

STREAMING INTO THE FUTURE: MUSIC AND VIDEO ONLINE

*William Sloan Coats, Vickie L. Feeman,
John G. Given and Heather D. Rafter**

I. INTRODUCTION

The Internet is impacting the music industry in much the same way it has other retail industries. The Internet's influence on the music industry is especially significant because it has the potential to change an industry controlled by a few record labels that have been able to consistently sustain high profit margins. These record labels seemed invincible due to significant statutory protection as well as a solid, tightly controlled method of distribution. However, digital distribution—the delivery of downloaded music from the Internet—is threatening to change this well-established system.

The battle for control within the music industry is interesting not only because it pits traditional distribution channels against an entirely new system but also because of the nature of the war itself. The forces on each side envision the current battle as somewhat of a holy war. Advocates of digital distribution of music believe this new trend will benefit artists by opening up and democratizing the music industry, thereby making more music available to the public and permitting a more equitable distribution of profits. On the other hand, the established record labels contend digital distribution threatens to destroy the music industry by undercutting the profits of all involved and by promoting music piracy.

Within this conflict, there are a few things that are certain. First, there is a large amount of money at stake for the victor, whether it is the

* Heather Rafter (hrafter@digidesign.com) is Vice President and General Counsel at Digidesign, a division of Avid Technology, Inc. Digidesign is a leading developer of hardware and software used to record, edit, mix and master sound for the professional music, film, video and multimedia industries. Bill Coats (coatsw@howrey.com) and Vickie Feeman (feemanv@howrey.com) are attorneys with Howrey Simon Arnold & White in Menlo Park, California. John Given (jgiven@digidesign.com) is a member of the legal staff at Digidesign. Special thanks to Fritz Hammond. The views expressed in this article do not necessarily reflect the opinions of the authors' respective companies or firms.

fledgling online music companies or the existing record labels. Total revenues for the United States music industry were \$12.5 billion in 1997 and \$12.3 billion in 1998.¹ These numbers are expected to increase with the advent of internet music distribution. Second, there is no doubt music commerce on the web will become more viable and mainstream in the near future. Third, the traditional music distribution companies will remain dominant for quite some time because they will obtain some control over digital distribution. That question is not whether digital distribution of music will impact the storefront model. The answer is yes. Rather, the real uncertainties are: who will win the battle to control the dissemination of music online; which legal and technological forces will shape the future of music distribution; and how quickly music will proliferate and be sold legally and profitably over the Internet.²

The battle for power in the music industry is analogous to the struggle that will occur with the distribution of online video. Currently, the bandwidth does not exist to make downloading online video commercially feasible. In the next five years, however, technology will likely evolve to the point where video may be easily downloaded from the Internet directly to a user's home. To make online video distribution a commercial reality, all that is required is a cable modem, large storage capacity (on the hard drive or through another media management system) and an easy method of playing the downloaded content. Once the technology has evolved sufficiently, the downloading of digital video will offer many of the same opportunities and pose many of the same legal challenges as the distribution of music online.

II. THE TRADITIONAL MUSIC CHANNELS

Traditionally, the sale of music to consumers has been dominated by a small group of large record labels that sell directly to large retailers or through large distributors to a vast array of local retailers. Approximately eighty percent of the popular music industry is controlled by the record companies known as the Big Five: BMG Entertainment, Sony Music,

1. See JUPITER COMMUNICATIONS, MUSIC INDUSTRY AND THE INTERNET: USAGE, RETAIL AND DIGITAL DISTRIBUTION PROJECTIONS 2 (1998). On a worldwide basis, the music industry is considered to be a \$40 billion industry. See Benny Evangelista, *MP3s Turn Up the Volume*, S.F. CHRON., Jan. 11, 1999, at C1.

2. For an interesting discussion of the future of music online, see the comments of Don Rose, President of RykoDisc, and other music industry executives. See JUPITER COMMUNICATIONS, *supra* note 1, at 117-34 (transcribing excerpts from Jupiter's 1998 conference, Executive Roundtable, "New Music Meets Technology").

Warner Music Group, EMI Recorded Music and Universal Music Group.³ These labels possess the money and marketing resources necessary to promote established talent and to introduce new artists to the marketplace.⁴ However, even the largest record label has practical limits on its ability to discover and support new artists. As a result, many talented musicians never have their music published or promoted by an established record company. The “independent” record labels, or “indies,” provide an alternative way for new artists to record and distribute albums. However, due to the high costs of promotion and distribution through traditional retail channels, only the most successful of the independent labels are able to reach large audiences and make their label commercially viable. Moreover, once a smaller record company achieves some level of success, it is often acquired by one of the large labels.

Another aspect of the traditional music industry is that a recording artist receives a relatively small percentage of revenues earned from album sales.⁵ Even if an artist is able to procure a record deal, he or she may earn less than ten percent of all net revenue generated from an album assuming any profit is made at all.⁶ Of course, well-known artists are able to achieve large profits due to substantial touring proceeds and those artists’ unique leverage over the record labels.⁷

III. THE CHANGING FACE OF MUSIC ONLINE

In 1993, a group of college friends founded Internet Underground Music Archive (“IUMA”), the first high fidelity site on the World Wide Web.⁸ The underlying idea of IUMA is to use web technology to allow artists a cheap and easy way to distribute their music.⁹ Unlike traditional avenues of distribution, the Internet offers a low-cost method to upload music files and instantly disseminate them worldwide.¹⁰ Any artist can create his or her own site on IUMA by simply paying a nominal

3. See Evangelista, *supra* note 1. In January of 2000, the Big Five became four when EMI and Warner initiated a merger. See CNNfn, *Warner, EMI Harmonize* (visited Apr. 1, 2000) <<http://cnfn.com/2000/01/24/worldbiz/eminew/>>.

4. See generally DONALD S. PASSMAN, *ALL YOU NEED TO KNOW ABOUT THE MUSIC BUSINESS* 81–87 (1994).

5. See *id.* at 87–98.

6. See *id.* at 98, 109.

7. See *id.* at 109.

8. See Joan Anderman, *Wired for Sound*, *BOSTON GLOBE*, Aug. 21, 1998, at D1. The IUMA site is located at www.iuma.com.

9. See *id.*

10. See generally *id.*

subscription fee.¹¹ The site enables artists to sell albums and other merchandise online.¹²

Today there are dozens of other online storefronts, including www.emusic.com, www.musicboulevard.com, www.amazon.com, www.mp3.com, www.towerrecords.com and www.cdnw.com. Similar to IUMA, these sites offer numerous advantages to users, including the ability to hear music samples, obtain information about the artist and order music easily.¹³ These advantages guarantee that online music distribution will continue to grow. For example, in 1996, U.S. online sales of prerecorded music totaled \$14 million; by 1998, that figure had grown to \$88 million.¹⁴ Still, these numbers are miniscule compared to total sales of music in the U.S.¹⁵ Currently, internet music sales account for just .03% of total revenue.¹⁶ The distribution and sale of music online is expected to grow and expand at a rapid rate.¹⁷ It is estimated sales of prerecorded music online will reach nearly \$1.4 billion, or at least eight percent of all U.S. music sales.¹⁸

Currently there are over 80,000 music sites on the Internet.¹⁹ However, not every music site is dedicated to the sale of prerecorded music online. Some are fan sites and others are devoted to Internet radio broadcasting or “webcasting.”

