

MUSIC PIRACY AND THE AUDIO HOME RECORDING ACT

In spite of the guidance provided by the Audio Home Recording Act¹ (AHRA) of 1992, music companies are once again at odds with consumer electronics manufacturers. This time around, the dispute is over certain information technology products that enable consumers to copy digital music and transfer them to different formats, or exchange them over the Internet. This article will discuss anti-piracy measures being taken by digital content owners and the United States legislature to combat piracy and evaluate them in light of the AHRA.

The Promulgation of Music Piracy

Over the last two years, the music industry has fed the media stark statistics about “piracy,” the act of copying digital music content to a blank CD, or uploading or downloading it on the Internet. According to various newspaper articles, an estimated 3.6 billion songs are illegally downloaded each month in the United States.² In 1999, the music industry estimated that one in four compact discs of new music was actually an unauthorized copy.³ By the end of 2001, it was estimated that as many CDs were burned and copied as were bought.⁴ In Europe, blank CDs are outselling recorded CDs (although these blank CDs might have also been purchased for legitimate reasons, such as to back-up personal computer files).⁵ And since 1999, ownership of CD burners has nearly tripled.⁶ This trend of consumers sharing their music rather than purchasing it may be attributable to many factors, including the slow economy. However, the music industry seems to believe that the most likely culprit in this trend is the rise of digital music,⁷ i.e., free online file sharing, and the growing popularity of CD burners.⁸

In an act of self-defense, the largest record companies are developing anti-piracy technology to protect their copyrighted music against the information technology industry’s

¹ 17 U.S.C. § 1001-10 (1992).

² Jacob Heilbrunn, Editorial, *Hollywood Embraces Big-Brother Tactics*, LOS ANGELES TIMES, March 31, 2002, at M3.

³ Charles Arthur, *Network: The Lady’s Not For Burning*, THE INDEPENDENT (London), November 26, 2001, at 9.

⁴ *Id.*

⁵ Jonathan Takiff, *The Music Business Is Tired Of Being (CD) Burned*, PHILADELPHIA DAILY NEWS, August 15, 2001.

⁶ Steve Morse, *Burned?*, THE BOSTON GLOBE, April 21, 2001, at L8.

⁷ Instead of being recorded as a sound wave, digital music is recorded as a group of ones and zeroes, and is playable on almost any digital media device.

movement toward increasingly user-friendly digital hardware and software. The United States Congress also has an eye on this power struggle between digital music owners and IT electronics manufacturers. It is currently considering a bill that would require IT manufacturers to protect copyrighted digital music from piracy by making significant alterations to the CD players and personal computers that they produce, thereby preventing unauthorized copying. However, there is already a federal statute in place that permits and regulates the home recording of copyrighted music. This current law provides a solid foundation upon which to build an up-to-date legislative solution that will satisfy all parties involved without unduly burdening one industry in favor of another.

Major Music Labels Develop Anti-Piracy Technology

A few of the “Big Five” major music labels⁹ are currently experimenting with anti-piracy technologies designed to combat the on-line file sharing of their products through peer-to-peer networks. Both Sony and BMG have already implemented copy-protection systems, and Vivendi Universal announced last spring its intention to add restricted-use technology to all of its releases by the summer of 2002.¹⁰ These copy-protection programs encode electronic impediments onto commercial CDs, which prevent the discs from being played on any device that is not a simple CD player.

Sony has developed its own anti-piracy technology, called “key2audio.”¹¹ The music label announced in January 2002 that it had produced a total of 10 million discs¹² for 500 different albums that could not be played on personal computers by using its key2audio program, which prevents consumers from listening to CDs on any type of CD-ROM or DVD player. A second version of the software, key2audio4PC, is a bit more lenient than key2audio in that it does permit listeners to play copy-protected CDs on their personal computer. However, the discs are

⁸ Jonathan Takiff, *The Music Business Is Tired Of Being (CD) Burned*, PHILADELPHIA DAILY NEWS, August 15, 2001.

⁹ The Big Five major music labels are Bertelsmann’s BMG (BMG Entertainment), Vivendi Universal, Sony, EMI Group, and AOL Time Warner.

