anticipates the possibility of a shift in distribution of sound recordings from physical to digital.⁴⁷ As an example of this second purpose, the Senate Report to the Act commented on the fact that on-line services that allow subscribers to download music "on demand" pose the greatest threat to traditional sales of records and compact discs.⁴⁸ Since the copyright owners of sound recordings held the right to traditional sales prior to the Digital Performance Right Act, it was only fair to provide comparable rights for negotiating licenses for distribution of their copyrighted sound recordings over on-line services.⁴⁹ This provision may work to prevent unauthorized distribution of digital music over on-line services where clients must pay a fee.⁵⁰ Unfortunately, the Digital Performance Right Act fails to

39. 17 U.S.C. §§ 106(6), 114(a) (Supp. I 1995); see Raysman & Brown, *supra* note 4, at 3.

40. See 17 U.S.C. §§ 106, 114(a) (1994) (amended 1995).

41. "Section 114(j)(3), when read with § 101, defines a 'digital audio transmission' as a transmission in a digital format...that embodies the transmission of a sound recording." Michael I. Rudell, *Music Legislation Meets the Digital Age*, N.Y. L.J., Dec. 22, 1995, at 3.

42. Raysman & Brown, *supra* note 4, at 3.

43. *Id.*

44. *Id.*

45. *Id.*

46. *Id.*

47. *Id.*

48. Rudell, *supra* note 41, at 3.

49. *Id.*

50. *Id.*

address transmissions that may be sent by independent bulletin board services⁵¹ that upload and download information on their own without charging a fee for people to access information.⁵²

III. WHAT IS AVAILABLE ON THE INTERNET

With the proper equipment, one can easily download digital music from the Internet onto a recordable compact disc through the use of a personal computer.⁵³ The reverse, uploading music from a compact disc onto the Internet for others to download, is equally simple.⁵⁴ This is the process whereby music gets distributed virtually for free, in violation of copyright law.⁵⁵ The Digital Performance Right Act was enacted to address this problem.⁵⁶

A. What Is "Digitized" Music?

In order to understand the problem, one must understand the difference between music found on the radio and that found on the Internet or cable networks. The key difference is sound quality.⁵⁷ While radio broadcasts are made in analog, the quality of music that is available on the Internet and off cable networks is digital quality, or in layman's terms, compact disc quality.⁵⁸

When AM/FM radio stations broadcast a recording, even a compact disc, some quality is lost in the transmission.⁵⁹ This is because analog transmissions are a "continuous representation of the original information read directly—usually physically—with a mechanical pickup in contact with the storage medium."⁶⁰ That means that the transmissions are subject to distortions not only from flaws in the storage medium itself but also from obstructions such as dust that can affect the reading of the information.⁶¹ The sound also comes from an amplified electrical signal, which is subject to distortion and interference in quality.⁶² So how does digital sound recording differ in quality to analog broadcasts?

51. A bulletin board server is "a telecommunications utility" that a person can dial up and either upload or download software. BRYAN PFAFFENBERGER & DAVID WALL, QUE'S COMPUTER & INTERNET DICTIONARY 66 (6th ed. 1996).

52. *See id.*

53. Debra Sherman, *CompuServe Settles Copyright Suit, May Set Model*, BC CYCLE, Nov. 7, 1995, available in LEXIS, News Library.

54. *Id.*

55. *Id.*

56. Raysman & Brown, *supra* note 4, at 3.

57. Bergman, *supra* note 28, at 362.

58. *Id.*

59. *Id.*

60. Calamita, *supra* note 1, at 515.

61. *Id.*

62. *Id.*

Digitization is the process of translating information, including sound, into mathematical bits. Music is stored in computer memory or on a compact disc or other digital software as 1s and 0s—the mathematical bits—and reconverted into music when played back on digital equipment such as a computer or compact disc player.⁶³

Through the process of digitization, the original sound recording retains its high quality.⁶⁴ Unlike analog, digital broadcasts are “far more resistant to interference,” and digital audio also allows for infinite copies to be made while retaining the original sound quality.⁶⁵ This process also requires less electrical power on the part of broadcasters, making the possibility of digital broadcasts cheaper than the current analog broadcasts.⁶⁶

How can the average person make use of and benefit from this relatively cheap, high quality transmission? Music can be recorded onto a computer's memory through the use of a Music Instrument Digital Interface (“MIDI”) file.⁶⁷ MIDI is the “industry standard for converting music into...digital data.”⁶⁸ Once the music has been converted into digital data and stored into a MIDI file, it can be recorded in a computer's memory, wherefrom it can be saved onto a disc or any other form of recordable medium.⁶⁹ So far, this appears to be a harmless process, but once the sound recording is stored into a computer in its digital format, a user can upload the file onto the Internet through the use of a modem.⁷⁰ From there, virtually anyone with a modem can download the information and, with a sound card that gives the computer audio capability, listen to the music in its digital format.⁷¹ Therefore, with the right equipment (computer, modem, sound card, and any software necessary to decompress data—the digitized music) one can download the sound files to a computer and then transfer the music onto a recordable compact disc.⁷² The sound file that gets transferred onto a recordable compact disc will have the same digital sound quality as a compact disc purchased from the local record store.⁷³

One disadvantage in this process is the time it takes to download and transfer such files onto a recordable medium.⁷⁴ Although current technology requires anywhere from ten to fifteen minutes to deliver a typical three minute

63. *Id.* at 507, n.7; see KEN C. POHLMANN, *THE COMPACT DISC: A HANDBOOK OF THEORY AND USE* 3, 13–44, 47–48 (1989).

64. Calamita, *supra* note 1, at 515.

65. *Id.*

66. *Id.*

67. Segal, *supra* note 30, at 103.

68. *Id.*

69. *Id.* at 103–04.

70. *Id.*

71. *Id.*

72. *Id.* at 104.

73. *Id.*

74. *See id.* at 105–06.

song, the inevitable development of better methods of file compression will drastically reduce the time required.⁷⁵ Once the time requirement is reduced, downloading sound recordings off the Internet will become a viable means to circumvent traditional distribution of music.⁷⁶

Another disadvantage is the cost involved. Although recordable compact discs are currently too expensive for the average consumer, prices are projected to decrease in time.⁷⁷ Currently, it is cheaper to purchase compact discs at the local record store, but that fact should not deter Congress from making laws to address this issue. The fact is that the technology for copyright violations on the Internet exists today and will soon become widely available to consumers, subjecting copyright holders to abuse.⁷⁸ If Congress waits for such abuse to occur, it will likely take months, or years, to debate and create protective legislation.⁷⁹ To prevent the record industry from suffering large losses, Congress should address the problem as soon as possible.