A. Streaming and Digital Downloading

The Web offers a variety of technologies for disseminating music and video online. One type of technology is “streaming media,” which is the live distribution of music or video online in which no permanent copy is created on the downloader’s system.²⁰ The quality of this music is lower than the quality of a CD.²¹ Many web sites selling music online offer audio

11. *See About IUMA: History* (visited Apr. 1, 2000) <<http://www.iuma.com/About>>.

12. *See id.*

13. The amount of information on each site varies, and some sites like www.cdnw.com and www.amazon.com do not yet offer the ability to digitally download the product itself.

14. JUPITER COMMUNICATIONS, *supra* note 1, at 5.

15. Paul Keegan, *Making Beautiful Music on the Net*, UPSIDE TODAY, July 21, 1998, at 83.

16. *See id.*

17. *See id.*

18. JUPITER COMMUNICATIONS, *supra* note 1, at 5.

19. *See Keegan, supra* note 15, at 84.

20. Web-based dictionary <<http://www.currents.net/resources/dictionary/noframes/nf.definition.phtml>>.

21. *Id.*

streaming technology that provides the opportunity to preview clips from an artist in real time.²²

Another type of technology, digital distribution, is the downloading of a complete audio content file, which may have the sound quality of a CD. Once downloaded, files can be retained by the customer and played on demand.²³

B. *The Controversy Over MP3*

There are several competing formats struggling to become the standard for the digital downloading of music. These formats include a2b, realaudio, liquidaudio and MP3. Of these formats, MP3 is gaining the most popularity among consumers and causing the greatest uproar in traditional music circles. MP3 stands for Motion Picture Experts Group (“MPEG”) one layer three, which is a method of compressing audio files into digital format that takes up only one-tenth of the computer storage space used by previous technologies.²⁴ As an example, where it used to take ten hours to download a record album in .wav file format, an MP3 user can download the same amount of music in one hour. MP3, as with other similar formats, also permits the proliferation of near perfect digital copies of music, with very little deterioration in quality.²⁵

Further, not only can existing songs be downloaded over the Internet using MP3 technology, they can also be forwarded quickly to others. Users need only load a CD into their computer, and, using an MP3 translation program, “rip” the wave files off the CD, convert them to the MP3 format, and then send the song over a standard internet connection to someone else or to a website. This entire process takes about twenty minutes, depending upon the user’s connection speed. Sending the same uncompressed song

22. Sites providing preview clips include www.iuma.com, www.garageband.com, www.emusic.com or www.cdnow.com. Additionally, there are sites such as www.mtv.com, www.cnn.com, www.killpopradio.com and www.broadcast.com that offer streaming media.

23. Digital distribution is a phrase coined in the *Jupiter Report*, *supra* note 1, and is not the only term defining the downloading of music from the Internet onto a computer hard drive. Nonetheless, use of the terms “streaming media” and “digital downloading” is a good way to differentiate between the two. Sites that allow digital distribution of audio content, at least of individual songs, include www.iuma.com, www.emusic.com and www.mp3.com.

24. See R. Harris, *New Technology Could Change the Music Industry, Consumer Habits*, (Dec. 11, 1998) <www.foxnews.com/news/wires2/1211/n_ap_1211212.sml>; see also Michael Robertson, *Top 10 Things Everyone Should Know About MP3* (visited Apr. 18, 2000) <<http://www.mp3.com/news/070.html>>.

25. Web-based Dictionary <<http://www.currents.net/resources/dictionary/noframes/hf.definition.phtml?bGava3VwPTC5ODU=>>>.

would take more than three hours.²⁶ Software for playing these “ripped” audio files is available free of charge on the Internet.²⁷ MP3’s capability to quickly and inexpensively distribute near-perfect compressed copies of music threatens the established music industry because it increases the risk of music piracy.

The advent in late 1998 of Diamond Multimedia’s “Rio,” a Walkman-like music player that permits the downloading and storage of MP3 music files on a computer chip, further heightened those concerns.²⁸ The Rio player can store about an hour’s worth of CD-quality MP3 music and currently sells for approximately \$200.²⁹ The Rio demonstrates technology has evolved to the point that CD-quality music can be downloaded quickly and efficiently off the Internet, and transferred onto a portable player.³⁰ This major advancement has caused great anxiety in the record industry. According to one commentator:

So far, regular use of MP3 has been limited to the kind of people likely to have the patience to do much of their music listening through a pair of computer speakers—principally hard-core hardware freaks and college students with high-bandwidth Net connections. But now, with the sexy, Walkman-esque Rio scheduled to hit stores this month at prices under \$200, that could change. Plug the Rio into your computer, copy a load of MP3 files into its memory and go. It’s a no-brainer for consumers and a nightmare for record executives.³¹

Despite the Rio player’s ability to play illegally copied music, that is not its purpose according to Rio’s manufacturer, Diamond Multimedia (“Diamond”).³² Diamond’s vice president of corporate marketing, Ken Wirt, states, “[w]e understand there is some pirating of music by MP3s, which we do not condone, promote or endorse.”³³ Instead, Diamond

26. Note the downloading process described above might be a violation of the copyright laws, but is nonetheless a common practice among MP3 users. See *infra* Part V for further discussion of copyright issues underlying the distribution of digital audio online.

27. For example, the realaudio software is available at no cost at www.real.com, the liquidaudio software is available at www.liquidaudio.com, and the Microsoft Media Player is available for free download at <http://microsoft.com/windows/mediaplayer/en/default.asp?RLD=58>.

28. Julian Dibbell, *The Record Industry’s Digital Daze*, ROLLING STONE, Nov. 26, 1998, at 102, available in 1998 WL 27734514.

29. *Rio Players* (visited Mar. 26, 2000) <<http://www.riohome.com>>.

30. *Audiohighway.com Now Offers Free MP3 Audio Content*, Multimedia News, Jan. 28, 1999, available in LEXIS, All News Library, Last 2 Years File.

