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COMMENTS

COPY PROTECTION OF CDS: THE RECORDING INDUSTRY'S LATEST ATTEMPT AT PREVENTING THE UNAUTHORIZED DIGITAL DISTRIBUTION OF MUSIC

I. INTRODUCTION

From records, 8-tracks and cassettes to CDs and MP3s,¹ the music industry has experienced drastic changes with the implementation of new technology.² Music has become available electronically to anyone with a computer, and often times, the distribution of such music occurs without cost.³ Previously the industry was concerned with simple unauthorized duplication of the music; now, the issue is not with the physical duplication, but rather with the ease of access and distribution.⁴ The growth of the Internet has facilitated this process by allowing anyone anywhere access to just about any song one could possibly want.⁵ What

1. See Michelle Spaulding, *Copyright Protection for Music on the Move* ¶ 2 <<http://econ.law.harvard.edu/mp3/>> (Sept. 1999) (stating that an MP3 is actually a Moving Picture Experts Group ("MPEG") 1, audio layer 3). It has the capability to compress digital music to a less space-consuming format, allowing for easier downloading and sharing. *Id.*

2. Jack Rabid, *On MP3s, CD-Rs, The Glut of LPs, and the Ever-Changing Impact of Technological Advances on the Distribution and Enjoyment of Music* ¶ 1 <<http://www.bigtakeover.com/699edit.html>> (Oct. 2, 2001) (stating "[w]e are on the cusp of the biggest technological revolution in the music industry in over 100 years").

3. See generally Kristine J. Hoffman, Student Author, *Fair Use or Fair Game? The Internet, MP3 and Copyright Law*, 11 Alb. L.J. Sci. & Tech. 153, 154 (2000); Bruce R. Poquette, *Current Public Law and Policy Issues: Information Wants to be Free*, 22 Hamline J. Pub. L. & Policy 175, 176 (2000).

4. Aaron L. Melville, *The Future of the Audio Home Recording Act of 1992: Has it Survived the Millennium Bug?*, 7 B.U. J. Sci. & Tech. L. 372, 375 (2001).

5. RIAA, *Anti-Piracy* ¶ 1 <<http://www.riaa.com/Protect-Online-1.cfm>> (accessed Oct. 2, 2001). Limitless possibilities exist in this day and age for those listeners with a computer, an Internet connection, a sound card, and a couple of speakers. *Id.* Additionally, such distribution is a tremendous benefit to those artists who have not yet established a niche in the industry by allowing them to distribute their music to an expansive, eager audience. *Id.*

does this mean for the traditional means of distributing music, then?

In order to thwart piracy,⁶ many CD manufacturers have recently begun the implementation of techniques where encryption devices are placed in the composition of the disc itself, changing access to the information contained therein when played on computers.⁷ In some instances, when the purchaser wishes to listen to the disc on a standard CD player contained in a computer, he would be directed to a Web site controlled by the CD manufacturer and other music companies.⁸ Only after entering personal information will the user be afforded the opportunity to download the songs contained on the purchased CD; however, the downloaded songs are only available in proprietary format.⁹ Another new strategy involves employing disc layouts that cannot be transferred to a computer or formats that restrict the ability to play and share the music.¹⁰ Such formats disable the user's ability to upload and share the music via file-sharing servers on the Internet and also render the files incapable of being converted to a compressed format and transferred to a space-saving device such as a portable MP3 player.¹¹

As a result of such measures being undertaken by CD manufacturers, consumers are being deprived of what they have commonly come to accept as CDs, functional on standard playback devices.¹² The few companies that have chosen to implement the protective devices have already experienced harsh consumer backlash¹³ and will continue to do so

6. Gwendolyn Mariano, *Copy-Protected CD Hacked—Or Is It?* ¶ 9 <<http://www.zdnet.com/zdnn/stories/news/0,4586,5082954,00.html>> (May 15, 2001) [hereinafter Mariano, *Hacked*].

7. Konrad Roeder, *How Watermarks Protect Copyrights* ¶ 5 <<http://www.mp3.com/news/424.html?hparticle1>> (Nov. 4, 1999).

8. Jim Hu, *Copy-Protected CDs Spark Lawsuit* ¶ 8 <<http://www.zdnet.com/zdnn/stories/news/04586,5096761,00.html>> (Sep. 7, 2001).

9. *Id.* "Proprietary" refers to that which belongs to the inventor or makers. Merriam Webster Online <<http://www.m-w.com/cgi-bin/dictionary?book=dictionary&va=proprietary>> (accessed Oct. 3, 2001). It is usually protected by against free competition by a copyright or patent. *Id.*

10. John Borland, *New CDs Designed to End 'Ripping'* ¶ 1 <<http://www.zdnet.com/zdnn/stories/news/0,4586,2815388,00.html>> (Sep. 28, 2001) [hereinafter Borland, *New CDs*].

11. *Id.* at ¶ 3. One new experiment places two different versions of the songs on a single disc. *Id.* One version cannot be uploaded to a computer hard drive, and while the other side can be there are restrictions on the use of those music files. *Id.* Implementing these new types of measures is likely to be disadvantageous to those customers with portable MP3 players. *Id.*

12. Hu, *supra* n. 8, at ¶ 7; see Milberg Weiss, *Dickey v. Universal Music Group, Complaint* <<http://www.milberg.com/pdf/audiocds/complaint.pdf>> (Sept. 6, 2001) [hereinafter *Complaint*]. Plaintiffs in both cases have sued several major recording labels, claiming that the CDs containing copy protection technology are defective and that the companies have failed to adequately notify consumers about the unusual disc format. *Id.*

13. Hu, *supra* n. 8, at ¶ 10.

at the rate they are going. In order to avoid future dissatisfaction and unpopularity, the music industry as a whole must come together and determine the best way to balance the consumer's rights and the companies' rights to protect the information on the disc.¹⁴ The lack of adequate warnings, infringement on consumer privacy, and failure to compromise will only endanger the future market for CDs and will merely push users further into the realm of unauthorized digital music.

This Comment will focus on the music industry's desire to control the use of music, especially with regard to its digital distribution, and the privacy issues that are raised as a result of such control. The first section will discuss the history of recording technologies and legislation pertaining thereto. Next will be a background discussion of copy protecting mechanisms currently employed, along with the consumers' response to such devices and the problems already encountered by the industry as a result. The subsequent section of this Comment will point out the reasons why current protection devices are not effective as long term solutions because of privacy, compatibility, and advances in technology. Finally, this Comment will discuss whom copy protection really protects and will suggest an alternative avenue to preventing the unauthorized digital distribution of music.

II. BACKGROUND

A. RECORDING TECHNOLOGIES

In addition to recording and playback devices, the music industry itself has undergone significant advances since the day of '45's, and with the introduction of each new listening medium came a new playback device. Records were the primary means for distribution of music¹⁵ for decades until the 8-track and cassette tape became prevalent.¹⁶ A cassette contained the same music as a record, but in a different format.¹⁷ Shortly after the introduction of this new, affordable practice, it was possible for the average consumer to make almost perfect duplicates of cas-

14. John Borland, *Labels Loosening Up on CD Copy Locks* ¶ 20 <<http://news.com.com/100-1023-956069.html>> (Sept. 3, 2002) [hereinafter Borland, *Labels Loosening Up*]. The Vice President of Sales and Marketing for Israeli-based Midbar Tech (which makes a data shield product for CDs) stated that "an acceptable compromise between playability and protection has been reached," when discussing the record companies' desire to achieve perfect protection and perfect playability. *Id.* at ¶ 24.

15. Steve Schoenherr, *Recording Technology History* §§ 1945-1966 <<http://history.acusd.edu/gen/recording/notes.html>> (last updated Sep. 3, 2001).

16. *Id.* at § 1966.

17. *Id.* at § 1963.

sette tapes.¹⁸ In fact, many cassette players came standard with two decks, which allowed users to duplicate or compile their own mixes on tape.¹⁹

The compact disc was introduced to the market in 1982,²⁰ demonstrating society's readiness to advance technologically in the music field. This new digital format provided music of unsurpassed quality.²¹ CD players were equipped with lasers that read the information on the disc, offering more clarity in sound than the previous mediums.²² Initially, these devices were capable of playback and not recording.²³ Much like its predecessor, the cassette, it was soon possible to make copies of the material on the CDs.²⁴ Although the technology did not exist to copy CD-to-CD, users could nevertheless copy CDs onto cassette tapes.²⁵ The resulting duplication was not as high-quality as the original CD,²⁶ but consumers did not seem to mind. Since many people had not completely abandoned their cassette players, the ability to make copies on cassette allowed the user to buy a CD, make a cassette duplicate of it, and enjoy it in the car stereo deck, walkman, and other cassette-playing devices.²⁷

Not surprisingly, duplication of CD-to-CD has become popular in the past few years.²⁸ Such duplication produces an almost exact copy of the

18. Robert T. Baker, *Finding a Winning Strategy Against the MP3 Invasion: Supplemental Measures the Recording Industry Must Take to Curb Online Piracy*, 8 UCLA Ent. L. Rev. 1, 2 (2000).

19. *Id.* After legally purchasing a cassette tape, the user could essentially make a plethora of illegal copies simply by having a "double-deck" analog cassette recorder and some blank cassette tapes. *Id.* While the quality of such duplication techniques is certainly lacking, consumers nevertheless continued to engage in the practice, perhaps in order to preview the music. *Id.* at 3.

20. Schoenherr, *supra* n. 15, at § 1982.

21. Melville, *supra* n. 4, at 376.

22. *Id.* (referring to A. Samuel Oddi, *Contributory Copyright Infringement: The Tort and Technological Tensions*, 64 Notre Dame L. Rev. 47, 92 (1989)).