B. The Question of Speed, Accessibility, and Viability

Computer users possess the ability to access and download MIDI files from the Internet onto their own computers.⁸⁰ Although the technology necessary to efficiently copy digital music is expensive and is not yet widely available, it does currently exist in the form of faster modem lines and new software.⁸¹ Slow modem speeds might make it inefficient for potential copyright violators to download songs from the Internet, but new technology is making the threat of "easy" infringement a quick reality.⁸²

1. Integrated Services Digital Network

One such new speed enhancing device is Integrated Services Digital Network ("ISDN").⁸³ Equipped with an ISDN modem and an ISDN connection

75. *Id.*

76. *See id.*

77. Marie D'Amico, *CD-R: Desktop DAT for 1996?*, DIGITAL MEDIA, Mar. 12, 1996, at 14, available in 1996 WL 9070723.

78. *See id.*

79. *See id.*

80. Talley, *supra* note 15, at 83.

81. Calamita, *supra* note 1, at 506-07.

82. *See Progressive Networks Announces RealAudio 3.0 Achieving Broadcast Quality Sound Over the Internet* (visited Jan. 4, 1997). <<http://www.realaudio.com>> [hereinafter *Progressive Networks Announces RealAudio 3.0*]. On September 26, 1997, Progressive Networks became "RealNetworks." *Id.* (visited Oct. 3, 1997).

83. To use ISDN, a user needs a piece of special hardware called a terminal adapter, or ISDN modem. It converts data from the computer monitor to a digital form that can be transmitted across the ISDN lines. Katie Barnes & Robert W. Harbison, *ISDN: The Speed You Need* (visited Oct. 3, 1997) <<http://www.cnet.com/Content/Reviews/Compare/Isdn/>>.

through the local telephone company, a computer user can speed transmission rates up to four times that of a 28.8 kbps modem.⁸⁴ The tricky part is the coordination involved between the phone company, the Internet service provider, and the computer.⁸⁵ The phone company provides the lines to connect the subscriber to his or her Internet service provider, which in turn allows the subscriber access to the World Wide Web.⁸⁶

Although ISDN technology has existed for over a decade, it has become widely available only recently in the United States.⁸⁷ So what is the bottom line? ISDN service can cost anywhere between \$40 to \$1400 per month, depending on where a person lives and how frequently she uses the service.⁸⁸ Therefore, ISDN is potentially an affordable and practical way for people to obtain faster Internet access.⁸⁹

A "cable modem" can also provide easy on-line access via cable television networks. They allow users to download files at a speed up to one thousand times faster than today's fastest conventional modems,⁹⁰ and one hundred times faster than ISDN modems.⁹¹ The installation of a cable modem will likely only require a service technician installing the modem and necessary software.⁹² In comparison, ISDN connections can become a complex process.

Although not yet widely available, Comcast Corporation recently introduced a cable modem service in Maryland.⁹³ The service costs \$39.95 per month for current cable subscribers and provides subscribers with quick and unlimited access to the Internet.⁹⁴ Comcast also plans to introduce this service into other areas, including Orange County, California.⁹⁵ Thus, more sophisticated technologies are already available to speed access to the Internet.

2. RealAudio and Shockwave

In addition to technologies offering quicker access, new technology, called streaming software, is available to make downloading digital music more

84. *Id.* Modem speed is measured in kilobites per second, or "kbps."

85. *See id.*

86. The World Wide Web is a network of servers and information available on the Internet. *See id.*

87. *Id.*

88. *Id.*

89. *See id.*

90. *Cable Modems Overview* (visited Oct. 3, 1997) <<http://www.cablemodems.com>>.

91. *Id.*

92. *Id.*

93. *Internet Access to be Offered Via Cable Lines*, REUTER, Dec. 5, 1996, ¶ 1 <<http://www.cnn.com/TECH/>>.

94. *Id.* ¶ 3.

95. *Id.* ¶ 4.

viable.⁹⁶ RealAudio 3.0 allows record labels to offer near "compact disc quality" sound to thousands of listeners who have ISDN modems, which use higher bandwidths, and offers stereo sound to the current population with 28.8 kbps modems.⁹⁷ "RealAudio 3.0 allows for the efficient transmission of an audio stream to many listeners while requiring a minimum amount of network bandwidth."⁹⁸ These transmissions retain digital quality sound because the system works by streaming⁹⁹ only the portions of audio that the computer user desires, which is also why only a minimum amount of Internet bandwidth is required.¹⁰⁰

The software system enables on-line subscribers with multimedia equipment in their computer to browse, choose, and listen to audio on demand, in real time.¹⁰¹ This is a technological breakthrough. Prior to this software system, subscribers trying to listen to on-line music using traditional methods would encounter download times at a rate five times longer than the actual digital sound file.¹⁰² For instance, a subscriber had to wait twenty-five minutes before listening to a track that lasted a mere five minutes.¹⁰³

Not only do the subscribers benefit from such software, but it also allows the recording industry to display its wares through a new medium. RealAudio is already considered the standard for streaming audio on the Internet. "Over forty entities are already planning to launch...[Web sites with files] utilizing the stereo sound featured in RealAudio 3.0 including leading music labels Sony, Warner, Polygram, BMG and MCA..."¹⁰⁴ "Since its introduction..., over 10 million RealAudio Players have been distributed..."¹⁰⁵ Over 25,000 copies of the software are being downloaded daily from RealAudio's Web site.¹⁰⁶ There is a

96. "Streaming" is the buzzword for the audio stream that gets transmitted from the Internet onto a person's computer. Through this process, sound is delivered while it is being received from the Internet site. Unlike traditional downloading, where a file has to be completely stored onto the hard drive and then played back, there is very little waiting time with streaming. *Progressive Networks Announces RealAudio 3.0*, *supra* note 82 (visited Oct. 3, 1997). Version 4.0 is now available. *Id.*

97. *Id.* (visited Jan. 4, 1997).

98. *Id.*

99. In this process, sound gets compressed into a smaller package of data, which is transmitted the modem. Software on the receiving computer decompresses the information, and it is then converted back into audio form. *Shockwave—The Standard for Web Multimedia* (visited Jan. 4, 1997) <<http://www.macromedia.com>>.

100. *See id.*

101. *Progressive Networks Announces RealAudio 3.0*, *supra* note 82 (visited Jan. 4, 1997).

102. *Id.*

103. *Id.*

104. *Id.*

105. *Id.* (visited Oct. 3, 1997).

106. *Id.*

similar software available called Shockwave.¹⁰⁷ The Shockwave players are also capable of streaming on-demand audio, such as live concerts and on-line radio broadcasts.¹⁰⁸

Finally, even though there are still many consumers who have yet to purchase a computer, much less new software and ISDN modems, wider access to the Internet is now here.¹⁰⁹ Web T.V., for example, offers a way for computer-phobic people to access the Internet through their all-familiar television sets.¹¹⁰ Taken together, these new technologies suggest both a greater possibility for copyright infringement and that record companies now have a large enough consumer base, with access to the right software, to make it economically viable to market music in the form of digital sound files on-line.¹¹¹

C. *Benefits of Having Digital Music on the Internet*

Although new technology could spell the end for the recording industry, it could also create new solutions if regulated with foresight. For example, on-line methods of distributing music make production and dissemination of the artists' works significantly cheaper.¹¹² There would no longer be a need to put a handful of songs onto a physical cassette or disc.¹¹³ Instead, they need only be uploaded onto a computer for consumers to download.