31. Dibbell, *supra* note 28, at 102.

32. See *id.*

33. *Id.*

Multimedia maintains the Rio's intended purpose is to permit users to transfer music legally acquired from the Internet or to convert music from the user's own CD collections. The record industry, however, is unpersuaded by Diamond's statements. The Vice President of New Media Technology at Polygram Group Distribution, Jim McDermott, has noted, "[t]he Rio, to me, is like walking into a head shop and buying a bong, and it says, 'For use with tobacco products only.' They . . . know [the Rio is] going to be used for piracy."³⁴

In response to the record industry's concerns over the Rio player, the Recording Industry Association of America ("RIAA"), which represents the major record labels, filed suit against Diamond on October 9, 1998.³⁵ The RIAA alleged the Rio player violated the Audio Home Recording Act ("AHRA")³⁶ by enabling serial copying of digital works.³⁷ Diamond countersued, accusing the RIAA of conspiring to stifle the sale of MP3 music over the Internet. The Diamond Multimedia case and related statutes governing music and video distribution online are discussed below.³⁸

IV. THE COPYRIGHT ACT

The distribution of sound recordings on the Internet is governed by the United States Copyright Act,³⁹ as is the distribution of music through traditional channels.⁴⁰ Regardless of whether a sound recording is streamed in real time, downloaded for future use, arranged as a Musical Instrument Digital Interface ("MIDI") file,⁴¹ or attached as a soundtrack to a video clip, the website owner who offers music online must obtain one or more licenses from the copyright holder.⁴² In most cases, there are multiple copyright holders for a single musical work.⁴³

34. *Id.*

35. Recording Indus. Ass'n of Am., Inc. v. Diamond Multimedia Sys., Inc., 29 F. Supp. 2d 624 (C.D. Cal. 1998).

36. 17 U.S.C. §§ 1001–1010 (1994 & Supp. IV 1998).

37. *See Diamond*, 29 F. Supp. 2d at 625.

38. *See infra* Part VI.

39. *See* 17 U.S.C. §§ 101–1332 (1994 & Supp. IV 1998).

40. *See id.*

41. *See* AL KOHN & BOB KOHN, KOHN ON MUSIC LICENSING 1244 (2d ed. 1996). MIDI is the standard computer format or protocol for the electronic transmission of music data. *See id.* at 1093. MIDI permits compact storage of music, known as MIDI files, on computer disks which can be copied or manipulated using digital audio technology. *See generally id.* at 1244.

42. *See infra* Part IV.A.

43. *See generally* 17 U.S.C. §§ 101–120 (1994 & Supp. IV 1998).

A. *The Composition/Sound Recording Dichotomy*

The variety of distinct ownership rights granted by the Copyright Act complicates the seemingly simple act of offering music to consumers online. Every piece of prerecorded music implicates at least two separate copyrights: one in the sound recording as it is heard and performed, and one in the musical composition that underlies the recording.⁴⁴ Thus, obtaining a license in the musical composition would authorize a web site owner to record her own version of a popular song, but would be insufficient to allow her to webcast the song as originally recorded.⁴⁵ Similarly, webcasting a song for which the web site owner has a sound recording license, but not a composition license, is an infringement.⁴⁶ Permission from both copyright holders is required to legally webcast a sound recording.⁴⁷

The dichotomy of ownership rights in sound recordings and musical compositions is further complicated by the range of rights granted to copyright holders. Those rights include the exclusive right to publicly perform, display, reproduce in copies, distribute, publish and transmit copyrighted works.⁴⁸ Rights under the Copyright Act are interpreted differently in digital audio transmissions on the Internet than in more traditional media.⁴⁹

B. *The Interplay Between Copyright Law and Audio on the Internet*

1. Exclusive Right of Public Performance

Owners of copyrights in musical compositions have the exclusive right to perform their work publicly.⁵⁰ Under the Copyright Act, the right

44. See KOHN & KOHN, *supra* note 41, at 1240.

45. See *id.*

46. See *id.* at 1240, 1246.

47. See *id.* at 1240. The United States Copyright Office has useful information on the copyright distinction between musical compositions and sound recordings, as well as the procedures for registering both. See U.S. COPYRIGHT OFFICE, CIRCULAR 56a, COPYRIGHT REGISTRATION OF MUSICAL COMPOSITIONS AND SOUND RECORDINGS (1999); U.S. COPYRIGHT OFFICE, CIRCULAR 50, COPYRIGHT REGISTRATION FOR MUSICAL COMPOSITIONS (1999), available at <http://lweb.loc.gov/copyright/circs/circ50.html>; U.S. COPYRIGHT OFFICE, CIRCULAR 56, COPYRIGHT REGISTRATION FOR SOUND RECORDINGS (1999), available at <http://lweb.loc.gov/copyright/circs/circ50.html>. Copyright application forms and circulars are also available upon request by telephoning the Copyright Office at (202) 707-9100.

48. See 17 U.S.C. § 106 (1994 & Supp. IV 1998).

49. See *infra* Part IV.B.

50. See 17 U.S.C. § 106(4) (1994 & Supp. IV 1998).

of public performance covers not only a live rendition of a composition onstage, but also the broadcast of the composition in any form on the Internet, radio, television or by any other medium through which sound can be heard.⁵¹ While playing a CD or other sound recording in the privacy of one's own home constitutes a private performance, a radio broadcast or arguably even a telephone "on-hold" recording is considered a public performance.⁵²

Unlike a radio transmission, an internet audio webcast may not result in the immediate performance of a musical work on the receiver's end, because the receiver may opt only to store the audio data for future use.⁵³ One could argue when the receiver of a digital transmission chooses to download the song for later listening, only a private performance takes place, which the copyright owner has no exclusive right to control. However, owners of musical composition copyrights argue a performance license is required regardless of whether an audio transmission is played immediately or stored for later use.⁵⁴

Unlike copyright holders of musical compositions, owners of sound recordings generally have no right to control analog public performances.⁵⁵ The reason for this disparity may be that when a sound recording is broadcast over the airwaves, the physical manifestation of the sound recording (i.e., the CD, record, tape, etc.) does not come under the listener's control or possession. Conversely, digital transmissions via the Internet are always stored on the recipient's hard drive or in the random access memory ("RAM") of the recipient's computer, even if only briefly. Perhaps in recognition of this difference, Congress enacted the Digital Performance Right in Sound Recordings Act ("DPRSRA")⁵⁶ in 1995, which amended the Copyright Act to extend public performance rights in sound recordings performed by means of digital audio transmission.⁵⁷

51. *See id.*; 17 U.S.C. § 101 (1994) (defining "perform" broadly to encompass any direct performance or any performance "by means of any device or process").

52. *See id.*

53. The storage of audio is, in fact, the typical scenario. As technology progresses, real-time streaming of audio is becoming more common, but the sound quality is less than perfect over typical modem lines. Direct download is still the preferred method for those who value high-quality sound.

54. *See KOHN & KOHN, supra* note 41, at 1241.

55. *See id.* at 1242; *see also* 17 U.S.C. § 106(6) (Supp. IV 1998) (granting sound recordings a performance right only when performed by "means of an audio transmission").