23. *Id.*

24. RIAA, *CD-R Piracy* ¶ 4 <<http://www.riaa.com/Protect-CDR.cfm>> (Oct. 2, 2001). In order to duplicate a CD, a person can purchase portable and cheap equipment as well as blank discs and make copies of CDs and other music for less than a dollar. *Id.* at ¶ 3.

25. Melville, *supra* n. 4, at 378.

26. *Id.*

27. Sony.com, *Sony Media and Energy* <<http://www.sel.sony.com/SEL/rmeg/audio/cat1.html>> (accessed Mar. 12, 2003). In fact, Sony, for one, developed an audiocassette tape that was longer in length than traditional cassette tapes, enabling users to copy an entire CD onto one audiocassette. *Id.* The "CD-It" is "available in popular CD lengths: 74-, 90-, and 120- minutes." *Id.* This manufacturer clearly states that this product is ideal for creating copies of other cassettes or CDs. *Id.*

28. *CD-R Piracy*, *supra* n. 24, at ¶¶ 1, 4. The industry claims that in the past year alone, the sale of blank recordable discs has increased by as much as eighty percent. John Borland, *Customers Put Kibosh on Anti-Copy CD* ¶ 6 <<http://news.cnet.com/news/0-1005-200-7922576.html>> (Nov. 19, 2001) [hereinafter Borland, *Kibosh*].

original disc and exemplary playback quality.²⁹ Digital technology has quickly taken users past the ability to copy CDs into an era where digital sharing of music is commonplace. Virtually every home computer is equipped with a CD-ROM, which not only runs computer software but also plays music CDs.³⁰ Methods exist where users can transfer the data from CDs to their computer's hard drive,³¹ and this process has evolved to a point where significantly less space is needed to store the song files.³² Once in compressed format, the files are readily tradable over the Internet.³³ One young entrepreneur picked up on this trend quickly and established a file-sharing server where users from all over the world could distribute their shared files via the Internet and receive files from others like them.³⁴

B. RECENT LEGISLATION

The controls on the access to and distribution of digital music have been lax until recently. The file-sharing giant Napster has battled copyright infringement claims in court.³⁵ This situation, coupled with obvious concerns of artists and copyright holders regarding compensation has caused the majority of disputes in this area.³⁶ Such turmoil makes it apparent that the control of music distribution is a relevant topic in to-

29. 138 Cong. Rec. E823 (daily ed. Mar. 25, 1992) (statement of Judge Collins). Here, the speaker commented to the House of Representatives that as a result of this particular technology, "virtually perfect copies of source music" can be produced which "maintain virtually perfect sound quality." *Id.*

30. Melville, *supra* n. 4, at 383 (stating that "CD-ROM drives employing the same disk format as a standard music CD and sound cards adding playback and recording capabilities to home computers have become standard items").

31. Hoffman, *supra* n. 3, at 155; Baker, *supra* n. 18, at 13.

32. *Id.* at 6. The resulting file (when using MP3 format) is approximately one-tenth its original size. *Id.*

33. *Id.*

34. Spencer E. Ante, *Business Weekly E Biz, Napster's Shawn Fanning: The Teen Who Woke Up Web Music* ¶ 1 <<http://www.businessweek.com/ebiz/0004/em0412.htm>> (Apr. 12, 2000).

35. See generally *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004 (9th Cir. 2000).

36. *CD-R Piracy*, *supra* n. 24, at ¶ 1. While the artists themselves are named as the biggest victims, it is argued that consumers will suffer as well. *Id.* It is also interesting to note that this is not the first time that such a matter has been in dispute in the entertainment industry. See generally *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417 (1984); *Recording Industry Assn. of Am. v. Diamond Multimedia Sys., Inc.*, 29 F. Supp. 2d 624 (C.D. Cal. 1998). Most notably, when videocassette recorders were introduced, motion picture copyright holders believed that the home distribution of such devices infringed upon their copyrights. *Sony*, 464 U.S. at 417. The U.S. Supreme Court, however, disagreed and determined that Sony had not engaged in any such infringement, stating that "the [video recorder] is. . .capable of substantial noninfringing uses. [The petitioners'] sale of such equipment to the general public does not constitute contributory infringement of respondents' copyrights." *Id.* at 455.

day's technologically advanced society. In order to deal with these issues and to answer for the growing number of complaints by the recording industry,³⁷ several groups have formed and legislative enactments have been created that address the concerns with digital distribution of music.³⁸ The group that has spearheaded much of this legislation is the Recording Industry Association of America ("RIAA").³⁹ The association is representative of ninety percent of the recording industry.⁴⁰ Their mission, simply put, is "to protect intellectual property rights worldwide and the First Amendment rights of artists; conduct consumer, industry and technical research; and monitor and review state and federal laws, regulations and policies."⁴¹

1. *Audio Home Recording Act*

The *Audio Home Recording Act* ("AHRA"),⁴² enacted in October of 1992,⁴³ is one such legislative pronouncement. It was brought into commission by Congress to address the issue of digital audio recording devices and copyright infringement.⁴⁴ The AHRA was designed to allow consumers access to the newest technology, while simultaneously providing incentives to manufacturers and recording companies to develop the products and the media.⁴⁵ But because technology moves at a faster pace than Congress, it is impossible for the AHRA to encompass each and every facet of digital audio.⁴⁶ Therefore, the AHRA does not necessarily set forth perfect guidelines for dealing with audio home recording in today's society.

37. See generally *RIAA v. Diamond Multimedia Sys.*, 29 F. Supp. 2d 624; see generally *A&M Records*, 239 F.3d 1004; see generally *Abkco Music, Inc. v. Stellar Records, Inc.*, 96 F.3d 60 (2d Cir. 1996).

38. This includes the *Audio Home Recording Act*, *Secure Digital Music Initiative*, and the *Digital Millennium Copyright Act*.

39. RIAA, *RIAA/About Us* ¶¶ 1, 2 <<http://www.riaa.com/About-Who.cfm>> (accessed Oct. 2, 2001). The Recording Industry Association of America helps to protect the interests of the U.S. recording industry by promoting better business practices that stimulate members' creativity while providing them with the financial rewards of their production. *Id.*

40. *Id.* at ¶ 1.

41. *Id.* at ¶ 2.

42. 17 U.S.C § 1001 (1992).

43. *Id.*

44. *Id.*

45. 138 Cong. Rec. E823 (daily ed. Mar. 25, 1992) (statement of Judge Collins). Additionally, Judge Collins discussed the prospective benefits to the copyright holders by implementing a royalty system where fees are to be assessed on each medium made available for purchase. *Id.* These fees will then be distributed to those holding copyrights in order to compensate them for any past losses as a result of infringement. *Id.*

46. Hoffman, *supra* n. 3, at 155.

2. *Secure Digital Music Initiative*

The RIAA was one of the driving forces behind instituting the *Secure Digital Music Initiative* ("SDMI").⁴⁷ Implemented by approximately 200 organizations, its members are all part of information technology related businesses.⁴⁸ The creation of the SDMI came about in order to improve consumers' experiences with music and the software and hardware that make the music accessible.⁴⁹ In order to achieve this goal, the SDMI encourages the development of open technology specifications that will provide customers with the access and availability of music that they desire, while at the same time allowing artists' works to be protected and promoted.⁵⁰

3. *Digital Millennium Copyright Act*

The *Digital Millennium Copyright Act* ("DMCA") is one of the more recent enactments that touches upon the subject of digital distribution of music.⁵¹ The DMCA was designed after the World Intellectual Property Organization's ("WIPO") conference in Geneva.⁵² Enacted to deal with the more current issues relating to technology and copyright, the DMCA makes it a crime to sell, manufacture and distribute any device capable of cracking codes to make illegal copies of software; the DMCA also outlaws any measures taken to circumvent anti-piracy devices.⁵³ While the DMCA does encourage and promote encryption and code-cracking research, it does not appear to properly address emerging trends in tech-

47. *Secure Digital Music Initiative* <<http://www.sdmi.org>> (accessed Oct. 2, 2001).

48. SDMI, *SDMI Fact Sheet* ¶ 1 <http://www.sdmi.org/who_we_are.htm> (accessed Oct. 2, 2001). The participants in this group include manufacturers of chips, computers, compression devices, watermarking technologies, and other peripheral hardware. *Id.* at ¶ 2.

49. SDMI, *Frequently Asked Questions* ¶ 3 <<http://www.sdmi.org/FAQ.htm>> (accessed Oct. 2, 2001). See Web site discussion titled "How does SDMI benefit customers?" *Id.*

50. *Id.* at ¶ 1.

The *Secure Digital Music Initiative* ("SDMI") is a forum that brings together the worldwide recording, consumer electronics and information technology industries to develop open technology specifications for protected digital music distribution. The specifications released by SDMI will ultimately provide consumers with convenient access to music both online and in new emerging digital distribution systems, enable copyright protection for artists' work, and promote the development of new music-related businesses and technologies.

Id.

51. UCLA Online Institute for Cyberspace Law and Policy, *The Digital Millennium Copyright Act* ¶ 1 <<http://www.gseis.ucla.edu/iclp/dmca1.htm>> (accessed Oct. 4, 2001). The DMCA was enacted on October 12, 1998 by Congress and was signed into law on October 28, 1998. *Id.* at ¶ 1.

52. *Id.* at ¶ 2.