¹⁰ Doug Bedell, *Dysfunctional Discs; ‘Copy-Protected’ CDs May Not Perform As You Expect*, THE DALLAS MORNING NEWS, February 21, 2002, at 3D. *See also*, Charles Arthur, *Network: The Lady’s Not For Burning*, THE INDEPENDENT (London), November 26, 2001, at 9.

¹¹ Key2audio was developed by the Digital Audio Disc Corp. (DADC), which is a subsidiary of Sony. *Circumvention Claimed For Copy-Proof CD*, CONSUMER ELECTRONICS, August 20, 2001.

¹² *Sony Says Its CD Copy-Protection Is On 10 Million Discs*, AUDIO WEEK, January 28, 2002. These discs were reportedly released in Europe by several different record labels. Doug Bedell, *Dysfunctional Discs; ‘Copy-Protected’ CDs May Not Perform As You Expect*, THE DALLAS MORNING NEWS, February 21, 2002, at 3D.

encrypted to limit usage to a single PC.¹³ For example, once the CD is played on the consumer's home computer, she would not be able to play the same CD on her DVD player in the next room, or on her computer at the office. Downloaded music files may be copied from the PC hard drive to a blank CD, but that CD would likewise be playable only in the specific PC on which the copy was made from an authorized download.¹⁴

Another music label is licensing anti-piracy technology from outside developers. BMG Entertainment began using the Cactus Data Shield anti-piracy program,¹⁵ developed by Midbar Technology,¹⁶ on CDs in the fall of 2001. Cactus is designed to prevent consumers from reformatting songs into MP3 files and burning copies, or making them available on file-sharing systems.¹⁷ The software prevents listeners from playing the discs on CD-ROM drives, which means that the music will not play on the Sony Playstation 2, a number of car stereos and DVD players, or on PCs.¹⁸ The Cactus patent application states that the resulting playback distortion on an unauthorized copy would not only distort the sound, but would also be "potentially damaging" to amplifiers and speakers.¹⁹ The Cactus system also disables stand-alone CD burners.²⁰

Digital rights management companies are also developing and marketing solutions for entertainment companies. Macrovision,²¹ in collaboration with TTR Technologies, developed multiple versions of an anti-piracy technology called SafeAudio, a 100% software-based, audio copy protection technology for music CDs. SafeAudio Version 2 allows CDs to operate in CD players and PC-based CD-ROMs, but spoils any copy made to the hard drive or a CD burner by adding background noise to the playback sound.²² SafeAudio Version 3 allows CDs to be played in simple CD players, but not in a CD-ROM or copied onto a hard disk drive. Products like

¹³ *Sony Says Its CD Copy-Protection Is On 10 Million Discs*, AUDIO WEEK, January 28, 2002.

¹⁴ *Id.*

¹⁵ Jonathan Takiff, *The Music Business Is Tired Of Being (CD) Burned*, PHILADELPHIA DAILY NEWS, August 15, 2001.

¹⁶ Macrovision, discussed *infra* note 21, acquired Midbar Technology and TTR Technologies in November 2002. See *Macrovision Buys Israeli Anti-Piracy Technology*, GLOBES ONLINE, November 5, 2002, available at <http://www.globes.co.il>.

¹⁷ Charles Arthur, *Network: The Lady's Not For Burning*, THE INDEPENDENT (London), November 26, 2001, at 9.

¹⁸ *Id.*

¹⁹ Jonathan Takiff, *The Music Business Is Tired Of Being (CD) Burned*, PHILADELPHIA DAILY NEWS, August 15, 2001.

²⁰ *Id.*

²¹ Macrovision Corporation provides digital rights management technologies for the home video, enterprise software and consumer interactive software markets. These technologies encompass copy protection, electronic licensing and rights management, and encryption.

²² *UMG Silent On CD Copy-Protection Details*, AUDIO WEEK, October 1, 2001. See also, *Macrovision Bolsters CD Copy Protection*, AUDIO WEEK, October 15, 2001.