56. Pub. L. No. 104-39, 109 Stat. 336 (1995).

57. *See* 17 U.S.C. § 106(6). The Digital Millennium Copyright Act ("DMCA"), passed on October 12, 1998, amended the Digital Performance Sound Recording Act of 1995 ("DPRSRA"). *See* DMCA, Pub. L. No. 105-304, 112 Stat. 2860 (1998). The DMCA creates stricter procedures for licensing digital audio transmission of sound recordings. *See id.* As a result of these

2. Exclusive Right of Reproduction

The Copyright Act grants the copyright holder the exclusive right to reproduce a sound recording.⁵⁸ As a result, a mechanical license is generally required in order for a non-copyright holder to reproduce any sound recording.⁵⁹ If a sound recording is only in audio format, as opposed to synchronized with video or film, a statutory license, that is, one the owner is compelled to grant, is available for a statutorily set rate.⁶⁰ This is known as a “compulsory” license.⁶¹

As discussed earlier, copyright holders in sound recordings are entitled to performance royalties in digital audio transmissions by virtue of the DPRSRA because a digital transmission often results in the creation of a copy of the sound recording—called a “phonorecord” by the DPRSRA⁶²—on the receiver’s computer.⁶³

3. Other Exclusive Rights: The Distribution and Derivative Rights

Distribution is another exclusive right of copyright owners.⁶⁴ Owners of both musical composition and sound recording copyrights have the exclusive right to control the distribution of their works.⁶⁵ The Copyright Act defines the right of distribution as the right “to distribute . . . to the public by sale or other transfer of ownership, or by rental, lease, or lending.”⁶⁶ This means copyright holders can control the commercial exploitation of their work.

One noteworthy limitation on this right is the first sale doctrine.⁶⁷ This doctrine states, “[n]otwithstanding the provisions of section 106(3), the owner of a particular copy or phonorecord lawfully made under this title, or any person authorized by such owner, is entitled, without the

amendments, web site owners must transmit identifying data, such as the name of the recording artist, along with digital audio content. See DMCA, Pub. L. No. 105-304 § 405, 112 Stat. 2860, 2890–94 (codified as enacted at 17 U.S.C. §§ 114(d)(2)(A)(iii), 114(d)(2)(C)(ix) (Supp. IV 1998)).

58. 17 U.S.C. § 106(1) (1994).

59. KOHN & KOHN, *supra* note 41, at 1195.

60. See 17 U.S.C. §§ 115(a)(1), 115(c) (1994 & Supp. IV 1998).

61. See KOHN & KOHN, *supra* note 41, at 656–57.

62. See 17 U.S.C. § 114(b) (1994 & Supp. IV 1998).

63. See 17 U.S.C. § 106(6); see also *supra* note 59 and accompanying text.

64. 17 U.S.C. § 106(3) (1994).

65. See *id.*

66. *Id.*

67. 17 U.S.C. § 109(a) (1994).

authority of the copyright owner, to sell or otherwise dispose of the possession of that copy or phonorecord.”⁶⁸

Thus, the first sale doctrine permits someone to buy a song from the Internet, such as a song downloaded in MP3 format, and then sell or give that same copy of the song to someone else. However, it would not permit a person to sell or otherwise transfer possession of a song obtained unlawfully, such as a pirated version.⁶⁹ Likewise, the first sale doctrine would not allow a person to sell or give away a reproduction of an MP3 file if that same person only paid for one copy and kept the original download on his or her own computer.

A copyright owner of musical compositions and sound recordings also has the exclusive right “to prepare derivative works.”⁷⁰ This right provides the copyright owner with the right to control the making of adaptations of works.⁷¹ On the Internet, the right to prepare derivative works is consistent with traditional copyright law; neither webcasters nor web sites can make adaptations of the musical composition or rearrangements of the sound recording without some form of a license.⁷²

C. Copyrights in Video, Motion Pictures and Other Media

Modern internet technology allows computer users to easily capture and transmit not only music, but moving images as well. Like digital audio, digital video may be streamed in real-time or downloaded for future viewing. If music accompanies the video transmission, musical reproduction and public performance licenses, as well as motion picture and synchronization licenses, may be required.⁷³ Additionally, the display of song lyrics requires a separate display license.⁷⁴ While copyright holders generally have not been quick to enforce their rights in the display of song lyrics on the Internet, the Harry Fox Agency recently took legal action against the Online Guitar Archives (“OLGA”), a BBS service where

68. *Id.*

69. *See id.*

70. 17 U.S.C. § 106(2) (1994).

71. *See id.* This right is sometimes referred to as the adaptation right. The Copyright Act distinguishes between sound recording copyright owners and other types of copyright owners in relation to the adaptation right. In one way, the Act appears more protective of sound recording copyright holders, giving them the exclusive right to prepare a derivative work “in which the actual sounds fixed in the sound recording are rearranged, remixed or otherwise altered in sequence in quality.” 17 U.S.C. § 114(b).

72. *See generally* KOHN & KOHN, *supra* note 41, at 507.

73. *See id.* at 1245–46.

74. *See generally* 17 U.S.C. § 106(5) (1994 & Supp. IV 1998) (granting copyright owners a separate right of display).

music enthusiasts could exchange guitar tablature and lyrics to popular songs.⁷⁵

D. Obtaining a License

If licensing were conducted on a song-by-song basis and there were no established procedures for obtaining the requisite licenses, obtaining and enforcing the variety of licenses necessary to offer music online would be impracticable, if not impossible, for both the copyright holder and the licensee. Fortunately, the process of obtaining licenses is relatively efficient and well-established, and most of the procedures available to the traditional media apply to music distributed over the Internet. In order to perform musical compositions publicly, web site owners can obtain blanket performance licenses from the three main music performance rights societies: American Society of Composers, Authors and Publishers (“ASCAP”), Broadcast Music Incorporated (“BMI”) or SESAC,⁷⁶ just as radio stations and music venues commonly do. A blanket license enables a licensee to pay a periodic fee representing a percentage of the user’s revenues attributable to the performed music.⁷⁷

In addition, under certain circumstances, a web site owner may be required to obtain a license to cover the public performance or reproduction of a sound recording. As part of the DPRSRA, Congress amended the compulsory mechanical provision of the Copyright Act to cover “those who make phonorecords or digital phonorecord deliveries. . . .”⁷⁸ The new Act specifically defines “digital phonorecord delivery” as:

[E]ach individual delivery of a phonorecord by digital transmission of a sound recording which results in a specifically identifiable reproduction by or for any transmission recipient of a phonorecord of that sound recording, regardless of whether the digital transmission is also a public performance of the sound

75. See *Tablature* (visited Mar. 6, 2000) <<http://www.harmony-central.com/Guitar/tab.html>>. The Online Guitar Archives (“OLGA”) closed in response to the Harry Fox Agency’s legal action. See *id.*

76. Virtually all performance licenses are issued by these three music performance rights societies. See KOHN & KOHN, *supra* note 41, at 871. In the U.S., the two largest of these are ASCAP and BMI. See *id.* at 871–72. All three organizations provide useful web sites with licensing information and rate schedules. ASCAP’s site is located at www.ascap.com; BMI’s site is located at www.bmi.com; and SESAC’s site is located at www.sesac.com. If music is not licensed through one of these performance rights societies, it is necessary to obtain written permission directly from the copyright holders to distribute or perform the music. See *id.* at 876–81.