53. *Id.* at ¶ 4.

nology.⁵⁴ This is of particular concern for the recording industry because users consistently find ways to circumvent copyright protection mechanisms.⁵⁵

4. *Consumer Broadband and Digital Television Promotion Act*

Previously known as the *Security Systems Standards and Certification Act*, the *Consumer Broadband and Digital Television Promotion Act* ("CBDTPA"), this draft legislation was introduced in 2002 to address the issue of digital content.⁵⁶ The CBDTPA proposes that a set of government-approved security standards be established and that all software and hardware must be made to comply with those standards.⁵⁷ The CBDTPA suggests that markers which signal a copy protected file should be placed in digital content; the CBDTPA then provides that removal of such a marker is unlawful.⁵⁸ Though the CBDTPA has yet to be passed by Congress, much criticism has surfaced as opponents claim the CBDTPA undermines innovation, fails to adequately protect the right to fair use, and shifts more power and control to media giants.⁵⁹

C. COPY PROTECTION MECHANISMS

In addition to legislative efforts, the industry has found other ways to control the digital distribution of music. Logically, going back to square one, the whole process starts with a CD. Consumers buy CDs, upload the songs onto their computers and ultimately share the song files with others via the Internet. In order to curb the free sharing of copyrighted works, the industry has put mechanisms in the CDs themselves that impede the process from the start. The following discussion will focus on watermarking, fingerprinting, and the use of certain computer programs to hinder the digital distribution of CD music.

54. Baker, *supra* n. 18, at 14. "It is only a matter of time before some new program or service finds a loophole to squeeze through." *Id.*

55. *Id.*

56. Robert Lemos, *Is Hardware Key to Piracy Crackdown?* ¶¶ 4-8 <<http://news.com/2100-1023-867270.html>> (Mar. 22, 2002); *Consumer Broadband and Digital Television Promotion Act*, Sen. 2048, 107th Cong. (2002). Senator Hollings (D-S.C.) introduced the bill to "regulate interstate commerce in certain devices by providing for private sector development of technological protection measures to be implemented and enforced by Federal regulations to protect digital content and promote broadband as well as the transition to digital television, and for other purposes." *Id.* at § Title.

57. Declan McCullagh, *What Hollings' Bill Would Do* ¶ 2 <<http://www.wired.com/news/politics/0,1283,51275,00.html>> (Mar. 22, 2002).

58. *Id.* at ¶¶ 4-7.

59. Digital Consumer, *Help Stop the CBDTBA* ¶¶ 2-15 <<http://www.digitalconsumer.org/cbdtpa/>> (accessed March 10, 2003).

1. *The Watermark*

One of the two major ways the industry is attempting to curb the distribution of illegal copies of music is through the use of watermarks.⁶⁰ “Digital watermarks serve as a powerful deterrent to unlawful distribution and incriminating to those who engage in pirating music on the Internet.”⁶¹ Digital watermarks are encoded onto the disc itself as an inaudible signal.⁶² Even though the signal is imperceptible to the human ear, certain equipment easily detects its presence.⁶³ This signal is capable of being transferred from the analog to the digital formats of the song so that it is carried with the music through copying procedures and is difficult to remove.⁶⁴ Because the signal is buried deep in the midst of the noise, the user is not aware that while listening to or “ripping”⁶⁵ the songs, the artist’s name, the song title, and often the serial number identifying the source of the music can be read by the computer and ultimately delivered to licensing bureaus.⁶⁶ This allows the licensing bureaus⁶⁷ to monitor the trading of these songs online,⁶⁸ which ultimately presents serious privacy concerns.⁶⁹

2. *Fingerprinting*

The fingerprint is another copy protection mechanism and is similar to the watermark. Fingerprinting works to recognize certain aspects of songs by comparing the tracks shared on peer-to-peer networks, for example, to the copyright holder’s copy of the song.⁷⁰ While similar to the watermark in that it allows for tracing the song as it is being traded, the

60. Hoffman, *supra* n. 3, at 171, 172.

61. Roeder, *supra* n. 7, at ¶ 8.

62. Brian Livingston, *Digital Encryption of Audio Files is Cracked; What Will This Mean for the Software Industry?* ¶ 18 <<http://www2.infoworld.com/articles/op/xml/99/08/20/990830opliv.xml?Te...printfriendly.htm>> (Aug. 30, 1999).

63. Roeder, *supra*, n. 7, at ¶ 3.

64. Livingston, *supra* n. 62, at ¶ 18; see Roeder, *supra* n. 7, at ¶ 4; Hoffman, *supra* n. 3, at 173.

65. Borland, *New CDs*, *supra* n. 10, at ¶ 3. “Ripping” is the term used to describe the method by which users convert song files from the CD into digital form on the computer, thus allowing the tracks to be traded openly on Internet file-sharing services. *Id.*

66. Roeder, *supra* n. 7, at ¶ 2.

67. *Id.* at ¶ 6. The three licensing bureaus noted as implementing these watermarking techniques are ASCAP, BMI and SESAC. *Id.* They are using technologies produced by Solana Technology Development Corporation, Cyveillance, and ARIS Technologies to seek out watermarks on the Internet and verify licensing. *Id.*

68. *Id.*

69. See *infra* nn. 96-101 and accompanying text (relating to privacy issue).

70. Tuneprint.com, *Why Would Anyone Use Music Fingerprinting Software?* ¶ 1 <<http://www.tuneprint.com>> (accessed Oct. 5, 2001). Tuneprint is one of the companies that have developed fingerprinting technologies as a method for protecting copyrights on music. *Id.*

fingerprint has one added benefit that the watermark does not: the ability to protect music that is already online, regardless of when the CD was produced or released.⁷¹ Furthermore, like the watermark, the fingerprint is rather difficult to remove and will survive compression and conversion, enabling record labels to virtually track the protected song indefinitely.⁷²

3. *Microsoft Windows Media Player*

Another way manufacturers have found to restrict the digital distribution of CD music is through a partnership with Microsoft.⁷³ Several members of the recording industry have teamed up with the software giant to release CDs that contain DRM technology.⁷⁴ The CDs will be similar to existing discs, but instead of having just one playable side, it will have two.⁷⁵ One side can be listened to on traditional playback devices such as home stereo systems and car decks but will not work on a computer's CD-ROM drive.⁷⁶ However, the user can play back the other side of the disc on his computer, but limitations have been placed on the use.⁷⁷ In order to play the disc on a computer, the user must listen to the songs via Microsoft Windows Media Player.⁷⁸ By using this mechanism, the user is limited in his ability to then transfer or compress the song files for use on a file sharing server or MP3 player, for example.⁷⁹

71. Poquette, *supra* n. 3, at 206.

72. John Borland, *Is Copy Protection Dead on Arrival?* ¶ 6 <<http://news.cnet.com/news/0-1005200-6774448.html?tag=rntfr>> (Aug. 7, 2001) [hereinafter Borland, *Copy Protection*].

73. John Borland, *Microsoft Plays OS Card to Cement Anti-Piracy Role* ¶¶ 1-2 <<http://news.cnet.com/news/0-1005-200-4684177.html?tag=prntfr>> (Feb. 1, 2001) [hereinafter Borland, *Microsoft*].

74. *Id.* at ¶ 2. DRM is digital rights management technology that some hope will eventually be a core service in the Microsoft operating system. *Id.*

DRM technology allows content providers such as artists and record companies to protect their proprietary music or other data by encrypting digital content and attaching usage rules to it. These rules determine the number of times the content will play, the type of devices upon which it should play, and so on.

DRM for Audio Drivers ¶ 1 <<http://www.microsoft.com/hwdev/tech/audio/DRM.asp>> (accessed Mar. 10, 2003). Many have criticized DRM technology, claiming that it threatens users' privacy and freedom of expression; fails to properly consider fair use rights; impedes users' ability to have free and open source software; and stifles innovation. *Id.*

75. Borland, *New CDs*, *supra* n. 10, at ¶ 1.

76. *Id.*; see John Borland, *Tripping the Rippers* ¶ 2 <<http://www.news.cnet.com/news/0-1005-202-7320279-0.html>> (Sep. 28, 2001) [hereinafter Borland, *Tripping*].

77. *Id.*

78. *Id.*

79. Borland, *New CDs*, *supra* n. 10, at ¶ 3.

D. CONSUMER BACKLASH

The biggest source of unrest in the digital distribution of music war lies with the copyright holders and artists,⁸⁰ but that appears to be changing. This is without question due to the financial repercussions associated with the digital distribution of music. On the one hand, the industry is seeking to develop a way to continue easy access to the music while allowing the artist and record company to receive due compensation for their services. On the other hand, consumers have (until now) enjoyed a virtually limitless, free catalog of all types of music on the Internet. This situation will change, however, once these copyright protection devices become more mainstream, either by restricting their use or by charging them for downloads.⁸¹ If CDs cannot be played on computers, users cannot upload and compress the song files. If the songs cannot be uploaded and made into MP3 or WAV format, for example, the world of online music sharing as we know it will come to an end.

While the copy protection devices in place have gained popularity among the media moguls,⁸² they have had the reverse effect on consumers. The public is unhappy with the new protection devices for various reasons.⁸³ Most specifically, two complaints brought forth by consumers are unfair business practices and privacy concerns.⁸⁴

E. PROBLEMS ENCOUNTERED

The overly restrictive nature of this entire process has already caused problems. Disabling the universal playback feature of CDs so that they are no longer usable on personal computers or MP3 players meant trouble for BMG in 2001.⁸⁵ BMG, along with one of the companies providing copy protection for record labels, shipped over a hundred

80. Baker, *supra* n. 18, at 6. Artists and producers alike rely on the laws of copyright protection to afford them a remedy when there exists a threat to their financial profits. *Id.*

81. Borland, *Copy Protection*, *supra* n. 72, at ¶ 6. "Consumers have long considered it their God-given right to copy (music) for personal use once they've paid for it." *Id.* at ¶ 7. Additionally, it is noted that U.S. copyright law allows consumers to legally make one copy of a copyrighted work for their personal, private use. See Richard Elen, *New Audio CD Copy Protection May Already Be Cracked* ¶ 10 <<http://www.audiorevolution.com/news/0701/24.safeaudio.shtml>> (July 24, 2001) [hereinafter Elen, *New Audio CD*]. In spite of this, however, copyright owners are not required to make such a copy available or possible. *Id.*

82. Hoffman, *supra* n. 3, at 154.

83. *Id.*

84. Hu, *supra* n. 8, at ¶ 4. In particular, consumers should have the right to receive information from the seller that assists them in making purchases so that they are comfortable and knowledgeable about the product they are buying. *Id.*

85. Gwendolyn Mariano, *Copy Lock Shuts Out Music Pirates* ¶ 4 <<http://www.zdnet.com/zdnn/stories/news/0,4586,506566,00.html?>> (Sept. 4, 2001) [hereinafter Mariano, *Copy Lock*].

thousand CDs that contained the new technology.⁸⁶ Reports indicated that once consumers found out about the limitations on the ability to transfer the files from the CD to a computer, they were unhappy and often returned the product.⁸⁷ Ultimately, as a result of the compatibility problems and many complaints from consumers, BMG abandoned the project but has plans to try again.⁸⁸ By releasing these products without warning to the consumer, the CD companies are creating an environment that promotes illegal distribution of music.⁸⁹ If consumers are unable to purchase and use CDs as they have been able to in the past, they will simply find another way to get the music. Unfortunately, these ways do not always provide money to the artists or record label.