The Internet is potentially the way people will conduct commerce in the next century. Although Internet commerce is in its early stages, "some observers predict that the volume of commercial transactions on the Internet will rise to over \$200 billion in the year 2000."¹¹⁴ If a secure payment mechanism is successfully developed, consumers will increasingly make their purchases off the World Wide Web as their confidence in security increases.¹¹⁵ Also, there are new Web sites created daily.¹¹⁶ Web browsers, such as Netscape, makes it possible for consumers to find and retrieve information "in graphical, audio and video form."¹¹⁷ Thus, businesses can provide full-color pictures of their merchandise as well as

107. See *Shockwave—the Standard for Web Multimedia*, *supra* note 99 (visited Jan. 4, 1997).

108. *Id.*

109. See Bob Strauss, *Channel Surfing Technophobes, Rejoice: Web T.V. Brings Internet Access to Television Screens*, ENT. WKLY., Jan. 31, 1997, at 60, 60.

110. *Id.*

111. See Segal, *supra* note 30, at 99–102.

112. Masson, *supra* note 29, at 1064.

113. *Id.*

114. Russell B. Stevenson, Jr., *Internet Payment Systems and the Cybercash Approach*, in *DOING BUSINESS ON THE INTERNET*, at 123, 125 (PLI Patents, Copyrights, Trademarks, and Literary Property Course Handbook Series No. G4–3988, 1996), available in WL, at 452 PLI/Pat 123.

115. See *id.*

116. See *id.* at 126.

117. *Id.* at 126–27.

information about price and availability of the merchandise, automated purchasing instructions, and interactive customer service.¹¹⁸

Internet shopping also has the potential for greatly reducing the cost of merchandise to the consumer.¹¹⁹ Since shipments can be made directly from the manufacturer to the consumer, Internet businesses will no longer have a need for warehouses and stores.¹²⁰ Additionally, in regards to cassettes and compact discs, the costs of mass reproduction and transportation to traditional record stores will be eliminated since the consumer can download the music directly from the Web sites of various record companies.¹²¹ This further reduces the cost the consumer currently bears to purchase the desired product.¹²²

How will on-line purchases be made? CyberCash, an encryption software producer, "is developing a secure, convenient and cost-effective means of purchasing goods and services or effecting payments over the Internet utilizing the electronic counterparts to cash, checks and credit cards."¹²³ Once this and other secure methods of payment are in place, consumers might gain confidence. Then the Internet has the potential of becoming as prevalent a method of making purchases as mail-order catalogs are today.¹²⁴

D. Music on Demand

Just where will these consumers get digital music? Currently, the three major applications of digital audio technology in use are Internet jukeboxes, cable services, and digital radio.¹²⁵ First, the "Celestial Jukebox" describes various Internet "jukebox" services where computer users can listen to and download digital quality music off the Internet.¹²⁶ Second, traditional cable service providers are expanding their services to include transmissions of digitized music via cable boxes that can be attached to a stereo system.¹²⁷ Subscribers simply pay an additional fee for this digital audio cable service.¹²⁸ Finally, there is digital radio, also called Digital Audio Broadcasting.¹²⁹ Although this is a slowly growing trend, radio stations have the option of broadcasting their programs simultaneously in analog and digital form.¹³⁰ This third use is also a threat to copyrighted music

- 118. *Id.*
- 119. *Id.* at 128.
- 120. *Id.*
- 121. *Id.*
- 122. *Id.*
- 123. *Id.* at 129.
- 124. *See id.* at 125.
- 125. *See* Bergman, *supra* note 28, at 360–63.
- 126. Segal, *supra* note 30, at 108–09.
- 127. Calamita, *supra* note 1, at 517.
- 128. *Id.*
- 129. *Id.* at 522.
- 130. *Id.* at 523.

because, like current radio broadcasts, entire albums may be broadcast without permission.¹³¹

1. *Internet Jukeboxes*

The first of the digital music providers are Internet jukeboxes. On-line providers, like CompuServe, grant subscribers access to musical material if they pay a monthly fee and an additional service charge based on the time connected to the bulletin board.¹³² Subscribers are able to upload and download information from these bulletin boards, thereby exchanging information.¹³³ Besides the popular services, such as America Online and CompuServe, there are also two examples of independent on-line services that provide digitized music. These providers "make only authorized use of the music they disseminate."¹³⁴ They are the Cerberus Celestial Jukebox and the Independent Underground Music Archive.¹³⁵

a. The Cerberus Celestial Jukebox

In 1994, the "Digital Jukebox," an "on-line music delivery service," was founded by a London company called Cerberus.¹³⁶ Cerberus is noteworthy for two reasons. First, it has a unique music compression technology.

Material is fed into an ordinary PC at Cerberus and compressed in real time. To compensate for any loss of quality in the compression process, the system compares the original recording with the same track after it has gone through compression and decompression. The Cerberus software then overemphasizes certain frequencies that have been damaged in the decompression process, and adds them to the original. It then re-compresses the track. The added equalization allows the quality of the compressed clone to be almost identical to the original....¹³⁷

The second unique feature is Cerberus' payment collection system. In this system, customers receive a password upon payment with a credit card.¹³⁸ This password allows customers to select and download the music that they choose.¹³⁹ This

131. *See id.* at 535-36.

132. *CompuServe Settles Suit over Copying of Songs on Its Database*, ENT. LITIG. REP., Dec. 30, 1995, available in LEXIS, News Library.

133. *Id.*

134. Segal, *supra* note 30, at 106.

135. *Id.*

136. *Id.* at 108; see Nick Rosen, *Internet Gives a Break to Budding Pop Stars*, SUNDAY TIMES, Aug. 7, 1994, § 3, at 6.

137. Dominic Sparkes, *Cerberus Advances Online Audio; Service Says It Delivers CD Quality Fast*, BILLBOARD, Aug. 6, 1994, at 92, 92.

138. Nick Rosen, *Royalties Boost for Internet Music*, GUARDIAN, Nov. 14, 1994, at 3; Segal, *supra* note 30, at 109.

139. Segal, *supra* note 30, at 109.

model of receiving payment is something that should be studied because, if copyright owners are to be offered protection and compensation for on-line distribution of their sound recordings, there must be an effective method of tracking who has downloaded what and who, if anyone, has paid.¹⁴⁰ This system offers such features.

b. The Independent Underground Music Archive

The Independent Underground Music Archive ("IUMA"), founded by students at the University of California at Santa Cruz, allows computer users to access music on-line for free.¹⁴¹ The IUMA provides this service using donations from participating bands.¹⁴²

More than 100,000 computer users per day access the system to obtain digital quality music.¹⁴³ The possibility that the IUMA can become an alternative distribution system for digital music has caught the eye of the recording industry,¹⁴⁴ because such a system can potentially offer entire records at minimal cost to the consumer.¹⁴⁵ In addition, this system has also caught the attention of other on-line service providers,¹⁴⁶ and the concept of a digital jukebox has been copied by other services worldwide.¹⁴⁷ Unlike the IUMA, many of the other services likely do not get permission from the copyright owners before uploading the digitized music made available to the general public to download.¹⁴⁸ It has even been alleged that "fans and hackers have put out a medley of illicit material including... a session tape of U2's latest single."¹⁴⁹

Another example of an on-line site containing music files is "http://live.cerf.net." There, a fan can find an entire "WAV" file¹⁵⁰ of Live's single "Lakini's Juice" off of their latest album, *Secret Samadhi*.¹⁵¹ In addition, Live's record label, RadioActive Records, has a site containing full-length music files from other artists.¹⁵² Part of the headline for RadioActive's Web page reads,

140. *Id.*

141. *Id.* at 106-07.