77. See generally PASSMAN, *supra* note 4, at 233–34.

78. See 17 U.S.C. § 115(a)(1).

recording or of any nondramatic musical work embodied therein.⁷⁹

This means that all licenses for the reproduction and distribution of audio-only recordings are governed by the compulsory license provision of the copyright law.⁸⁰ Thus, the web site owners must pay the statutory fee, but the copyright owner cannot refuse to grant a license nor set a different rate.⁸¹ As of January 1, 2000, the statutory rates are 7.55¢ for songs under five minutes in length and 1.45¢ per minute for songs over five minutes.⁸² The Harry Fox Agency administers mechanical license fees for many music publishers in the U.S.⁸³

As noted earlier, other types of licenses may be required in addition to the performance or mechanical licenses. These licenses include synchronization licenses and radio synchronization licenses, which may be obtained from the Harry Fox Agency or music publishers. In addition, the RIAA provides more information about licenses involving sound recordings.⁸⁴ ASCAP's web site also includes a powerful search engine, known as "ACE on the Web," which can be used to locate information about the writers, publishers and performers of a wide variety of songs in ASCAP's repertoire.⁸⁵ A good source of general information on music licensing can also be found in the treatise *Kohn on Music Licensing*,⁸⁶ as well as on the book's web site, at www.kohnmusic.com. Alternatively, the U.S. Copyright Office can assist in searches of the Copyright Office records in order to find owners of rights in musical works and sound recordings. As a last resort, § 115 of the Copyright Act sets forth a procedure for providing notice when a licensee cannot identify the

79. *Id.* § 115(c)(3)(A).

80. *See generally id.* § 115(d).

81. For further discussion, *see* KOHN & KOHN, *supra* note 41, at 656–60.

82. *See* AL KOHN & BOB KOHN, KOHN ON MUSIC LICENSING 390 (2d ed. Supp. 2000).

83. *See* AL KOHN & BOB KOHN, KOHN ON MUSIC LICENSING 670–71 (2d ed. 1996). The Harry Fox Agency is associated with the National Music Publisher's Association. *See NMPA-HFA Home Page* (visited Mar. 26, 2000) <<http://www.nmpa.org>>. According to Harry Fox's site, "[t]he Agency now represents more than 22,000 American music publishers and licenses a large percentage of the uses of music in the United States on records, tapes, CDs and imported phonorecords." *Id.* The site provides useful information on mechanical license fees. *See Statutory Royalty Rates Effective January 1, 2000* (visited Apr. 1, 2000) <<http://www.nmpa.org/hfa/ratecurrent.html>>.

84. *See RIAA Online* (visited Mar. 6, 2000) <<http://www.riaa.com>>. The Recording Industry Association of America ("RIAA") is the trade group that represents most of the recording industry in the U.S. *Id.* The RIAA's members include over 500 record companies and "90% of all legitimate sound recordings produced and sold in the United States." *Id.*

85. *See ASCAP* (visited Mar. 6, 2000) <<http://www.ascap.com>>.

86. *See generally* KOHN & KOHN, *supra* note 41.

copyright owner of a sound recording through a search of Copyright Office records or other procedures.⁸⁷

V. THE AUDIO HOME RECORDING ACT

In 1992, the Audio Home Recording Act (“AHRA”)⁸⁸ added Chapter 10 to the Copyright Act to govern audio recording.⁸⁹ Chapter 10 applies only to the recording of audio works and is not intended to establish general principles applicable to other types of copyrighted works.⁹⁰

The AHRA resolved the longstanding debate between the music industry, consumer electronics manufacturers and consumers over the legality of home audio recording. Prior to passage of the AHRA, neither the legislature nor the courts had definitively resolved this debate. Until the advent of digital recording technology in the late 1980’s, the inferior sound quality of home tapes assured a substantial market for original audio recordings. However, the development of digital audio tape (“DAT”) technology in 1987 shifted the balance by enabling perfect fidelity copies, regardless of the generation of the copy. The pyramid scheme enabled by perfect digital copying—for example, a purchaser of a recording could make three copies and give them to three friends, who in turn could each make three copies and give them to three friends, and so on—threatened to supplant a substantial number of retail store sales.

To cope with the changing environment of the audio recording enabled by DAT technology, the record companies and hardware manufacturers engaged in worldwide negotiations and came to an accord on July 28, 1989.⁹¹ It took two more years, until June 1991, for other factions of the record industry, such as music publishers, song writers and performing rights societies to sign an agreement, which was then presented to Congress. Although the Copyright Office, the consumers and the administration all supported the AHRA, it went through numerous hearings

87. *See generally* 17 U.S.C. § 115 (1994 & Supp. IV 1998). A licensee in such an instance would record with the Licensing Division of the Copyright Office a “Notice of Intention to Obtain a Compulsory License.” *See* 17 U.S.C. § 115(b) (1994). For additional information, see U.S. COPYRIGHT OFFICE, CIRCULAR 75, THE LICENSING DIVISION OF THE COPYRIGHT OFFICE, available at <<http://lcweb.loc.gov/copyright/circs/circ75.html>>, or call the Licensing Division of the Copyright Office at (202) 707-8150. *See U.S. Copyright Office* (visited Mar. 6, 2000) <<http://lcweb.loc.gov/copyright/circs>>.

88. Audio Home Recording Act of 1992, Pub. L. No. 102-563, 106 Stat. 4242 (1992).

89. *See* 17 U.S.C. §§ 1001–1010 (1994 & Supp. IV 1998).

90. *See id.*

91. *See* H.R. Rep. No. 102-873, pt. 1 (1992).

and revisions before Congress finally passed the bill on October 28, 1992.⁹² Arguably, the AHRA, applies to all forms of digital-to-digital copying and benefits all interested parties. The AHRA allows consumer electronics manufacturers to sell digital audio recorders and recording media and allows consumers to use the recorders for home taping.⁹³ This Act also compensates affected parties, such as record companies, songwriters and music publishers, for revenues lost due to such home taping.⁹⁴

The AHRA provides manufacturers and distributors of digital or analog audio recording devices and digital or analog audio recording media immunity from copyright infringement actions.⁹⁵ In exchange for this immunity, the AHRA requires manufacturers and distributors to contribute royalties for all digital recording devices and recording media imported to or distributed in the U.S.⁹⁶ The royalties are then distributed to the recording artists, copyright owners, music publishers and music composers.⁹⁷

The AHRA also requires digital recording devices contain one of the following three copy protection systems:

- (1) the Serial Copy Management System;
- (2) a system that has the same functional characteristics as the Serial Copy Management System and requires that copyright and generation status information be accurately sent, received, and acted upon between devices using the system's method of serial copying regulation and devices using the Serial Copy

92. Audio Home Recording Act of 1992, Pub. L. No. 102-563 § 4, 106 Stat. 4242, 4248 (1992).

93. *See* 17 U.S.C. § 1001 (1994).