F. FUTURE PROBLEMS

There are a few problems that have already been encountered⁹⁰ in the implementation of copy protection devices and there are sure to be even more difficulties as the battle ensues. The first problem, as indicated previously,⁹¹ involves the likelihood of consumer dissatisfaction when they purchase a CD not knowing it has been encrypted to prevent play on home computers. The second problem focuses on the issue of privacy and a user's desire to listen to, share, and compress music files anonymously. Finally, a third problem deals with faults in the copy protection mechanisms themselves.

86. *Id.* at ¶ 9.

87. *Id.* Most sources indicate that a very high percentage of returns occurred when the CDs were first placed on the market. *Id.* On the other hand, Macrovision reports that they did not experience any more returns than normal when they implemented their SafeAudio technology in a distribution of over 200,000 CDs. Borland, *Copy Protection*, *supra* n. 72, at ¶ 11.

88. Mariano, *Hacked*, *supra* n. 6, at ¶ 12. However, BMG has devised one way to implement copy protection methods in the meantime to help limit unauthorized song trading. Jim Hu, *BMG Puts Kibosh on Copying Promo CDs* ¶ 6 <<http://news.com.com/2100-1023-877933.html>> (Apr. 8, 2002). The record company announced that it would continue to release free samples and promos to radio stations and retailers before the albums are officially released, but that now, the CDs will come packaged with anti-copying software. *Id.* at ¶ 1. Although BMG stresses that this does not "signal a company wide decision to place anti-copying software in CDs sold to consumers," it indicated that the protection was necessary on the samples due to the previous leaks of unreleased tracks onto the Internet. *Id.* at ¶¶ 2, 6.

89. Borland, *New CDs*, *supra* n. 10, at ¶ 5. Macrovision President Bill Krepick recognized that "the labels don't want to do anything to turn off customers . . . There's a lot of risk aversion right now." *Id.* at ¶ 6. Additionally, an unnamed record label executive noted that they simply do not know exactly how consumers will react to these attempted solutions. *Id.* at ¶ 15. Furthermore, even if every label were to implement such protection devices in newer CDs, any disc released previously will not be vulnerable to these new tactics and users could still potentially share these files unimpeded.

90. *See supra* nn. 85-88 and accompanying text.

91. Hu, *supra* n. 8, at ¶ 1.

1. *Current Dissatisfaction*

Even though the recording industry has been sneaking CDs with the new technology intact into the market for some time now,⁹² consumers are just now beginning to notice.⁹³ Rampant dissatisfaction rings in the words of spurned users as they get the word out to anyone and everyone on online message boards, warning future purchasers of which CDs contain the new technology.⁹⁴ Such outrage has affected purchasing habits and could potentially influence a consumer's decision over spending twenty dollars to buy a CD versus going home and taking the time to search, download, and enjoy the exact same songs.⁹⁵ This does not necessarily harm the consumer as much as it leads to adverse affects for the artist and record company.⁹⁶ This situation clearly demonstrates the essential fact that record companies should be honest with buyers instead of engaging in practices consumers perceive as deceptive.

2. *Privacy Concerns*

When manufacturers place these protection devices in CDs, it renders them capable of monitoring and tracking consumer habits.⁹⁷

92. Borland, *New CDs*, *supra* n. 10, at ¶ 4.

93. *Id.* at ¶¶ 5, 26, 28. Pop singer Natalie Imbruglia's latest CD was released with copy protection. Borland, *Kibosh*, *supra* n. 28, at ¶¶ 1-3; see Elen, *supra* n. 81, at ¶ 12. Additionally, many hackers think that companies have wasted a lot of money trying to create a copy protection mechanism that is capable of being impenetrable. *Id.* at ¶ 13.

94. Many Web sites are boasting lists of CDs that users claim are copy protected, but it appears to have caused even more confusion. John Borland, *Sites Spotlight Reports of Copy-Protected CDs* ¶¶ 1, 5-8 <<http://news.cnet.com/news/0-1005-2007852921.html?tag=prntfr>> (Nov. 12, 2001) [hereinafter Borland, *Spotlight*]. In fact, some sites even urge users to take the CDs back to where they purchased them, calling them defective. *Id.* at ¶ 4. This is an attempt by many users to show the recording industry that they cannot implement such drastic changes to users' music without proper warning. *Id.* Additionally, the article cites a member of the Campaign for Digital Rights (U.K.) as arguing that such practices only demonstrate how little respect the manufacturers have for their consumers. *Id.* at ¶ 5.

95. Fat Chuck's, *Corrupt CDs* <<http://www.fatchucks.com/z3.cd.html>> (Mar. 12, 2003). Web sites such as "Fat Chucks," while user-based, maintain lists of CDs they call "corrupt." *Id.* The site encourages users to report CDs that "prevent you from copying it for personal use or . . . prevent you from playing on any computerized device (computers, DVD players, game consoles like PlayStation, MP3 players, consumer CD duplicators, high-end stereo equipment and car CD players)." *Id.*

96. Borland, *Copy Protection*, *supra* n. 72, at ¶¶ 3-5. The online community provides a voice for everyone, whether the information conveyed is true or false. *Id.* Even if the CDs do not contain the copy protection devices, users warning others of which CDs have the protection and which do not will ultimately affect consumer buying habits, again, regardless of the veracity of the information. *Id.* at ¶ 5; see also nn. 93-94 and accompanying text.

97. Roeder, *supra* n. 7, at ¶ 5. Digital equipment can detect a watermark's presence. *Id.* at ¶ 3. Once detected, in an effort to thwart piracy, some programs "crawl" through the Internet searching for the watermark and ultimately decode them. *Id.* at ¶¶ 5-6.

Through the use of watermarks digital processing equipment can “monitor the public performance of copyrighted and licensed music.”⁹⁸ Additionally, there is software available with Web-crawling devices that can detect the use of pirated music files online.⁹⁹ Ostensibly, such practices are incorporated in order to make the electronic distribution of these CDs very difficult,¹⁰⁰ however, the privacy of these users is infringed upon when they are required to divulge personal information.¹⁰¹ Additionally, requiring users to visit proprietary Web sites to download songs contained on a disc they have purchased is acceptable, but when the Web site then places a tracking ‘cookie’¹⁰² on the user’s hard drive, the user’s privacy has been invaded. Unquestionably one of the most desirable features of home computer systems these days is the ability to use the device as a total entertainment medium – CD player, DVD player, etc. Placing users’ privacy in jeopardy by enabling data to be captured and retrieved by unknown companies when they listen to CDs does not promote good consumer relations. Furthermore, it invokes a sense of distrust and annoyance for several aspects of the recording industry, and quite possibly even for the artists themselves.

3. *Cracking the Code*

In addition to the problem of privacy, innovation and technology pose threats to the development of new copy protection mechanisms. Unfortunately, once something becomes “new technology” it is quickly outdated. In order to be successful in this war against illegal digital distribution of music, the record industry will have to develop a code that is impenetrable. Just about any sort of code can be cracked, provided someone is willing to spend the time and energy on the project.¹⁰³ In fact, the SDMI¹⁰⁴ dared the general public to undertake the formidable task of cracking several of their data-encoding technologies.¹⁰⁵ The rules were simple: break the code, tell them how it was done, and get

98. *Id.* at ¶ 5.

99. *Id.* at ¶¶ 5-6.

100. Elen, *New Audio CD*, *supra* n. 81, at ¶ 2.

101. Hu, *supra* n. 8, at ¶ 4.

102. See Microsoft.com Profile Center, *Cookies: What are They, Why You are in Charge* ¶ 1 <<http://www.microsoft.com/info/cookies.htm>> (Nov. 15, 2001) (stating that a “cookie” is “a very small text file placed on your hard drive by a Web Page server [and] it is essentially your identification card”).

103. Borland, *Microsoft*, *supra* n. 73, at ¶ 9.

104. See *supra* nn. 47-50 and accompanying text.

105. Richard Elen, *Hack-Proof DVD-Audio Watermark Cracked at Princeton, but Under Legal Duress* ¶¶ 1-4 <<http://www.ambisonic.net/audiorev/sdmifelten.html>> (April 27, 2001) [hereinafter Elen, *Hack-Proof*].

\$10,000.¹⁰⁶ A team from Princeton University¹⁰⁷ followed the strict contest rules and ultimately claimed that they “reverse-engineered and defeated all four of [the SDMI’s] watermarking technologies.”¹⁰⁸ While many were eager to learn how the team accomplished the great feat, their results will not be disclosed because of industry demands.¹⁰⁹ Nevertheless, others claim to have cracked the encryption devices¹¹⁰ and because of the nature of the computer industry, it is likely that hackers will always be right in step with developers, if not one step ahead.