SafeAudio are proving to be a difficult sell to record labels in the United States, which are concerned about negative consumer backlash.²³ Perhaps in response to this concern, Macrovision recently released its SafeAuthenticate product, which permits CDs that are authenticated by the product's software to be a genuine pressing to be played from the computer's CD-ROM drive or copied onto the hard drive for playback through Microsoft's Windows Media Player.²⁴

The Consumer Broadband and Digital Television Promotion Act

While music copyright owners are taking action to protect their content, the United States Senate is considering controversial legislation that would require IT manufacturers to implement safeguards against unauthorized copying of music. In March of 2002, Senator Ernest Hollings, D-S.C., Senate Commerce Committee Chairman, introduced the Consumer Broadband and Digital Television Promotion Act²⁵ ("CBDTPA"). This proposed legislation, which is heavily supported by music industry lobbies such as the Recording Industry Association of America, would require all new digital media devices to be encoded with security technology to prevent unauthorized copying of copyrighted works.²⁶

The drafters of this bill cite a negative cycle in the market for digital content as being the impetus for this legislation. They find that there is a lack of high-quality digital content available for sale to the general public,²⁷ which leads many consumers to pirate digital music. This piracy threat makes content owners reluctant to place their copyrighted material in the marketplace. This accounts for the lack of content for sale, thus completing the cycle and creating a need for legislated content security measures.²⁸ The drafters contend that such measures will create a situation where copyright owners are comfortable placing more content in the marketplace, thereby reducing the consumer's need to make pirated copies.

²³ Record labels in Europe and Asia, where consumer fair use is less protected, readily use products such as SafeAudio and Cactus Data Shield to protect their products. Aram Sinnreich, *Rollout Of CDs With Anti-Piracy Safeguards Limited By Tech Glitches, Labels Fear*, BILLBOARD, October 28, 2002, at 38. See also, Dan Daley, *Copy Protection Technology: Can The Industry Secure Content Without Alienating Customers?*, TAPE-DISC BUSINESS, September 1, 2002, at 22; James Bickers, *Copy Protected CDs: Piracy Defense or Rip-Off?*, USA TODAY, June 25, 2002, at 2E.

²⁴ Macrovision released SafeAuthenticate in October 2002. News brief, AUDIO WEEK, Audio Notes section, October 28, 2002.

²⁵ Consumer Broadband and Digital Television Promotion Act, S. 2048, 107th Congress. (2002). The Consumer Broadband and Digital Television Promotion Act is co-sponsored by Sen. Ted Stevens, R-Alaska, Sen. Daniel Inouye, D-Hawaii, Sen. John Breaux, D-La., Sen. Bill Nelson, D-Fla., and Sen. Dianne Feinstein, D-Calif.

²⁶ S. 2048, 107th Cong. § 3(d) (2002).

²⁷ S. 2048, 107th Cong. § 2(1) (2002).

²⁸ S. 2048, 107th Cong. § 2(2) (2002).

Many high-tech industry leaders and consumer advocacy groups have balked at this proposed legislation. Members of the IT industry believe that the charge to make them responsible for inhibiting unauthorized copying is an impossible task because it is not technologically feasible to protect a digital work once it is in the public domain.²⁹ Consumer groups such as DigitalConsumer.org³⁰ feel that the bill violates individuals' rights to post-purchase flexible use of copyrighted materials.³¹ Media critics declare that as a cure, CBDTPA would be far worse than the disease of digital content piracy.³² They say that making it more difficult to play a copy-protected CD on more than one digital media device would be only a speed bump for pirates who might easily circumvent anti-piracy technology, but it could turn out to be a roadblock for the average music buyer.³³

The Audio Home Recording Act

In 1992, Congress passed the Audio Home Recording Act³⁴ ("AHRA"), an amendment to the federal copyright law. Under the AHRA, all digital recording devices must incorporate a Serial Copy Management System ("SCMS").³⁵ This system allows digital recorders to make a first-generation copy of a digitally recorded work, but does not allow a second-generation copy to be made from the first copy (users may still make as many first-generation copies as they want). The AHRA also provides for a royalty tax³⁶ of up to \$8 per new digital recording machine and 3 percent of the price of all digital audiotapes or discs.³⁷ This tax is paid by the manufacturers of digital media devices and distributed to the copyright owners whose music is presumably being copied.³⁸ In consideration of this tax, copyright owners agree to forever waive the right to claim copyright infringement against consumers using audio recording devices in their homes.³⁹ This is commensurate with the fair use exception to copyright law, which allows consumers to make

²⁹ Cara Garretson, *Copyright Protection Bill Draws Criticism*, INFOWORLD DAILY NEWS, March 22, 2002, available at http://idg.net/crd_idgsearch_835348.html.