94. *See* 17 U.S.C. § 1003(a) (1994).

95. *See* 17 U.S.C. § 1008 (1994 & Supp. IV 1998). The Act defines "digital audio recording device" as:

any machine or device of a type commonly distributed to individuals for use by individuals, whether or not included with or as part of some other machine or device, the digital recording function of which is designed or marketed for the primary purpose of, and that is capable of, making a digital audio copied recording for private use. . . .

17 U.S.C. § 1001(3) (1994). However, the AHRA sets forth two explicit exceptions to this definition: "(A) professional model products and (B) dictation machines, answering machines, and other audio recording equipment that is designed and marketed primarily for the creation of sound recordings resulting from the fixation of nonmusical sounds." *See* 17 U.S.C. § 1001(3)(A)-(B) (1994). Finally, the AHRA defines a digital audio recording medium as "any material object in a form commonly distributed for use by individuals, that is primarily marketed or most commonly used by consumers for the purpose of making digital audio copied recordings by use of a digital audio recording device." 17 U.S.C. § 1001(4)(A) (1994).

96. *See* 17 U.S.C. §§ 1003-1004 (1994).

97. *See* 17 U.S.C. § 1006 (1994 & Supp. IV 1998).

Management System; or

(3) any other system certified by the Secretary of Commerce as prohibiting unauthorized serial copying.⁹⁸

Failure to comply with either the royalty or copy protection requirements subjects a manufacturer or distributor to potential civil liability under the AHRA.⁹⁹

In addition, the AHRA protects consumers who use digital or analog recording devices or mediums to make home audio recordings from copyright infringement actions.¹⁰⁰ The Act thus puts to rest the debate over the legality of home recording of both analog and digital audio works.

VI. THE DIAMOND MULTIMEDIA CASE

On October 9, 1998, the RIAA filed suit against Diamond Multimedia in the U.S. District Court for the Central District of California, alleging the manufacture and sale of the Rio player violated the AHRA.¹⁰¹ The RIAA asserted Diamond failed to comply with the requirements of the AHRA because its Rio player enables serial copying.¹⁰² The RIAA contended the Rio player enables users to make serial copies of CDs by making a first generation copy on their hard drive and then a second generation copy to their Rio player.¹⁰³ The plaintiff argued the Rio also enables users to make second or higher generation copies of internet MP3 files, and those MP3 files are often pirated copies of songs.¹⁰⁴

In reply, Diamond argued that its Rio player is exempt from the AHRA because it requires a personal computer to record music.¹⁰⁵ According to Diamond, the Rio is not a “digital audio recording device” because the source of the copy, the computer hard drive, is not a “digital musical recording.”¹⁰⁶ Section 1001(5)(B)(ii) of the AHRA excludes

98. 17 U.S.C. § 1002(a) (1994 & Supp. IV 1998).

99. *See* 17 U.S.C. § 1009 (1994).

100. *See id.* § 1008.

101. *See* Recording Indus. Ass’n of Am. v. Diamond Multimedia Sys. Inc., 29 F. Supp. 2d 624 (C.D. Cal. 1998).

102. Plaintiff’s Reply Memorandum of Points and Authorities in Support of Order to Show Cause Re Preliminary Injunction, at 2, Recording Indus. Ass’n of Am. v. Diamond Multimedia Sys. Inc., 29 F. Supp. 2d 624 (C.D. Cal. 1998) (No. CV 98-8247).

103. *See id.*

104. *See id.*

105. Diamond Multimedia Systems, Inc.’s Memorandum of Points and Authorities in Opposition to Preliminary Injunction, at 4, Recording Indus. Ass’n of Am. v. Diamond Multimedia Sys. Inc., 29 F. Supp. 2d 624 (C.D. Cal. 1998) (No. CV 98-8247).

106. *Id.* at 9–10.

material objects “in which one or more computer programs are fixed” from the definition of digital musical recordings.¹⁰⁷ Diamond contended because the Rio acquires the music it records from a computer hard drive, which stores computer programs, the player does not make a “digital audio copied recording” within the meaning of the statute.¹⁰⁸ In the alternative, Diamond argued the Rio player complies with the serial copy management system requirements of the AHRA because it lacks digital output, thus preventing serial copying of files stored in the Rio or on its flash memory.¹⁰⁹

Although the district court initially granted the RIAA’s application for a temporary restraining order, the court ultimately ruled that the RIAA failed to demonstrate Diamond’s distribution of the Rio player would cause irreparable harm.¹¹⁰ The court therefore refused to enter a preliminary injunction barring sale of the Rio player,¹¹¹ and its ruling was subsequently affirmed by the Ninth Circuit.¹¹²

The district court rejected Diamond’s argument that the Rio player was not covered by the AHRA and concluded the Rio “appears to technically satisfy the Act’s definition of ‘serial copying.’”¹¹³ However, the Court noted adding Serial Copy Management System (“SCMS”) to the Rio would be an “exercise in futility”¹¹⁴ because the copyright and generation status information is not contained in the MP3 files on the computer’s hard drive.¹¹⁵ Moreover, because the Rio does not have digital output capability and cannot enable further copies of information stored in its memory, the SCMS information may not be sent or received between devices.¹¹⁶ Therefore, the court concluded a Rio player “without SCMS is functionally equivalent to a Rio with SCMS.”¹¹⁷ Further, the court found the Secretary of Commerce would likely determine the Rio adequately prohibits unauthorized serial copying and thus Diamond is at most

107. 17 U.S.C. § 1001(5)(B)(ii) (1994).

108. *See Diamond*, 29 F. Supp. 2d at 628.

109. Diamond has since added Serial Copy Management System (“SCMS”) to its Rio Player. *See AHRA Unconstitutional, Diamond Says in Countersuing RIAA*, AUDIO WEEK, Dec. 7, 1998, available in 1998 WL 10701067.

110. *See Diamond*, 29 F. Supp. 2d at 626, 633.

111. *See id.* at 633.

112. *See Recording Indus. Ass’n of Am. v. Diamond Multimedia Sys., Inc.*, 180 F.3d 1072, 1081 (9th Cir. 1999).

113. *See Diamond*, 29 F. Supp. 2d at 628–31.

114. *Id.* at 632.