Realistically, however, even if average users do not know how to crack codes, it is still possible for them to find elementary ways around copy protection.¹¹¹ The antiquated method of putting two playback devices side by side to play from one and record on the other is always an option. Better yet, users can easily play the music from their home CD players and use their computers’ microphones to pick up the sound.¹¹² Both methods, while very simplistic, can effectively circumvent the new technology placed in the discs.

106. Janelle Brown, *SDMI Cracked!* ¶ 2 <http://www.salon.com/tech/log2000/10/12/sdmi_hacked/> (Oct. 12, 2001).

107. Elen, *Hack-Proof*, *supra* n. 105, at ¶¶ 1-2. Professor Felten of the Computer Science Department at Princeton headed the team. *Id.* at ¶ 1.

108. *Id.* at ¶ 6. After participating in the contest Professor Felten and his team indicated that they believe any audio protection scheme could potentially be defeated. *Id.* at ¶ 7. This is primarily due to the fact that it is possible to both see and hear the protected content, thus enabling a consumer to copy it. *Id.*

109. Elen, *Hack Proof*, *supra* n. 105, at ¶ 6. Once they claimed to have cracked the code, the conference holders encouraged the withdrawal of Felten’s team’s paper and removed their data from the distribution materials. *Id.* Furthermore, the team was urged to not divulge any of the information contained therein. *Id.* However, a New Jersey judge just recently dismissed a lawsuit brought by Felten when the professor filed charges against the RIAA, alleging that they threatened him to refrain from publishing his results. Robert Lemos, *Court Dismisses Free-Speech Lawsuit* ¶¶ 1-2 <<http://news.cnet.com/news/0-1005-202-8010671.html>> (Nov. 28, 2001). The RIAA, in turn, moved for a dismissal, which was granted by Judge Garrett Brown, federal district judge in Trenton, New Jersey. *Id.* at ¶ 5. Both the RIAA and the Department of Justice claim that there is no dispute whatsoever and that “Professor Felten is free to publish his findings.” *Id.* at ¶ 12.

110. Elen, *New Audio CD*, *supra* n. 81, at ¶ 7. While others have claimed to have broken the SDMI’s watermarks, a representative of the SDMI has denied those allegations. Brown, *supra* n. 101, at ¶ 6. Industry buzz indicated that even if someone had cracked the codes, it was likely that the results, whether positive or negative, would be downplayed or delayed. *Id.* at ¶ 4.

111. Borland, *Labels Loosening Up*, *supra* n. 14, at ¶ 18. “Anti-copying technology from Sony and Midbar each proved to be easily disarmed using only a felt-tip pen.” *Id.*

112. Borland, *New CDs*, *supra* n. 10, at ¶ 19. While the thought of this type of reproduction seems elementary, group product manager Johnathan Usher of Microsoft has conceded that “committed pirates” may resort to these methods. *Id.*

III. ANALYSIS

While the war on curbing the unauthorized distribution of music files over the Internet has only just begun,¹¹³ CD manufacturers have already started taking extensive precautionary measures against further piracy.¹¹⁴ Some companies are employing technology that allows the user to play the CD on conventional players and computer CD-ROMs as before,¹¹⁵ but have implemented copy protection schematics to prevent digital “ripping” or copying onto recordable CDs.¹¹⁶ Another trend entails CD manufacturers embedding protection devices into the CD itself so users cannot play the songs on computers at all.¹¹⁷ Both types of these CDs have already been released into the stream of commerce and unleashed upon unsuspecting purchasers.¹¹⁸ The distribution of these impaired CDs has been met with consumer dissatisfaction.¹¹⁹ Taking advantage of consumers and forcing them to sacrifice their privacy to listen to music¹²⁰ on the device of their choosing will present a myriad of future problems as well. It is apparent, therefore, that in implementing the sweeping changes to digital distribution of music, the recording industry must seek to balance the rights of the artists and copyright holders as well as the rights of the consumer.

113. *Id.* at ¶ 25. “CD anti-copying protections are in only the earliest stages of that process.” *Id.*

114. Mariano, *Copy Lock*, *supra* n. 85, at ¶ 4.

115. Borland, *New CDs*, *supra* n. 10, at ¶ 1.

116. Reuters, *Universal Plans Protection for All CDs* ¶ 12 <<http://news.cnet.com/news/0-1005-202-7299321.html>> (Sept. 25, 2001). An executive with one of Universal’s competitors concedes that the industry has always tolerated some unauthorized copying, but that now, with the technological advancements, regular, everyday people are capable of “mass distribution” of unauthorized music. *Id.* at ¶ 7.

117. Borland, *New CDs*, *supra* n. 10, at ¶ 1. Critics note that earlier versions of CDs that didn’t allow for playback on computer CD-ROM drives were a result of mistakes by technology companies who failed to take into consideration the consumer. *Id.* at ¶ 36.

118. *Id.* at ¶¶ 1, 32. Software company Macrovision admits that it has placed its technology on over 100,000 CDs that have been released in the United States. *Id.* at ¶ 4. Because of their concern for consumer bias, they have not disclosed which discs contain the protection, however. *Id.* at ¶ 32. Further, a sampling of consumers in a major music store indicated that consumers are not likely to know about the protection measures in place, or that they may purchase a CD with safeguards without knowing. *Id.* at ¶¶ 28-30.

119. Mariano, *Copy Lock*, *supra* n. 85, at ¶ 8. One project in Germany was completely abandoned after compatibility problems and complaints. *Id.*

120. *Complaint*, *supra* n. 12, at ¶ 12 (Sep. 6, 2001). The plaintiff here alleges that “the manufacture and sale of impaired compact discs with defective notice” effectuates deception on behalf of the defendant record companies. *Id.*

A. PROTECTION DEVICES WILL NOT PROVIDE A LONG TERM SOLUTION

1. *Watermarking and Fingerprinting Are Not Enough*

Several companies are currently utilizing watermarks to protect CDs, but this method is unlikely to be a durable solution. For instance, while watermarking techniques allow the holder of the copyright to identify and trace the path back to the infringer, this solution is not feasible to track down the average user who engages in file sharing for personal use.¹²¹ Since most file sharers are of this nature, it would be quite burdensome and costly to indulge in this type of identification.¹²² Moreover, even though watermarking is in place on many new CDs, older CDs are not traceable.¹²³ Most older music has already been converted to digital format and is being traded currently online.¹²⁴ Therefore, watermarking does not cover all of the bases. Furthermore, both watermarking and fingerprinting present the important issue of supervision.¹²⁵ If these mechanisms are in place and designed to be effective, someone must be appointed to police the Internet and monitor file sharing for evidence of infringement.¹²⁶

2. *Is Microsoft the Answer?*

Microsoft is gaining control over CD purchasing and listening habits. Surprisingly, while the two-sided disc method¹²⁷ may not have consumers jumping for joy just yet, it seems to be the most credible attempt at compromise.¹²⁸ Purchasers will have no problems using such CDs in their car or home stereos with the one side, and the other side, albeit a restricted version, still enables playback via computer players. The key to making a device like this work is to make it hack-proof. If the savvy user finds a way around these limitations, the purpose behind the two-sided disc will be defeated and the recording industry will be back to square one.

It is important to note that while this appears to be a relatively good solution, in the meantime CD purchasers and listeners who do not have the Microsoft Operating Systems on their home computers are likely to be dissatisfied with this emerging product. Specifically, they will be up-

121. Poquette, *supra* n. 3, at 205.

122. *Id.*

123. *Id.* at 206.

124. *Id.*

125. *Id.* at 207.

126. Poquette, *supra* n. 3, at 207.

127. See *supra* nn. 73-75 and accompanying text.

128. Poquette, *supra* n. 3, at 207. Research analysts indicate that this method "meets both sides." *Id.* Users are able to compress audio files for use on their computers, while at the same time, artists' and companies' copyrights are protected. *Id.*

set because if the discs work as designed, playback will be impossible on non-Microsoft computers, since they are exclusively designed to play on Windows Media Player.¹²⁹ Additionally, the competition (like Apple and Linux) is sure to complain about this ostentatious practice.¹³⁰ Microsoft has already battled allegations of monopoly in the browser market, and it is likely that this argument may resurface,¹³¹ only this time dealing with audio players instead of Web browsers. If these types of discs are to be the best compromise, the problem of how non-Microsoft users are to have the ability to listen to the discs will need to be sorted out, otherwise there is sure to be severe consumer backlash from those users.

Furthermore, the discussions of this mechanism fail to take into consideration the fact that many users purchase CDs, upload them on to a computer, compress the files, and “space shift”¹³² the music onto a portable MP3 player. Thus far, there are no indications that the Windows Media Player format will enable users to do so. Additionally, all of the discussions about copy protecting CDs has dealt strictly with the use on computers, but what about stand alone CD players/burners, DVD players, or Play Station machines?¹³³ Perhaps the one side of the new Microsoft Windows Media Player CD will work on these machines since they are not computers, but at the same time, they are not traditional playback devices either, so how is copy protection effectuated then? Either the user will be able to use such a device to bypass copy protection schemes and still compile, upload, and share the song files, or, if the two-sided disc cannot be played at all on these types of players, the companies will be faced with angry consumers. Regardless, the goals of copy protection and ceasing the digital distribution of music are not met here and will only upset one or both parties.

129. See *supra* nn. 68-74 and accompanying text.

130. Borland, *Labels Loosening Up*, *supra* n. 14, at ¶ 9. Allegations have since surfaced that copy-protected CDs may even cause damage to Apple products. *Id.*

131. See *U.S. v. Microsoft*, 253 F.3d 34 (2000). In this case, several software competitors alleged that Microsoft engaged in unfair business practices as well as anticompetitive measures to promote the use of their proprietary Web browser which unfairly stifled the success of other available browsers such as Netscape Navigator. *Id.* This all started because “several PC makers alleged that Microsoft was trying to leverage its dominance in the operating system market to gain market share for Internet Explorer.” ZDNet, *Microsoft's Hardball Tactics* <<http://www.zdnet.com/eweek/news/1020/msdoj.html>> (Oct 29, 1997).