142. *Id.*

143. *Id.* at 107.

144. *Id.* at 107-08.

145. *Id.* at 107.

146. *Id.* at 108.

147. *Id.*

148. *Id.*

149. Norman Lebrecht, *Death of the CD: Computer Technology Threatens the Compact Disc with Extinction*, DAILY TELEGRAPH, Feb. 6, 1997, at 21.

150. A "WAV" file is "[a] sound file format jointly developed by Microsoft and IBM, and prominently featured in Microsoft Windows 95's accessories for storing wave sounds. The format's specification calls for both 8-bit and 16-bit storage formats, in both monaural and stereo...." PFAFFENBERGER & WALL, *supra* note 51, 552.

151. *Live Home Page* (visited Feb. 12, 1997) <<http://live.cerf.net>>.

152. *RadioActive Home Page* (visited Feb. 12, 1997) <<http://radioactive.net>>.

"Download for personal use only. Any other use or reproduction is strictly illegal."¹⁵³ Undoubtedly, other record companies' Web sites also contain such full-length files.¹⁵⁴ But whether or not such a warning will deter those with the proper equipment from downloading multiple copies of the file, or copying a single file once downloaded, is yet to be determined.¹⁵⁵ Thus, it appears that in attempting to avoid the music industry's established distribution methods (i.e., record stores), various on-line services have opened new debate concerning copyright law.¹⁵⁶

2. Cable Networks

In addition to Internet jukeboxes, cable networks also serve as digital music providers. There are two major companies, Digital Cable Radio and Digital Music Express, that offer digital cable services.¹⁵⁷ Although claiming to be "record industry friendly," they have "promoted the availability to subscribers of 'Album Hours during which an entire CD will be played from beginning to end, uninterrupted,'"¹⁵⁸ giving subscribers the opportunity to record entire albums in high quality digital sound.¹⁵⁹ These digital cable services pay royalty fees for the performance of the musical compositions,¹⁶⁰ and now with the Digital Performance Right Act, they will be liable for royalty payments to the copyright owners of the sound recordings as well.¹⁶¹ But this does not necessarily stop individuals from making home recordings for nonpersonal use.

a. Airing of Entire Records and the Difficulty in Discouraging Home Recordings

Prior to the Digital Performance Right Act, the broadcasting of entire records arguably cost copyright owners of the sound recordings the opportunity to otherwise profit from sales of their records to consumers in the traditional cassette or compact disc format.¹⁶² But even though this potential loss existed, no

153. *Id.*

154. *Id.*

155. *Id.*

156. Segal, *supra* note 30, at 108.

157. Calamita, *supra* note 1, at 517.

158. *Id.* at 518 (quoting Comments of Recording Industry Association of America, in REGISTER OF COPYRIGHTS, U.S. COPYRIGHT OFFICE, COPYRIGHT IMPLICATIONS OF DIGITAL AUDIO TRANSMISSION SERVICES, app. at 63 (1991)).

159. *Id.*

160. *Id.*

161. See Raysman & Brown, *supra* note 4, at 4.

162. Calamita, *supra* note 1, at 535.

legislation was ever passed (prior to 1995),¹⁶³ and no case law was ever made regarding the continuation of the practice of playing entire records.¹⁶⁴

Today, with the increasing possibility (and threat to copyright owners) of an interactive, "music on demand," digital audio service, there is an increasing need to clarify the rights of copyright owners of sound recordings.¹⁶⁵ As with the Internet jukeboxes, such a service would pose a threat to conventional record sales and such competition could displace traditional distribution of music as it stands today.¹⁶⁶ The threat arises since such services are able to provide the same high quality digital sound for a fraction of the cost, and with the added convenience of never having to leave home. To aggravate the situation, entire compact discs are being broadcast in digital quality into people's homes. This leads many to fear "that consumers will not only copy compact discs that were initially purchased, but will bypass the initial purchase altogether by recording directly from digital broadcasts."¹⁶⁷ Thus, digital cable services would be providing a de facto distribution center for copyrighted recordings.¹⁶⁸ Such access to on-demand digital recordings libraries, in combination with digital home recording technology, is what the Digital Performance Right Act was created, in part, to address.¹⁶⁹

b. Pay-Per-Listen

One of the earlier solutions proposed to prevent potential copyright violations was transmitting encoded or unencoded versions of digital recordings in order to disallow or allow the subscriber to record, depending on the amount of service charge the subscriber paid.¹⁷⁰ Such a proposal is a "pay-per-listen" option,¹⁷¹ much like the pay-per-view movie channel in the average cable system.

With "pay-per-listen," customers would have an incentive to sample music from unknown performers, who may not be in the mainstream, without having to pay the high cost of a "risky" compact disc purchase.¹⁷² Although such an option could arguably increase record sales of unknown performers by giving them an expanded audience, such an option also poses a threat to record sales if consumers choose the home recording option, since the sound quality would be

163. "Although Congress recently gave official sanction to noncommercial home taping of copyrighted sound recordings, that legislation did not mean by the grant of a 'modest' royalty on home digital recording equipment to resolve all the economic and policy considerations raised by the digitization of sound recordings." *Id.* at 535-36.

164. *Id.* at 535.

165. *Id.* at 542.

166. *Id.* at 542-43.

167. Talley, *supra* note 15, at 82.

168. *See id.* at 81-82.

169. *See Raysman & Brown, supra* note 4.

170. Calamita, *supra* note 1, at 551.

171. *See id.*

172. *Id.*

just as good as a store-bought compact disc.¹⁷³ Consumers would lack the incentive to purchase their own compact disc from a record store if they can obtain the same item at the same quality for a fraction of the cost.

Moreover, even though digital cable broadcasts should be of concern to the record industry, there is a more pressing matter. Home recording equipment is increasingly being made available to the general public for use in recording digital music from both the Internet and cable radio.¹⁷⁴

3. *The Equipment: Digital Audio Tape and Compact Disc Recordables*

Concern over the issue of home recordings has been high within recording industry circles since the introduction of home taping equipment in the United States.¹⁷⁵ Equipment, such as the Digital Audio Tape ("DAT") recorder,¹⁷⁶ Sony's Mini Disc System, and Philip's Digital Compact Cassette, gives consumers the ability to make digital copies of compact discs or tape digital broadcasts with no loss in sound quality.¹⁷⁷ In fact, as Compact Disc-Recordable ("CD-R") packages become available to the general public, recording from compact disc to CD-R discs will get easier and easier.¹⁷⁸ So while making a copy of a disc for personal use is not a violation of copyright law, this assumes that the original disc was legally acquired in the first place. Additionally, either giving the copy to a friend or selling it constitutes a copyright violation.¹⁷⁹ Even so, all a person has to do is purchase a compact disc at a store with a money-back guarantee policy, make and distribute the copies, and then return the disc for a refund.¹⁸⁰ This is made even more realistic with the declining costs of blank CD-Rs, which can be as low as \$6.95 each if purchased in bulk.¹⁸¹ The major drawback is the equipment needed to make such copies. To copy onto a blank CD-R, a computer user needs, "a CD-R drive, blank CD-Rs,...a hard disk drive fast enough to maintain a continuous data transfer during the recording process...[and] either a CD drive or a hard disk drive of about 1 Gbyte."¹⁸²

173. *See id.*

174. *See* Starrett, *supra* note 7, at 94.