115. *See id.*

116. *See id.*

117. *Id.*

violating § 1002(a) only in a technical sense, by failing to acquire a certification of compliance from the Secretary of Commerce.¹¹⁸

On appeal, the Ninth Circuit affirmed the district court's denial of a preliminary injunction.¹¹⁹ However, contrary to the district court, the Ninth Circuit accepted Diamond's argument that Rio is not a "digital audio recording device" subject to the AHRA.¹²⁰ The Ninth Circuit found there "are simply no grounds in either the plain language of the definition or in the legislative history for interpreting the term 'digital musical recording' to include songs fixed on computer hard drives."¹²¹ Further, the court found the Rio cannot make copies from "transmissions" of digital musical recordings, but can only make copies from computer hard drives.¹²² Thus, because the Rio does not constitute a digital audio recording device, the court held it is not subject to the requirements of the AHRA.¹²³

On the surface, the Ninth Circuit's decision is favorable to the online music industry. In fact, it may send a message to those manufacturers and distributors of technologies that allow the downloading of music through personal computers that they are not subject to the royalty payments and serial copy protection requirements imposed by the AHRA. However, the decision does not expressly immunize those manufacturers and distributors from copyright infringement. Thus, the Ninth Circuit's decision may be viewed as permitting actions against technologies like Rio based on direct, contributory or vicarious copyright infringement theories.

However, the Ninth Circuit's decision probably does not represent decisive approval of such infringement actions. Rather, the court noted devices like the Rio merely "space-shift"¹²⁴ already existing files on the user's computer.¹²⁵ The court concluded this kind of copying was "paradigmatic noncommercial personal use entirely consistent with the purposes of the Act."¹²⁶ The court seemed to consider space-shifting as a fair use, analogizing it to "time-shifting" of television programming in the home video context.¹²⁷ Thus, the court's decision may result in fair use

118. *See id.* at 631-32.

119. *See Diamond*, 180 F.3d at 1081.

120. *See id.*

121. *Id.* at 1077.

122. *See id.* at 1081.

123. *See id.* at 1078, 1081.

124. *See id.* at 1079.

125. *See Diamond*, 180 F.3d at 1079.

126. *Id.*

127. *See id.*; *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 455 (1984) (holding home time-shifting is fair use).

being recognized as a valid defense to potential claims of direct, contributory or vicarious infringement.

While the Rio and similar devices may facilitate personal use, and the fair use doctrine may protect manufacturers or distributors from liability, it is unclear how future technological changes will affect this digital music scenario. As new devices offer flexible output functionality similar to those devices covered by the AHRA, it is likely a “space-shifting” argument will lose some of its force and the threat of various infringement claims will become more real. Furthermore, the development of competing watermarking and encryption technologies to protect online content will further complicate the situation. These kinds of technological developments raise many of the same issues believed to have been resolved by the AHRA. Undoubtedly, parties on all sides of the debate will advance new legislative initiatives to clarify the open questions and provide some order in this rapidly changing environment.

A flood of new litigation will test copyrighted music on the Internet. A number of new lawsuits have been filed against companies trying to explore new distribution mechanisms for music. The decisions in those cases will impact the future of music. Two cases have been brought by the RIAA recently against two of the most popular MP3 sites, Napster, Inc. (www.napster.com)¹²⁸ and MP3.com, Inc. (www.mp3.com).¹²⁹

The Napster site allows users to share MP3 files over the Internet using a simple interface. Napster makes it easy to find pirated music on the Internet, simplifying what had previously been a laborious and time-consuming task. The site has become so popular that a number of colleges have had to ban students from using Napster through the college’s servers.¹³⁰ The RIAA complaint alleges that Napster facilitates the exchange of pirated music in MP3 files and is therefore a contributory copyright infringer or vicariously liable for copyright infringement.¹³¹ However, Napster maintains it is protected by the Digital Millennium Copyright Act under 17 U.S.C. § 512(a). The motion is currently under submission.

128. See generally *A & M Records, Inc. v. Napster, Inc.*, No. 995183 (MHP) (N.D. Cal. filed Dec. 7, 1999).

129. See generally Plaintiff’s Complaint, *UMG Recording, Inc. v. MP3.com, Inc.*, No. 00 Civ. 0472 (JSR) (S.D.N.Y. filed Jan. 21, 2000) available at <<http://www.mp3.com/news/533.html>>.

130. See Warren Cohen, *Napster is Rocking the Music Industry*, U.S. NEWS ONLINE (March 6, 2000) <<http://www.usnews.com/usnews/issue/000306/napster.htm>>.

131. See generally Plaintiff’s Complaint, *UMG Recording, Inc. v. MP3.com, Inc.*, No. 00 Civ. 0472 (JSR) (S.D.N.Y. filed Jan. 21, 2000) available at <<http://www.mp3.com/news/533.html>>.

MP3.com, Inc. took a very different approach from Napster to distributing music over the Internet. As initially conceived, MP3.com distributed original music over the Internet. However, MP3.com initiated a new service, MyMP3.com, that is a direct challenge to the RIAA and its members. MP3.com bought and recorded some 80,000 popular CD's on its servers. MyMP3.com allowed anyone who signed up for MyMP3.com to access a stored CD if they demonstrated to MyMP3.com they had a copy of it. The consumer could then get the MP3 file streamed to him or her for listening or storage on a hard drive or MP3 device such as the Rio. In its complaint, among other allegations, the RIAA alleged MP3.com was a direct copyright infringer because it had no license to make copies of the CDs on its server or to distribute those copies to third parties.¹³² On April 28, 2000, the district judge on that case issued a ruling in favor of the RIAA.¹³³

In a role reversal, the RIAA is a defendant in a lawsuit brought by the National Association of Broadcasters ("NAB") that will also have a significant impact on music copyright law.¹³⁴ The NAB is challenging the RIAA's assertion that music streamed over the Internet is subject to two royalty payments for the performance rights and the mechanical rights.¹³⁵ The NAB's action seeks declaratory relief on the issue of the proper royalties that should be paid on streaming audio over the Internet.¹³⁶

Both the Napster case and the MP3.com case test the bounds of copyright law which has not had to deal with the unique issues presented by those internet music distribution models before now. There are other recent cases involving music and video copyright that will also provide

132. See Plaintiff's Complaint, UMG Recording, Inc. v. MP3.com, Inc., No. 00 Civ. 0472 (JSR) (S.D.N.Y. filed Jan. 21, 2000).

133. See *Judge sides with music industry against MP3.com* (April 28, 2000) <<http://home.cnet.com/category/0-1005-200-1776075.html>>. The judge's ruling was:

Plaintiff's motion for partial summary judgement holding defendant liable for copyright infringement is hereby granted. A written opinion setting forth the grounds for this determination will issue shortly, mostly likely within the next two weeks. Meanwhile, a schedule will be set for the expeditious completion of the remainder of this case. SO ORDERED. (Jed S. Rakoff)

Id. The court must still determine the amount of damages to assess to Mp3.com. *Id.*

134. See *National Ass'n of Broads. v. Recording Indus. Ass'n of Am.*, No. 1:00cv02330 (S.D.N.Y. filed Mar. 27, 2000).

135. The National Association of Broadcaster's suit is in response to the RIAA's petition for rulemaking with the U.S. Copyright Office. The RIAA's petition argues that broadcasters who simultaneously webcast their over-the-air signals are not exempt from paying royalties to the sound recording copyright owner for the digital performance. See *Petition for Rulemaking, In the Matter of Section 112 and 114 Statutory Licenses; Webcasting of AM and FM Radio Stations by Broadcasters*, Copyright Office Docket No. RM 2000-3 (filed Mar. 1, 2000).