132. Melville, *supra*, n. 4, at n. 173. The term “space shifting” refers to the process of making files portable. *Id.* Song files can take up a lot of space and therefore, when compression is effectuated, the files can be transferred to a handheld device for listening on the go. *Id.* at 385.

133. See Philips <<http://www.philips.com>> (accessed Nov. 5, 2001). Philips, among others, manufactures a device that is capable of playing several discs. It also has the capability of compiling tracks from the various CDs and creating a unique disc. *Id.*

B. A CASE OF FIRST IMPRESSION

While the implementation of copy protection devices is gaining attractiveness and popularity within the industry, consumers have expressed an entirely different sentiment. In 2001, a consumer filed a lawsuit in the Superior Court of Marin County in California against several record companies.¹³⁴ The purchaser in this instance bought a country music CD¹³⁵ and later learned that the music could not be played on her home computer, unlike the millions of other CDs available on the market.¹³⁶ In this particular instance playback was restricted to only CD players, walkmans, and the like, but in order to listen to the CD's songs on a computer, the user was first required to register on a Web site.¹³⁷ Moreover, the plaintiff in this case alleged that the defendants and others have implemented certain practices that are designed to defeat customers' reasonable expectations.¹³⁸ The plaintiff, DeLise, sued the Fahrenheit Entertainment group, among others,¹³⁹ for the failure to adequately label the product so as to warn her of the non-traditional nature of the CD she purchased.¹⁴⁰ While the record company contended that it provided adequate warnings on the label,¹⁴¹ this consumer disagreed.¹⁴² The purchaser argued that the jargon used on the label was not fairly and honestly set forth and therefore resulted in unfair business practices.¹⁴³

One particular area of interest in this case involved the co-defendant SunnComm.¹⁴⁴ While they may have attempted to prevent the songs on

134. Hu, *supra* n. 8, at ¶¶ 1-2.

135. Borland, *New CDs*, *supra* n. 10, at ¶ 33. While most labels have refused to disclose which CDs contain the new copy protection technology, one such title has been identified. *Id.* Country singer Charley Pride, through an independent Nashville label has released his current CD "Tribute to Jim Reeves" with the impairing protection devices. *Id.*

136. Hu, *supra* n. 8, at ¶ 7.

137. Borland, *New CDs*, *supra* n. 10, at ¶ 8. SunnComm, a software company based in Phoenix, has instituted a protection device whereby users may not listen to their purchased CD on their computers without first registering it on a separate Web site. Hu, *supra* n. 8, at ¶¶ 4, 8.

138. *Complaint*, *supra* n. 12, at ¶ 1.

139. *Complaint*, *supra* n. 12, at ¶¶ 2, 4, 8. Plaintiff DeLise is suing Fahrenheit Entertainment, Inc., Music City Records, SunnComm Inc., and any other record companies whose names may be ascertained later. *Id.*

140. Hu, *supra* n. 8, at ¶¶ 2, 4, 12.

141. *Id.* at ¶ 10. Chief Executive Officer of Fahrenheit responded to the plaintiff's allegations by stating that "there's a disclaimer on the outside and . . . [they're] not preventing anyone from doing downloads . . . [but you] have to go to the web site to do it." *Id.*

142. *Id.* at ¶ 12.

143. *Complaint*, *supra* n. 12, at ¶ 5.

144. Fahrenheit Entertainment Corp., *Fahrenheit Entertainment Inspects and Accepts New Charley Pride CD; SunnComm Goes to Market with the World's First "Cloaked" CD* ¶ 1 <<http://www.fahrenhitentertainment.com/newsreleases/newsrelease032201.htm>> (Nov.

this CD from being digitally copied and shared, they failed to address all issues. The protection may exist to restrict uploading and file sharing, but they have yet to come up with a way to offer all users a “complete music experience”¹⁴⁵ because they have failed to consider the part of the market that space shifts song files on to portable MP3 devices. Today, a “complete music experience” involves “ripping,” “burning,” and “space-shifting,” and in order to become the industry leader that they hope to be,¹⁴⁶ SunnComm must address this discrepancy.

This lawsuit was the focus of much industry attention because it was the first of its kind. While the Napster battle still ensues,¹⁴⁷ the *DeLise* case is unique because it specifically addresses the issue of copy protection of the CDs themselves as opposed to the sharing of the digital version of the songs. Many predicted that the case would have a serious impact on the future of CD manufacturing, distribution, labeling and purchasing, and some were shocked when the case settled in February, 2002.¹⁴⁸

Shortly after the *DeLise* case was settled out-of-court, another similar lawsuit appeared in the news.¹⁴⁹ *Dickey v. Universal Music Group, et. al.* was filed in June, 2002 in the Superior Court of Los Angeles and is a class action lawsuit against Universal Music Group, EMI Music Pub-

16, 2001) [hereinafter *Fahrenheit, Accepts New CD*]. Defendant SunnComm provides its MediaCloQ content security technology to Fahrenheit Entertainment for use on new CD releases. *Id.*

145. *Id.* at ¶ 9. John Aquilino is SunnComm’s Chairman as well as the Chief Technology Officer. *Id.* He boasts that their MediaCloQ technology “coupled with a secure digital rights distribution model will offer consumers everywhere a complete music experience.” *Id.*

146. *Id.* at ¶ 12.

147. *See Napster*, 239 F.3d at 1004. Napster is currently disabled as a file-sharing server, although users may still download and use the program to organize their music. Napster ¶ 1 <<http://www.napster.com>> (accessed Nov. 27, 2001). The legal strategy is to “not only to reach a resolution of past claims [dealing with copyright and licensing matters], but also to obtain licenses from the record labels, so you’ll be able to share their music on” the new music service that Napster intends to release in the future. Napster, *Legal Issues* ¶¶ 1-2 <<http://www.napster.com/lowdown.html#legal>> (accessed Nov. 27, 2001).

148. Rothkin, *Sunncomm and Music City Records Agree to Resolve Consumer Music “CD-Cloqueing” Law Suit by Providing Better Notice and Enhancing Consumer Privacy* <<http://www.techfirm.com/sunnsett.pdf>> (Feb. 22, 2002). The settlement provides, among other things, that the Internet music file downloads and listening to music contained in the CD will be anonymous; that it will purge all personal information that it has collected to date as a result of the music downloads; that it will accept returns from those who are dissatisfied with the playability aspects of the disc; that it will now include a label on the CD warning users that it is not playable on all devices; and that it will place a warning that the downloadable encrypted song files are only capable of being downloaded six times. *Id.* at ¶ 4.

149. Milberg Weiss, *Dickey v. Universal Music Group* ¶ 1 <<http://www.milberg.commil/cgi-bin/mil?templ=featured/audiocds.html>> (accessed Mar. 12, 2003).

lishing, BMG Entertainment, Sony Music Entertainment, and Warner Music Group.¹⁵⁰ Similar to the allegations in *DeLise*, the complaint in this case accuses the defendants of manufacturing CDs that are “unreproducible” and are incapable of being used on many types of disc players and computers.¹⁵¹ The suit also claims that the defendants misrepresented the products as being traditional CDs, and distributed, advertised, and sold them knowing that consumers were likely to be misled and purchase them without knowing of the playability defects.¹⁵²

The *DeLise* case never made it to the courtroom, and thus far, the *Dickey* case remains on the docket,¹⁵³ leaving consumers wondering what will happen. One thing is for sure, that consumers are not willing to sit back and let the recording companies deceptively unleash these new “defective” products upon the market without serious consequences.

C. PRIVACY

With the implementation of these new copy protected CDs also comes the issue of privacy. Some of the CDs contain watermarks or fingerprints which are designed to protect the files from being copied, but those technologies also have the capability of tracing song files, which ultimately results in tracking use and listening habits of consumers. Many users are concerned about privacy and the ability to listen to music anonymously. If watermarking and fingerprinting technologies are to be used, there must be a mechanism in place to protect the average user. Surely it makes good sense to employ these methods to catch large-scale pirates who are engaged in harmful practices, but it is unreasonable to make average individuals sacrifice their privacy and anonymity to listen to music. The current practice of requiring users to register on a proprietary Web site prior to downloading songs from a CD they have already purchased has upset consumers and is likely to cause greater distress once consumers become more aware of the limitations.¹⁵⁴

150. *Id.*

151. *Id.* at ¶ 3.

152. *Id.* at ¶¶ 1, 3. The firm representing the plaintiffs, Milberg Weiss, has placed a “Defective Audio Disc Form” on its Web site in order to gain more information from consumers who have purchased similar discs and experienced problems or dissatisfaction. *Id.*

153. Borland, *Labels Loosening Up*, *supra* n. 14, at ¶ 16.

154. Fahrenheit, *Accepts New CD*, *supra* n. 144, at ¶ 1. The first CD that contained this technology was introduced on the market in September 2001. *Id.* The CD entitled “A Tribute to Jim Reeves” by country western artist Charley Pride was produced and marketed through a small independent Nashville label. Borland, *New CDs*, *supra* n. 10, at ¶ 33. The CD is capable of being played on a computer only when the purchaser first registers on a certain Web site. Hu, *supra* n. 8, at ¶ 8; Fahrenheit, *Accepts New CD*, *supra* n. 144, at ¶ 6. Unfortunately, a week before the CD was placed on the market, eight of the songs appeared on the Internet in digital form. Mariano, *Hacked*, *supra* n. 6, at ¶ 4. It is argued that the early release of the CD in Australia may have caused this. *Id.* It is also interesting to note

The RIAA has recently proposed legislation affecting the privacy of those who share music files online.¹⁵⁵ Apparently the proposal would allow copyright holders to engage in any activities to prevent electronic piracy, and even more frightening, they will not be subject to liability for any damages caused to users' computers in the process.¹⁵⁶ Of course, copyright holders are only allowed to perform such measures if their efforts are "reasonably intended to impede or prevent" piracy.¹⁵⁷ This attack on digital sharing of music is unlikely to be successful, however. First of all, the RIAA amendment basically allows deliberate hacking into personal computers. Second, what happens if in the process of trying to remove infringed files from a computer the user's entire hard drive is erased, or worse, the whole computer is destroyed?¹⁵⁸ Since the amendment proposes no liability for copyright holders, permitting such actions would leave many computer users victims without any recourse.