175. Talley, *supra* note 15, at 81-82.

176. DAT encountered many problems that caused its lack of popularity. While it is possible to record from compact disc to DAT, it is not possible to make DAT to DAT copies. "This is because DAT recorders are equipped with the Serial Copy Management System.... This system is mandated by Chapter 10 of the Copyright Act of 1976 (commonly known as the Home Recording Act of 1992)." Starrett, *supra* note 7, at 94. An original digital recording is encoded by the Serial Copy Management System with data that prevented a person from making a copy of a copy (DAT to DAT). *Id.*

177. Talley, *supra* note 15, at 81-82.

178. Starrett, *supra* note 7, at 94.

179. *Id.*

180. D'Amico, *supra* note 77.

181. *Id.*

182. *Id.*

Currently, according to an industry analyst, the price of CD-R drives are around \$500.¹⁸³ This price will likely decline in the future, thereby making the technology suitable for mass consumer purchase. Once equipped, a CD-R disc copy can be created for half of what it costs to purchase a compact disc.¹⁸⁴ This, according to Scott Blum, executive vice president of the company that produces ninety percent of all CD-R drives, will lead to a "black or gray market," encouraging copyright violations.¹⁸⁵ Similar violations of copyright law have occurred in relation to computer software on the Internet.¹⁸⁶ This Note now turns to relevant case law in the computer software realm since there is, as of yet, no case law regarding digital music.

IV. CASE LAW

To date, only one case (*Frank Music v. CompuServe, Inc.*)¹⁸⁷ has dealt with the issue of dissemination of music on the Internet.¹⁸⁸ However, the parties in *Frank Music* settled the case before any judicial decision was rendered.¹⁸⁹ Therefore, one must also look at cases dealing with copyright infringement of other mediums on the Internet.

A. Religious Technology Center v. Netcom On-Line Communication Services

*Religious Technology Center v. Netcom On-Line Communication Services*¹⁹⁰ was a case where the copyright holder of a written work sought to hold an Internet access provider liable for a subscriber's copyright infringement. The district court in *Netcom* concluded that it was proper to hold Netcom contributorily liable for copyright infringement because, in this case, there was evidence suggesting that Netcom had knowledge of the postings that were in violation of the copyright laws.¹⁹¹ On the other hand, the *Netcom* court did, in fact, recognize that "[n]o purpose would be served by holding liable those who have no ability to control the information to which their subscribers have access."¹⁹² Despite the court's words, the Internet community was alarmed by the prospect of being held contributorily liable for acts of copyright infringement committed by its customers.¹⁹³ Based on the result in *Netcom*, on-line service providers expressed

183. *Id.*

184. *Id.*

185. *Id.*

186. *See id.*

187. No. 93 Civ. 8153 (S.D.N.Y. filed Nov. 29, 1993).

188. Segal, *supra* note 30, at 130.

189. *Id.*; *Settlement Reached in Music Publishers' Class Action*, PR Newswire, Nov. 7, 1995, available in WL, PRWIREPLUS Database.

190. 907 F. Supp. 1361 (N.D. Cal. 1995).

191. Raysman & Brown, *supra* note 4, at 3.

192. *Religious Tech. Ctr.*, 907 F. Supp. at 1372.

193. Raysman & Brown, *supra* note 4, at 3 (citing *Religious Tech. Ctr.*, 907 F. Supp. 1361).

concern that they would be saddled with the impossible task of policing the Internet for infringing activities.¹⁹⁴

B. Frank Music v. CompuServe

Shortly after *Netcom* came *Frank Music v. CompuServe*.¹⁹⁵ That case involved the liability of CompuServe, the on-line service provider, for "facilitating infringement of copyrighted musical works."¹⁹⁶ The complaint involved allegations that sound recordings were being uploaded to, and downloaded from, CompuServe's system by subscribers to the CompuServe Information Service in violation of copyright laws.¹⁹⁷ The complaint further alleged that CompuServe had facilitated such copyright violations.¹⁹⁸ Although they made no admission of liability,¹⁹⁹ the case was settled with CompuServe paying \$568,000 in damages.²⁰⁰ The settlement also outlined a licensing agreement to provide plaintiffs with a means to collect future on-line licensing royalties from CompuServe.²⁰¹

The licensing agreement in *Frank Music* can serve as a model for "mechanical licensing of sound recordings by copyright owners to on-line networks."²⁰² How did this licensing scheme work? In order to receive a license to distribute a specific sound recording, the managers of CompuServe's on-line forums must make electronic requests to the Harry Fox Agency, the music publisher involved in this case.²⁰³ Each forum's manager will be given his or her own personal identification number by the Agency in making each licensing request.²⁰⁴ The licenses will allow digital transmissions of the specific sound recordings that belong to any member of the class of plaintiffs in this case.²⁰⁵ Although the licenses are not being issued directly to CompuServe, the agreement imposes an obligation on them to ensure that its forum managers pay the fees under the issued licenses.²⁰⁶

194. Raysman & Brown, *supra* note 4, at 3.

195. No. 93 Civ. 8153 (S.D.N.Y. filed Nov. 29, 1993).

196. Raysman & Brown, *supra* note 4, at 3 (emphasis added).

197. *Settlement Reached in Music Publishers' Class Action*, *supra* note 189.

198. *Id.*

199. Marilyn A. Gillen, *CompuServe, Publishers Reach Deal Online Service to Have Music Activities Licensed*, BILLBOARD, Nov. 18, 1995, at 9, 9.

200. Raysman & Brown, *supra* note 4, at 3.

201. *Id.*

202. *Id.*

203. *Id.*

204. *Id.*; see also 17 U.S.C. § 115 (1994 & Supp. I 1995) (discussing compulsory licensing provisions).

205. Raysman & Brown, *supra* note 4, at 3.

206. Gillen, *supra* note 199, at 119.

C. *Sega Enterprises v. MAPHIA*

A more recent case dealing with a nonmusical topic was *Sega Enterprises v. MAPHIA*.²⁰⁷ In *Sega*, the popular video game maker filed suit against MAPHIA, a bulletin board service ("BBS"), and its operator for copyright infringement.²⁰⁸ Sega claimed that MAPHIA facilitated the distribution of unauthorized copies of its video games.²⁰⁹ Pursuant to a seizure order, the operator's computer was examined.²¹⁰ Over twenty games were found on the BBS that were substantially similar to Sega video game programs, and identified by the trademark word "Sega."²¹¹ It was also discovered that the operator was in the business of selling an adaptive driver, or "copier," that allowed those downloading the unauthorized games to run the video game using a floppy disk rather than a Sega game cartridge.²¹² Further evidence showed that the operator had knowledge of infringing activities that included uploading and downloading of the copyrighted video games.²¹³ The operator had printouts of user upload and download statistics from his bulletin board, suggesting he had the ability to track subscriber activities.²¹⁴ In his defense, the operator argued that the copying done through his BBS constituted "fair use,"²¹⁵ because Sega provided no evidence that the users did anything more than play the games in their own homes.²¹⁶

1. *Fair Use*

What is the fair use defense? Once the plaintiff claims the existence of infringement, the defense states that despite the infringement, the activity is permissive as long as the person's use is "fair."²¹⁷ "Fair" is determined by looking at and balancing four factors: "the purpose and character of the use; the nature of the copyrighted work; the amount and substantiality of the copyrighted work used; and the effect of the use upon the potential market for the copyrighted work."²¹⁸ The first factor looks at whether a person's intended use of the copyrighted material is personal or commercial in nature.²¹⁹ The second factor suggests that it

207. 948 F. Supp. 923 (N.D. Cal. 1996).