136. See *id.*

guidance as to permitted use of the Internet. Recently, RealNetworks, Inc. sued Streambox, Inc. over a product called Streambox VCR.¹³⁷ RealNetworks offers a product called RealMedia that allows consumers to access streaming audio and video content over the Internet, but not to make a copy of that content unless permitted by the content holder.¹³⁸ Streambox VCR allows a consumer to make a copy of streaming content without the consent of the copyright holder.¹³⁹ RealMedia sought and obtained a preliminary injunction against Streambox VCR on January 18, 2000, arguing that Streambox VCR was a circumvention device prohibited by 17 U.S.C. § 1201.¹⁴⁰

Three other cases of note involve the “hacking” of the copy protection system that protects video released on DVD known as Content Scramble System (“CSS”). The circumvention software known as DeCSS was widely distributed and currently is the subject of three lawsuits.¹⁴¹ Preliminary injunctions have been issued in all three cases, which are currently ongoing.

VII. THE FUTURE OF AUDIO AND VIDEO CONTENT ONLINE

In light of *Diamond*, it may appear the differing positions of the recording industry and the internet audio community are irreconcilable. The recording industry often portrays the emerging availability of audio content on the Internet as a threat to copyright protection and an invitation to piracy. Conversely, proponents of online digital audio and video transmissions frequently accuse the recording industry of stifling creativity and technological advancement, and seeking to maintain their protected position in the entertainment market.

There is still hope, however, the record labels and the online music community will not indefinitely remain at odds. The President of MP3.com, Michael Robertson, recently reported there are indications the two sides are moving closer together.¹⁴² For example, in December of

137. Plaintiff's Complaint, RealNetworks, Inc. v. Streambox, Inc., No. C99-2070Z (W.D. Wash. filed on Dec. 21, 1999).

138. *See id.*

139. *See id.*

140. *Id.*; 17 U.S.C. § 1201 (Supp. IV 1998).

141. Universal City Studios, Inc. v. Reimerdes, 82 F. Supp. 2d 211 (S.D.N.Y. 2000); Universal City Studios, Inc. v. Hughes, No. 3:00cv72 (D. Conn. filed Jan. 14, 2000); Order Granting Preliminary Injunction, DVD Copy Control Ass'n v. McLaughlin, No. CV 786804 (Super. Ct. Cal. decided Jan. 21, 2000).

142. *See* Michael Robertson, *RIAA Moves Towards MP3* (visited Mar. 7, 2000) <<http://www.mp3.com/news/147.html>>.

1998, the RIAA held the Secure Digital Music Initiative (“SDMI”) press conference in New York,¹⁴³ during which some record company executives downplayed piracy and instead focused on the potential for increased sales on the Internet.¹⁴⁴ Robertson also saw significance in the fact that the press conference was broadcast over the Internet using the latest streaming audio and video technology.¹⁴⁵ Other evidence exists most of the big labels are joining the rush to open new markets online despite their concern over the effects of piracy.¹⁴⁶

The SDMI has announced its Phase I standard (the SDMI Portable Device Specification - Part 1, Version 1.0) and is waiting to see if its new proposed limitations will be adopted by either the industry or consumers.¹⁴⁷ “During Phase I, SDMI compliant devices may accept music in all current formats, whether protected or unprotected.”¹⁴⁸ SDMI will also produce a more restrictive Phase II standard, although it will not be released until the second quarter of 2000.¹⁴⁹

Moreover, various companies are ardently working to find technological methods to protect online content, such as watermarking and encryption technologies. Several new companies are also offering technologies specifically designed to prevent illegal copying of MP3 files. One such company is Audio Explosion, which sells copyright-protected MP3-formatted songs for use with digital players such as the Rio.¹⁵⁰ Technology that enables copyright owners to track pirated music on the Internet through intelligent search software is also available.¹⁵¹

143. *See id.*

144. *See id.*

145. *See id.*

146. There is evidence the major record labels are considering selling MP3-formatted songs. *See* Rob Kenner, *The Top 5 Countdown: Charting The Recording Industry's Digital Game Plans*, WIREd, Aug. 1999 (visited Mar. 7, 2000) <<http://www.wired.com/wired>>. Three companies that sell MP3-formatted songs, Audio Explosion, AudioSoft and MCY, each say they are negotiating with some of the major record labels on the side. *See* Evangelista, *supra* note 1.

147. *SDMI Publishes Open Standard for Portable Devices* (visited Apr. 2, 2000) <http://www.sdmi.org/pr/LA_Jul_13_1999_PR.htm>.

148. *Id.*

149. *The Secure Digital Music Initiative Website* (visited Apr. 2, 2000) <<http://www.sdmi.org>>.

150. Audio Explosion's website can be accessed at www.audioexplosion.com.

151. Once a site that contains illegal content is located, it can often be easily shut down by contacting the local Internet Service Provider (“ISP”). ISPs have a legal obligation under the copyright law to keep their servers free of infringing materials. Digital Millennium Copyright Act, Pub. L. No. 105-304, § 512, 112 Stat. 2860, 2877–86 (1998). If an ISP fails to act, the ISP may find itself liable for contributory copyright infringement. *See id.*

It appears there is enough momentum to ensure that music online will continue growing in popularity at a rapid rate.¹⁵² Assuming the bandwidth issues can be resolved in the near future, it seems equally certain the Internet will provide an attractive vehicle for the distribution of video content. Both the online community and the traditional labels are working to find solutions to remaining hurdles, such as protecting the rights of copyright owners. Companies have just recently begun to tap the potential of the Internet as a vehicle for the efficient and low cost distribution of music and video. As technology continues to evolve and the legal issues are resolved, the Internet will become an increasingly important distribution channel.

152. As a result of the *Diamond* decision, a number of MP3 playback devices have been or will soon be introduced to the market. For example, Creative Labs (www.nomadworld.com); Pontis (www.mplayer3.com); Saehan (www.mpman.com); Samsung (yepp.co.kr); Lydstrom (www.lydstrom.com); Indigita (www.indigita.com); and Empeg (www.empeg.com) have all developed MP3 devices. See Jesse Freund, *The MP3 Players—What You Get With the Hottest Portable Devices Since the Walkman* (visited Apr. 2, 2000) <http://www.wired.com/wired/archive/7.08/dl_players.html>.