Alternatively, it has been said that "too much privacy on the Net can be a bad thing."¹⁵⁹ Since online file-sharing services still exist,¹⁶⁰ tracking services are being developed and employed to monitor users to determine what songs they share and to obtain their IP addresses¹⁶¹ and

that only 8,000 of the discs were shipped out, so it is impossible to tell what, if any, large scale effect such practices could have on the buying trends of music fans. Borland, *New CDs*, *supra* n. 10, at ¶ 33.

155. Declan McCullagh, *WiredNews*, *RIAA Wants to Hack Your PC* ¶ 33 <<http://www.wired.com/news/print/0,1294,47552,00.html>> (Oct. 15, 2001). The proposed amendment is to the *USA Act*. *Id.* at ¶ 6. If the Act (as currently written) becomes a law, it is feared that attempts to disable pirate file sharing services by copyright holders will be completely banned. *Id.* at ¶ 7. This leads one to question what the RIAA really hopes to accomplish by such legislation. *Id.* It is uncertain whether these types of organizations are most concerned about the ease of online distribution, or the high quality produced by digital copies. *Id.* Both issues are certainly integral to the determination of what should be done to solve this problem. *Id.*

156. *Id.* at ¶¶ 3, 6.

157. *Id.* at ¶ 3.

158. *Id.* at ¶¶ 12, 14, 15. This is an issue Marc Rotenberg (Electronic Privacy Information Center), Peter Swire (professor) and Orin Kerr (former Justice Department lawyer) all feel must be addressed before the amendment is considered. *Id.* at ¶¶ 12, 15.

159. John Borland, *Anti-Napster Fight Takes Aim at Online Anonymity* ¶ 2 <<http://news.cnet.com/news/0-1005-200-1983353.html?tag=prntfr>> (May 31, 2001) [hereinafter Borland, *Anti-Napster*]. This statement has been made by record industry executives as a result of what they see as copyright violation activities occurring on Napster, for instance. *Id.*

160. One such company is KaZaA. KaZaA <<http://www.kazaa.com>> (accessed Oct. 2, 2001).

161. Microsoft.com, *Windows 2000 Resource Kits* <http://www.microsoft.com/windows2000/techinfo/reskit/en-us/default.asp?url=/windows2000/techinfo/reskit/enus/cnet/cnbb_tcp_PNMZ.asp> (Nov. 15, 2001). "The IP address identifies a system's location on the network in the same way a street address identifies a house on a city block." *Id.*

usernames.¹⁶² This sacrifice of privacy obviously horrifies advocates who promote free speech and anonymity, especially on the Internet.¹⁶³ Naturally, however, there is already a way around such tracking programs.¹⁶⁴ Software exists that masks individual online traces and allows the content to be distributed more widely around the Internet, making tracing more difficult.

D. TECHNOLOGICAL ADVANCEMENTS

While it is natural to refer to the current methods and mechanisms of protecting CDs and digital music as “new,” these seemingly innovative means will be deemed “old” within a short time. Technology is rapidly changing. Just because the technology to share and “burn” certain copy protected works does not exist today does not mean that it will not someday. Certainly there is nothing preventing people from experimenting with new methods. In fact, DVD burners are already available.¹⁶⁵ What’s more, if consumers purchase such a device, they can also buy “The Expert Guide to DVD Ripping”¹⁶⁶ to assist them in copying DVDs and creating a vast home movie collection.¹⁶⁷ It is unlikely that the industry is happy about this, but it is inevitable that someone somewhere will always find a way to circumvent protective measures by the industry.

There once was a time when the VCR and videocassettes were similarly shunned by the industry. Initially Sony was the target of much criticism by the film industry because they created a device that was ca-

162. Borland, *Anti-Napster*, *supra* n. 152, at ¶ 10. While it is a scary to think that by trading songs online you could very well be allowing someone to track your use, some people believe this is the only way to stop music-sharing. *Id.* at ¶ 9. Furthermore, Rob Atkinson, who is a director of technology at the Public Policy Institute says “if users are anonymous, then rights holders will have no one to sue.” *Id.* at ¶ 15.

163. *Id.* at ¶¶ 6, 7.

164. *Id.* at ¶ 13. The services, as mentioned, include Freenet and ZeroKnowledge. *Id.*

165. Philips Consumer Electronics <<http://www2.ce-europe.philips.com/do/session/4419950/vsid/1215/cid/1804321/cmpid/1165/url/>> (Feb. 11, 2001). Philips Consumer Electronics division has introduced a DVD recorder. *Id.* They call it:

the next logical step in digital home entertainment . . . The only rewritable DVD format to combine optimum performance with two-way compatibility. It can be used and interchanged with your computer and home entertainment system, which offers you “room to create” your own DVD. The first Philips DVD Recorders, using DVD+RW technology, will be available for purchase from September 2001.

Id.

166. Expert-Guides.com, *DVD Ripping & Copying* ¶ 1 <http://www.expertguides.com/library/dvd_ripping.asp> (accessed Nov. 2, 2001); *DVD Copy Pro* ¶ 1 <<http://www.dvdcopypro.com/overture.html>> (accessed Mar. 12, 2003); Riphelp.com, *DVD Ripping Guide* ¶ 1 <<http://www.riphelp.com/articles/dvdripping.html>> (accessed Mar. 12, 2003).

167. *Id.*

pable of recording copyright protected programs for personal use.¹⁶⁸ It was assumed that a device such as the VCR would substantially interfere with copyright holders' rights to royalties from movies and television programs.¹⁶⁹ The marketing of VCRs and similar devices was challenged but the products remained available to consumers. The acceptance of the VCR as a recording and playback device did not happen overnight. Eventually the film industry had to succumb and embrace the new technology. Today, fifteen years later it is easy to see that they were correct in doing so.¹⁷⁰ The recording industry should look back to how the VCR became accepted and act accordingly with regard to digital music.

E. IS THIS SUCH A BAD THING?

With all the fuss being made about digital distribution of music, the recording industry must step back and seriously consider whether allowing consumers access to so much with such ease is really that bad after all. Consider the fact that the system allows millions of music lovers, all from different countries, backgrounds, and lifestyles to share a form of art, exposing one another to different artists and genres of music. How can this be wrong? If users were unable to upload their personal CD collections onto their computers' hard drives, the sharing of music files would come to a dramatic halt. This would limit the exposure of music to those places willing to distribute or sell those CDs.

168. *Sony*, 464 U.S. at 417.

169. See Borland, *New CDs*, *supra* n. 10, at ¶¶ 23-24. Macrovision, one of the leading developers of copy protection technology had a hand in the copy protection of VHS tapes, as well. *Id.* The company created technology "that prevented the duplication of VCR tapes almost 15 years ago." *Id.* Later, however, VCR manufacturers found a way to circumvent Macrovision's mechanisms. *Id.*

170. Universal Studios, *Company Overview* ¶¶ 1-2 <http://www.universalstudios.com/homepage/html/about_us/> (accessed Nov. 15, 2001). While Universal was the main contender in the *Sony* case (See *Sony* 464 U.S. 417), even they adapted to change and have now become an industry leader in a business they sought to keep down. *Id.*

During the last decade, Universal Studios has undergone extraordinary change and growth, and has broadened its reach as a global company with worldwide operations in motion pictures, home entertainment, television, recreation and consumer products. Today, Universal Studios is a part of the Canal+ Group, which is the TV & Film Division of Vivendi Universal, a new global leader in media and digital communications. The combined strengths of Universal and Canal have created a global powerhouse – with the world's second largest library of films and television titles; two major studio production entities; and a world-wide distribution operation – that offers a full spectrum of filmed entertainment for diverse audiences around the world, and for all existing and emerging platforms, including the Internet, DVD and video-on-demand.

Id. It would be ideal to think that fifteen years from now, people will look back on the highly-controversial issue of copy protection and feel similarly to how people feel about the VCR, home videos, and the recording/playback features today.

It is apparent that this is a heated issue within the industry. Many artists¹⁷¹ have been quite vocal and support the digital distribution of music, even if it is for free.¹⁷² For the most part, these artists are thrilled that people want to hear their music and introduce it to others.¹⁷³ Likewise, some artists believe that if people can upload the CDs they purchase and share the files, ultimately, someone else will hear the songs and will go out and buy the CDs themselves.¹⁷⁴ Additionally, because music can be placed online and distributed to anyone anywhere for virtually no cost at all, file sharing allows unestablished artists, for instance, a way to distribute their music without the need for a money-grubbing record label.

On the other hand, several other musicians have spoken out in opposition to the free sharing of music,¹⁷⁵ citing loss of revenues, copyright infringement, and the exploitation of artists' music without their consent.¹⁷⁶ The media portrays their anger as being geared entirely toward Napster, but it seems apparent that these artists are opposed to the practice of uploading songs from CDs and trading them online, regardless of how they are shared.

171. Napster, *Artists Sound Off* ¶¶ 1-19 <<http://www.napster.com/speakout/artists.html>> (Oct. 28, 2001). The following artists are supportive of the right to upload and share musical files: Prince, Dave Matthews (Dave Matthews Band), Fred Durst (Limp Bizkit), Dave Grohl (Foo Fighters), Bono (U2), Dave Stewart (Eurythmics), Billy Joe Armstrong (Green Day), Thom Yorke (Radiohead), Madonna, Chuck D, Moby, B.B. King, and Dexter Holland (The Offspring). *Id.*

172. *Id.* at ¶ 1. However, others would beg to differ: the president and chief executive officer of SunnComm, Peter Jacobs calls these practices "socially acceptable larceny." Fahrheit, *Accepts New CD*, *supra* n. 144, at ¶ 13.