208. *Id.* at 926.

209. *Id.* at 927.

210. *Id.*

211. *Id.* at 928.

212. *Id.* at 929.

213. *Id.* at 932.

214. *Id.* at 933.

215. *See* 17 U.S.C. § 107 (1994) (stating fair use exception to copyright violations).

216. *Sega Enters.*, 948 F. Supp. at 933.

217. *Id.*

218. *Id.*; *see also* 17 U.S.C. § 107 (stating the four statutory factors for "fair use" exception to copyright infringements); *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569 (1994) (discussing section 107's four factors for "fair use" exception).

219. *Sega Enters.*, 948 F. Supp. at 934.

is harder to raise the fair use defense when the copyrighted work being infringed is close to the intended matter or goal of protection.²²⁰ The third factor examines the proportion of the work that was copied and also whether what was copied is considered “the heart of the copyrighted work.”²²¹ The fourth factor contemplates “whether unrestricted and widespread conduct of the sort engaged in by the defendant would result in a substantially adverse impact on the potential market for the copyrighted work.”²²²

2. Fair Use Analysis in *Sega*

In *Sega*, the BBS operator argued that if a copyright violation is determined to be “fair use,” such act could not be a direct infringement of copyright laws.²²³ This, in turn, would mean that MAPHIA could not be held contributorily liable because contributory infringement requires that someone (*i.e.*, the operator) be held liable for direct infringement.²²⁴ The court, however, concluded that the defendants did not meet their burden of demonstrating fair use.²²⁵ The court weighed two of the fair use factors, the first and the fourth, heavily against the BBS and its operator.²²⁶

In looking at the first factor, the evidence showed that the operator encouraged uploading and downloading of *Sega* games in order to promote sales of a copier system that the operator had assembled.²²⁷ Since the operator’s intent was to benefit his own business venture, this case was distinguishable from *Netcom*; in *Netcom*, the defendant did not gain anything from the information it made available to its subscribers.²²⁸ In looking at the fourth and most important²²⁹ factor, the *Sega* court stated that even though only a few of the operator’s copiers were sold, the fair use analysis requires one to predict how *Sega*’s market would be impacted if such copying were “widespread.”²³⁰ Therefore, the court held the BBS contributorily liable for the infringing activities of its subscribers.²³¹ The court did not make a finding of direct liability because *Sega* was unable to prove that the operator directly caused the copying.²³²

220. *Id.*

221. *Id.* at 934–35.

222. *Id.* at 935 (citing *Campbell*, 510 U.S. at 590).

223. *Id.* at 933–34.

224. *Id.* at 934 (citing *Fonovisa v. Cherry Auction*, 76 F.3d 259, 264 (1996)).

225. *Id.* at 936; *see also Campbell*, 510 U.S. at 590 (recognizing that burden is on defendants to prove the fair use exception).

226. *Sega Enters.*, 948 F. Supp. at 934–35.

227. *Id.* at 934.

228. *Id.* (citing *Religious Tech. Ctr. v. Netcom On-Line Communication Servs.*, 907 F. Supp. 1361, 1379 (N.D. Cal. 1995)).

229. *Id.* at 935.

230. *Id.* at 935–36.

231. *Id.* at 932–33.

232. *Id.* at 932.

The *Sega* analysis has important implications for music on the Internet. The court in *Sega* held a BBS contributorily liable for the copyright violations committed by one of its operators,²³³ in part based on a prediction of the impact on the potential market, by assuming that the operator's conduct was widespread.²³⁴ Similarly, although the equipment required to copy and distribute digital music from the Internet may not exist in every home today, copyright violations committed by just a handful of people with the proper technology can possibly result in liability for on-line service providers. But *Sega's* holding alone will not prevent copyright infringement. Unless regulations with effective enforcement and monitoring mechanisms are created, the recording industry will be greatly impacted.

V. PROBLEMS AND SOLUTIONS

The Digital Performance Right Act, which became effective in 1996,²³⁵ was targeted in part at foreign subscription services that provide the computer user with access to a vast selection of digital recordings for home use or otherwise.²³⁶ In response to this copyright "crisis," the legislative solution was to grant copyright owners legal remedies to protect their sound recordings.²³⁷ The effectiveness of this solution will depend greatly on the issue of enforcement.²³⁸

Currently, there is no Internet police force monitoring violations and enforcing copyright laws.²³⁹ This is problematic because, "Cyberspace has bred an entitlement philosophy in Internet users. The prevailing dogma is that anything available over the Internet—text, graphics, music, software, etc.—is free, or at least should be."²⁴⁰ When one factors in the pervasive presence of copyrighted music on the Internet, usually without the artists' permission, the problem grows. Questions about who will monitor violations and who will pay for the licensing fees will need to be answered in greater detail before this Act can accomplish its objective of deterring copyright violations.

A. The Possible Displacement of Compact Discs and the Record Industry's Concerns Regarding Enforcement

In asking the question of who will monitor such performance right violations, the first answer is likely to be the record industry itself. Record companies are generally the ones who own the sound recording copyright, and

233. *Id.*

234. *Id.*

235. *See Raysman & Brown, supra* note 4, at 3.

236. Lebrecht, *supra* note 149, at 21.

237. *See* 17 U.S.C. § 106 (Supp. I 1995).

238. *See Raysman & Brown, supra* note 4, at 3.