173. Napster, *Artists Sounds Off*, *supra* n. 171, at ¶ 1. "I just want my music to be out, and that's always been the main priority . . . It was just getting people to hear my music and say, 'Hey, I like your song.'" *Id.* at ¶ 1 (quoting Billy Joe Armstrong of Green Day).

174. *Id.* at ¶ 3. Ian MacKaye, who is both a recording artist as well as the co-owner of Dischord Records, supports the practice he calls "sampling." *Id.*

175. Andrew Dansby, *Dr. Dre Sends a Warning to Napster* ¶ 4 <<http://www.rollingstone.com/news/newsarticle.asp?nid=10651>> (Apr. 20, 2000). Lars Ulrich of Metallica probably manifests the Anti-Napster sentiment more than any other artist. Additionally, other well-known musicians such as Dr. Dre, Lou Reed, and Elton John condemn Napster and its practices. *Id.*

176. Metallica.com, *Napster Ruling In* ¶ 2 <<http://www.metallica.com/metdotcom/indexa.html>> (Feb. 12, 2001).

From day one our fight has always been to protect the rights of artists who chose not to have their music exploited without consent. . . . We are delighted that the Court has upheld the rights of all artists to protect and control their creative efforts. The 9th Circuit Court has confirmed that musicians, songwriters, filmmakers, authors, visual artists and other members of the creative community are entitled to the same copyright protections online that they traditionally been afforded online. We have never objected to the technology, the Internet or the digital distribution of music. All we have ever asked is that artists be able to control how, when and in what form their creativity is distributed through these channels.

Id.

One of the biggest advantages of having the ability to digitally distribute music via the Internet is that it helps so many artists. Surely there are many musicians who simply do not have the resources or the money to put together a commercial CD for mass distribution on the market. Often such artists are either unrepresented or may be represented by smaller independent labels. With the current situation, these artists can record a CD themselves or simply record the sound onto their computer,¹⁷⁷ upload the song on to a file sharing service and hope that random users from around the world download and listen to their original music.¹⁷⁸

Additionally, it is important to consider the effects of this type of distribution on the artists themselves. Even mainstream artists can get more exposure than before. Users are able to find songs they may have heard on the radio, or conversely, songs that are by a certain artist that are not suitable for airplay. Listeners are able to sample the music in the privacy of their own homes to determine if they want to purchase the CD or not. If this is not enough advertising for the artists, there are often ad banners on the file sharing programs which direct the user to Web sites which sell the CDs, as well.¹⁷⁹

F. WHAT'S NEXT?

"If you're going to place restrictions on your customers, you have to offer them something of value that will make the product attractive."¹⁸⁰ While for the industry it would be ideal for CDs to be incapable of being copied and for users to be unable to "rip" the songs into MP3 format for

177. ProAudioMusic, *Band in a Box* <http://www.proaudiomusic.com/PG%20music/band_in_a_box.htm> (Nov. 15, 2001). One program that allows users to record their own music with a computer is called "Band in a Box." *Id.* The software contains user-friendly guided demonstrations of how to make original sounds, "and when you're ready to let others hear your composition, you can "burn" it directly to an Audio-CD with your CDR or CDRW drive. *Id.* You can even save your composition in Windows Media Format, leaving you with a file all ready to be uploaded to your Web site and played over the Internet." *Id.* For as little as \$60, such a program is ideal for the up-and-coming artist to inexpensively record and distribute original music. *Id.*

178. By getting his music out on the Internet, the artist essentially receives fast and free promotion. Additionally, there are no time or space burdens because the artist does not have to mail a CD or cassette to an interested listener, but instead can provide it in immediate online format.

179. KaZaA, *supra* n. 160. When users connect to KaZaA using KaZaA media desktop, there is a button in the taskbar labeled "More Info." *Id.* After clicking on this button, the right-hand portion of the user's display provides quick links to purchase the CD at Amazon.com; to learn more about the artist at MTV.com; and to obtain other downloads from MP3.com, among other things. *Id.*

180. Reuters, *supra* n. 116, at ¶ 9.

easy trading on the Internet, there is a lot of work to be done.¹⁸¹ In order to implement such measures “any barriers to copying must be ‘backward compatible’—meaning the new technologies would have to work on old CD players that don’t screen for pirated material and vice versa.”¹⁸² If the government and the industry continue their resolute attempt at protecting music, the licensing of other digital music may be restrained.¹⁸³ Those artists wishing to benefit from the mass exposure digital distribution affords them will then suffer the consequences at the hand of giant media moguls,¹⁸⁴ merely for trying to be a part of free enterprise.

It seems as though the copyright holders and recording industry as a whole will only be happy when they have found a way to be in complete control of the situation. Surely it could also be argued that a happy medium will be struck when they can be in a better financial position as well. One has to think whether all of this would even be such a big issue if one of the recording industry brethren had instituted peer-to-peer file sharing services instead of a middleclass nineteen-year old college student.¹⁸⁵ Surely then they would see how digital distribution of music can be “the music industry’s ultimate marketing vehicle.”¹⁸⁶

When looking at the overall picture of copy protection, one must truly ponder the following: by implementing such devices and features, who is really being protected? Is it the industry? The artist? The copyright holder? The consumer? Arguably, the savvy consumer will not accept the argument that it is designed to protect the artist, because most people know that artists themselves receive very little money for each CD sold,¹⁸⁷ and instead reap their profits from concerts and the like. The substance of the complaints from artists results from issues of consent and permission as opposed to money.¹⁸⁸ Therefore, it can be argued that the protection is ultimately designed to protect the record compa-

181. Mariano, *Hacked*, *supra* n. 6, at ¶¶ 10-11. It seems as though all of the efforts taken thus far by the industry have failed to address backward compatibility or even ways to deal with those CDs that are already in circulation without any sort of protection devices. Surely it would be costly to re-release older, previously circulated titles with the new technology when they are unlikely to sell as well as they did when first released.

182. *Id.*; see nn. 131-133 and accompanying text (discussing Windows Media Player CDs).

183. Livingston, *supra* n. 62, at ¶ 11.

184. Hoffman, *supra* n. 3, at 158.

185. See generally Ante, *supra* n. 34.

186. *Id.*

187. Love Label Records, *Better Royalties for Recording Artists* <http://www.beverlyhills310.com/love_label.htm> (Nov. 15, 2001) “An artist will receive between 12 percent and 14 percent of the suggested retail prices of cassettes and albums and about 10 percent of the cassette royalty rate on CDs as compensation for their efforts of recording and album.” *Id.*

188. See ProAudioMusic, *supra* n. 177 and accompanying text.

nies and manufacturers, because they are the ones who have the most at stake financially.

It does not seem that the industry intends to protect the consumer from the rapid changes in the industry and guide them through the changing process. As a result, and as a stepping stone to instigate and promote further proactive measures prior to CD releases, a set of standards must be adopted and followed where CD manufacturers uniformly label CDs that are unable to be used on computers.¹⁸⁹ This allows consumers to be properly apprised of any impaired conditions that make the CD different from those that the user is familiar with. Furthermore, a system that allows users to play these discs on their computers without being forced to divulge a barrage of personal information must be enacted so as not to infringe dramatically on a user's privacy.

Uniform labeling would provide a partial solution because it would lessen some of the consumer animosity toward the protection devices. Empowering consumers with this type of knowledge allows them to make a decision as to whether to purchase a copy-protected disc or not. For many, this may not even be an issue. For others, however, merely placing a sticker on the front of a CD will not fix all of the problems with copy protection. Consumers want fair use and a stop to privacy violations; record companies want "perfect playability along with perfect protection."¹⁹⁰ To appease both sides of the issue, it seems that a CD which can be played and/or uploaded onto all types of media devices, while at the same time containing some sort of reasonable copy protection to reduce the unlimited digital distribution of files would be best for everyone.¹⁹¹

IV. CONCLUSION

Even though the implementation of copy protection mechanisms in CDs is still in the early stages, there are bound to be several bumps in the road ahead before consumers are willing to accept such newly-de-

189. Desiree Everts, *Logo Would Identify Copy-Protected CDs* ¶¶ 1, 3 <<http://news.com.com/2100-1023-958353.html>> (Sept. 17, 2002). The International Federation of the Phonographic Industry (IFPI), which is very similar to RIAA, proposed that record companies label CDs with a logo that notifies consumers that the CD they are purchasing may not work properly on anything but a traditional playback device. *Id.* IFPI believes that this is a practical solution to the problem by providing better information to consumers and therefore eliminating some of the harsh backlash experienced when consumers later discover their protected disc. *Id.* at ¶ 2.

190. Borland, *Labels Loosening Up*, *supra* n. 14, at ¶ 20.

191. *Id.* "Consumers have to be given benefits along with copy-blocking." *Id.* at ¶ 22. Once this occurs, some record companies believe that copy-protection will become old news and consumers will quickly forget about it and instead focus on the new benefits provided by the CD. *Id.*

signed CDs. These new products have yet to be marketed in a manner that will project a favorable image to consumers, and because of this, manufacturers and record labels have already experienced extreme consumer dissatisfaction. Just as computer users become reliant on and comfortable using programs such as Napster or KaZaA to trade music with others, this privilege is on the verge of being taken away. Users are just now starting to learn of the protection devices and it is doubtful that they truly understand the purpose behind them or the fact that the record companies are capable of monitoring and tracking them through the new technology. Regardless of what has been done and what will happen in the near future, success will not come overnight. The process is bound to be long and arduous and the delicate nature of placating consumers' wishes while keeping the recording industry in an economically desirable position will require caution.

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