239. Segal, *supra* note 30, at 99.

240. *Id.*

financially, they have the most to lose.²⁴¹ Therefore, to avoid becoming extinct, the record industry should bear the burden of monitoring copyright violations on the Internet and other digital mediums.²⁴²

Currently, it costs record companies a significant sum of money to physically transport their products from a manufacturing plant to the distributors.²⁴³ It is because of such high distribution costs that many in the industry believe that digital delivery of music may eventually displace traditional methods of selling records.²⁴⁴ For example, competition to record stores can come from computer networks, which are able to distribute directly to the consumer.²⁴⁵ One such direct distributor is J-Bird Records, which went on-line November 1, 1996.²⁴⁶ It uses its Web site as a virtual record store to recruit unsigned artists, provide new musicians with an international audience, and offer consumers the opportunity to purchase music from these artists via the Internet.²⁴⁷ The Internet thereby eliminates the middle man²⁴⁸ and makes conventional retailing's system of distribution redundant.²⁴⁹ Because the Internet provides artists more direct access to their customers, the recording industry risks great financial loss and possible extinction unless it bears the burden of convincing Congress to sort out how to enforce the protections available to copyright owners.²⁵⁰

Unfortunately, there are inherent difficulties in monitoring copyright violations.²⁵¹ Internet service providers have pointed out that it is nearly impossible to effectively monitor the large volume of information that gets transmitted over their systems.²⁵² Attempts to monitor, they claim, will most likely result in a massive slow down of the Internet's greatest benefit—rapid

241. Calamita, *supra* note 1, at 549–50.

242. *Id.*

243. *Id.*; see Chuck Philips, '93 Sales Break Sound Barrier, L.A. TIMES, Feb. 25, 1994, at F1; see also Anthony Gottlieb, *No Money Down (Almost Grown: A Survey of the Music Business)*, ECONOMIST, Dec. 21, 1991, at 13 (discussing methods record companies can use to distribute music).

244. Segal, *supra* note 30, at 100–01.

245. *Id.*

246. Larry McShane, *Music by Modem*, COLUMBIAN, Jan. 16, 1997, at § E, available in 1997 WL 6513742. An article appearing on the *New York Times* Web site reported that the J-Bird Web site had so much traffic that it had to be closed down temporarily. In its first week, the site averaged 10,000 visitors per day and the company signed forty artists. Matthew Mirapaul, *Web-Based Record Company Is Swamped with Traffic and Bands*, (Nov. 24, 1996) <<http://www.nytimes.com/yt/mo/day/cyber/>>.

247. McShane, *supra* note 246, at § E.

248. Lebrecht, *supra* note 149, at 21.

249. *Id.*

250. Segal, *supra* note 30, at 100–01; see Alice Rawsthorn, *Wired for Sound: On-Line Distribution of Recordings Puts the Music Industry in a Quandary*, DALLAS MORNING NEWS, Nov. 27, 1994, at 3C (discussing quandary Internet poses to record companies since it can decrease their costs but may end up replacing them entirely).

251. Raysman & Brown, *supra* note 4, at 3.

252. *Id.*

communication capabilities.²⁵³ In addition, service providers have little incentive to cooperate with monitoring efforts since they fear that exposing themselves to liability will drive them out of business.²⁵⁴ For these reasons, service providers have urged for either a high standard of proof when judging infringement or exemption from liability for copyright infringement.²⁵⁵ In recognizing such fear and resistance, the question of who is to be held liable must be addressed. Section IV of this Note discussed the issue of BBS liability in the context of *Sega Enterprises v. MAPHIA*.²⁵⁶ The following subsection examines the issue of liability in greater detail, comparing individuals and service providers.

B. Who Is the Defendant?

Another question that needs to be answered before the Digital Performance Right Act can become useful is who will pay for the copyright infringements. One early step taken by Congress in dealing with the issue of copyright infringement was in another musical realm: the Audio Home Recording Act.²⁵⁷ It was enacted to deal with new technology, such as DAT recorders.²⁵⁸ The Audio Home Recording Act states that “[n]o action may be brought under this title alleging infringement of copyright...based on the noncommercial use by a consumer of [a digital audio recording device] for making digital musical recordings.”²⁵⁹ The Audio Home Recording Act instead set off a portion of the revenues from the sale of such recording devices as royalty for the recording industry’s musical composition copyright holder, thereby avoiding the issue of liability.²⁶⁰ Such a royalty system was not written into the Digital Performance Right Act. Therefore, it is unclear whether those who passively assist noncommercial digital audio copying off the Internet or cable radio at home are liable for copyright infringement.²⁶¹

Although recording for personal use is generally condoned, it is still illegal to upload copyrighted material onto the Internet without permission.²⁶² This is because “copyright infringement occurs whenever an unauthorized copy or phonorecord is made, even if it is used solely for the private purposes of the reproducer.”²⁶³ Unfortunately, since direct infringers are generally committing

253. *Id.*

254. *Id.*

255. *Id.*

256. *See supra* Part IV.C.

257. *See Talley, supra* note 15, at 87.

258. *See id.* at 82.

259. 17 U.S.C. § 1008 (1994).

260. *See Talley, supra* note 15, at 82.

261. *Id.* at 87.

262. Lebrecht, *supra* note 149, at 21.

263. Segal, *supra* note 30, at 125 (citing MELVILLE B. NIMMER & DAVID NIMMER, 2 NIMMER ON COPYRIGHT § 8.02[C] (1994)).

their illegal acts from home, they might be impossible to find.²⁶⁴ Due to the anonymity of Internet communications and the difficulty in locating direct infringers, on-line services become the target of liability.²⁶⁵ On the other hand, even though the service providers are easier to find, they may not always be held legally responsible for their subscribers' acts.²⁶⁶

On-line service liability versus consumer liability must be compared when determining the proper defendant. Service providers grant users access onto electronic bulletin boards.²⁶⁷ These boards are popular Internet sites where users gather to exchange information.²⁶⁸ The question of whether to hold the service provider or the subscriber liable arises when copyrighted materials are furnished by one subscriber to another without the consent of the service provider.²⁶⁹ Especially since individual subscribers are hard to track down, the on-line services, who may only be passive infringers, may increasingly become the ones held contributorily liable.²⁷⁰ This question of liability has not been fully answered by the courts,²⁷¹ and this issue becomes increasingly aggravated by the growth of the Internet worldwide.

C. *The International Implications of the Internet*

There are no discernable boundaries when it comes to the Internet. Copyright laws are generally based on national boundaries and become meaningless in the world of the Internet. This borderless world is like, "a giant copying machine where anything from music to software can be duplicated and distributed at the click of a computer mouse."²⁷² Due to the Internet truly being a global object, it is hard to imagine an Internet police force capable of keeping an eye out for uploads and downloads of digital music in violation of copyright laws. And even if such a police force were to discover some instances of violations, there would remain the difficult question of which country's copyright laws should be applied. This is a question that cannot be addressed in great detail in this Note. However, a brief synopsis of how global leaders are trying to address this issue is necessary in order to understand the need in the United States for more detailed copyright laws, which address music on the Internet.

264. *Id.* at 124.

265. *Id.*

266. *Id.*

267. Raysman & Brown, *supra* note 4, at 3.

268. *Id.*

269. *Id.*

270. *Id.*

271. *See* Sega Enters. v. MAPHIA, 948 F. Supp. 923, 933-36 (N.D. Cal. 1996).

272. *Copyright Battles in Cyberspace* (visited Dec. 20, 1996)

<<http://www.cnn.com/TECH/>>.

The issue of copyrighted data on the Internet was the focus of a United Nations Conference.²⁷³ The World Intellectual Property Organization ("WIPO")²⁷⁴ is the United Nations group that governs copyright and patent issues. In December 1996, it held a three-week conference in Geneva to tackle the first major revisions to international copyright law in thirty-five years, dealing especially with the growth of the Internet.²⁷⁵ Specifically, three treaties were addressed.²⁷⁶ However, only two of these treaties were adopted. They were the WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty.²⁷⁷ Both address the challenges of digital technology in relation to the Internet.²⁷⁸ They provide for technological measures of protection and information regarding management of electronic rights.²⁷⁹

According to the International Federation of the Phonographic Industry, the results of the conference "will have a critical impact on the future growth of the \$40 billion global music business."²⁸⁰ This potential impact is the reason it is necessary to address the copyright issues internationally. The International Federation of the Phonographic Industry warned that, although music delivery on the Internet is currently in its infancy, within five years the Internet could take away fifteen percent of traditional record sales.²⁸¹ The record industry played a large role in the negotiations because of the impact reduced sales could potentially have on its profits.²⁸² Also, it is important to point out that the record industry is especially concerned because its main consumers are often younger people who are more likely to "surf" the Internet and listen to or download songs.²⁸³ In addition to the concerns of the record industry, databases of digital recordings raised a separate concern.²⁸⁴ According to the United Nations, such databases do not pass the "originality" test that would give them copyright protection because they are mere compilations of original recordings.²⁸⁵ Unfortunately, the issue of databases has yet to be resolved by the WIPO.

273. *U.N. Conference Discussing Internet Copyright Laws* (visited Dec. 20, 1996) <<http://www.cnn.com/TECH/>>.

274. The United States is a member of the WIPO. *Id.*

275. *See id.*

276. The three treaties were to protect "[l]iterary and artistic works"; "[t]he rights of performers and producers of 'phonograms,' now most commonly CDs and audio cassettes"; and "[p]roducers of databases." *Id.*

277. *WIPO Press Release No. 106.*, West's Legal News, available in 1997 WL 12502 (Jan. 16, 1997).

278. *Id.*

279. *Id.*

280. *U.N. Conference Discussing Internet Copyright Laws*, *supra* note 273.

281. *Id.*

282. *Id.*

283. *Id.*

284. *Id.*

285. *Id.*

The director general of the International Federation of the Phonographic Industry, Nic Garnett, stated that the proposed treaties "give record companies the basic legal foundation they need to do business in an electronic online market that will grow dramatically in the next few years."²⁸⁶ This organization also believes that the provisions approved in Geneva by the WIPO establish exclusive rights over digital music delivery on-line, supporting the record industry's efforts at copyright enforcement through electronic encryption devices.²⁸⁷ On the other hand, critics of international copyright law have said that cracking down on "cyberspace piracy" will suffocate the Internet and obstruct public access to information.²⁸⁸ Therefore, in order to prevent suffocation of the Internet, alternatives to copyright law should be examined.²⁸⁹

D. Alternatives to Copyright Law

One possible response to these problems involves changing the royalty collection and calculation system for blank digital tapes and compact discs in order to ensure that their retail price remains roughly the same as that of the average prerecorded compact disc.²⁹⁰ Currently, the Audio Home Recording Act requires that manufacturers and distributors of digital audio recording equipment and devices pay royalties.²⁹¹ "The royalty is 2% of the manufacturer's selling price for recorders and 3% of the manufacturer's selling price for recordable media."²⁹² Some now suggest that rather than setting royalties at a percentage of the equipment's price, a regulatory agency should be enlisted to routinely adjust the royalty rate to make sure the retail prices of these items remain at a sufficiently high level to discourage home recordings.²⁹³ Monitoring rates might be a plausible alternative to monitoring the Internet, and so this possibility should be given additional scrutiny by the record industry and Congress.

Another solution offered is blanket licensing.²⁹⁴ Since radio stations and local merchants must purchase blanket licenses before playing copyrighted music, it is reasonable to suggest blanket licenses for Internet service providers. Recently, there have been music-licensing agreements with the American Society of Composers, Authors, and Publishers ("ASCAP") and Broadcast Music, Incorporated ("BMI") issuing blanket performance licenses to operators of

286. *Music Recording Industry Claims Victory over WIPO Copyright Treaties*, West's Legal News, available in 1997 WL 726 (Jan. 2, 1997).

287. *Id.*

288. *Communications Industry: Copyright Laws Will Ruin Internet* (visited Dec. 20, 1996) <<http://www.cnn.com/TECH/>>.

289. See Raysman & Brown, *supra* note 4, at 3.

290. Talley, *supra* note 15, at 99.

291. Starrett, *supra* note 7, at 94-95.

292. *Id.* at 95.

293. Talley, *supra* note 15, at 99.

294. See Gillen, *supra* note 199, at 9.

individual World Wide Web sites for the transmission of music on the Internet.²⁹⁵ ASCAP and BMI are the two major groups that enforce copyrights of musicians and artists.²⁹⁶ Just last year, there was some controversy regarding the ASCAP and a youth group who happened to be singing copyrighted music over a campfire.²⁹⁷ This may appear to be a valiant effort at enforcement of copyright laws, but the Internet is a more difficult world to monitor, especially since it is global in scale.

Finally, there are encryption devices and cyber monitors.²⁹⁸ A recent *Wall Street Journal* article discussed book publishers' support for a system of electronic coding for books.²⁹⁹ Such a device would alert the copyright holder of unauthorized copying.³⁰⁰ In fact, technology already exists that can detect copyright violations of digital images.³⁰¹ But as history teaches us, encryption software is not always an effective solution because "for every encryption algorithm invented, there's a hacker who'll break it."³⁰² In addition, there was a suggestion by the Georgetown University's Cyberspace Law Institute for a court system for the Internet.³⁰³ Such a system, called "Digital Mediation Board" of "virtual magistrates," would exist to respond quickly to claims of on-line copyright infringement.³⁰⁴ Because there is little available case law regarding the Internet, Congress should consider such a system in greater detail as a more focused way to address questions of copyright infringement.

VI. CONCLUSION

The rapid rate at which technology advances is far greater than the pace at which Congress enacts legislation. Although the notion of private individuals everywhere copying digital music onto CD-Rs seems somewhat futuristic, it may soon become reality. The problems that digital music on the Internet and cable networks create for copyright law are real. Even with the passage of the Digital Performance Right Act, the questions of who will monitor such infringement and who will pay for the violations have yet to be clearly answered. Eventually, this problem is likely to seriously affect the profits of record companies. Congress can choose to wait until massive copyright violations occur before they begin addressing enforcement of the Act. But if they wait, by the time they determine a proper method of enforcement, new methods of bypassing copyright law will

295. *Id.* at 119.

296. *See* Segal, *supra* note 30, at 100.

297. *See* Elisabeth Bumiller, *The Girl Scouts vs. ASCAP: Music Writers' Copyright Initiative Proves to Be Public-Relations Debacle of Stunning Proportions*, MONTREAL GAZETTE, Jan. 5, 1997, at C8.

298. Raysman & Brown, *supra* note 4, at 3.

299. *See id.*

300. *Id.*

301. *Id.*

302. D'Amico, *supra* note 77.

303. Raysman & Brown, *supra* note 4, at 3.

304. *Id.*

likely be invented. Therefore, Congress needs to consider suggested solutions such as a Digital Mediation Board and monitoring the royalty rates of digital recording equipment, while keeping in mind the global nature of the Internet. Otherwise, the record industry will either face extinction and lose any meaningful copyright protection, or it will have to learn new methods of distribution by working within this new era.