³⁰ DigitalConsumer.org is an organization founded by Joe Krouse set up to oppose the Consumer Broadband and Digital Television Promotion Act. Krouse is also the founder of Excite.com.

³¹ Garretson, *supra* note 29.

³² Alex Salkever, *Guard Copyrights, Don't Jail Innovation*, BUSINESS WEEK ONLINE, March 27, 2002, available at http://www.businessweek.com/bwdaily/dnflash/mar2002/nf20020327_2364.htm.

³³ *Id.*

³⁴ 17 U.S.C. § 1001-10 (1992).

³⁵ 17 U.S.C. § 1002(a) (1992).

³⁶ 17 U.S.C. § 1003 (1992).

³⁷ 17 U.S.C. § 1004 (1992).

³⁸ *Id.*

³⁹ 17 U.S.C. § 1008 (1992).

copies of copyrighted music for non-commercial purposes.⁴⁰ The SCMS and royalty requirements apply only to digital audio recording devices.⁴¹ Because computers are not digital audio recording devices, they are not required to comply with Serial Copy Management System requirement.⁴²

It is clear from the language of the AHRA, and subsequent judicial interpretations of the statute, that Congress did not anticipate ten years ago that the SCMS would be inadequate to contain the impending home digital recording explosion that was galvanized by the Internet. However, the CBDTPA bill and the new anti-piracy technologies appear to be the music industry's effort at making an end run around the AHRA. Instead of passing this new legislation, it would be more appropriate for Congress to amend the AHRA, which strikes an appropriate, albeit outdated, balance between music distributors, electronics manufacturers and consumers.

Pirated music has become such a large issue that it undoubtedly warrants the attention that it is receiving. However, with so many divergent interests involved, it is not feasible for all of these groups to be left to work this issue out among themselves, which is what the CBDTPA suggests. Congress must take charge to enact legislation that will fairly balance the interests of all of these groups, and the CBDTPA legislation is too partial to the music industry to be the proper avenue for such an undertaking. Rather, Congress should look back to the AHRA as a starting point and further develop that statute to accommodate for the societal and technological changes that have occurred in the last ten years. This new AHRA, in conjunction with the new paid subscription based online music services being offered by the music labels, has great potential to result in an amicable understanding among all parties involved.

One change that is absolutely necessary for the AHRA is to require PC hardware and software manufactures to also pay a royalty tax and comply with the SCMS requirement. Although the primary function of a PC is not to record copies of music, for all practical purposes, PCs pose the biggest threat to copyright holders because they not only allow users to copy music onto the hard drive for downloading onto a blank CD, but also permit consumers to share music on the Internet.

An amended AHRA would cover all the bases for the music industry: they would continue to recover from digital recording device manufacturers for music copied on CD burners, which IT manufacturers likely would happily pay rather than install anti-piracy safeguards on their products; they would now be compensated for music downloaded on home computers; and

⁴⁰ 17 U.S.C. § 1008 (1992).

⁴¹ *Recording Indus. Ass'n v. Diamond Multimedia Sys., Inc.*, 180 F.3d 1072 (9th Cir. 1999).

⁴² *Id.*

they would autonomously be able to collect from individuals via the online subscription services, a well that will probably not run dry as long as the subscription fees are less expensive than purchasing the music in a store.

Conclusion

Sometimes progress may feel more like loss than gain⁴³ when a technology that an industry has developed a significant portion of their products around becomes outdated. While this may be a frustrating experience for those industries that are tangential to the technology, the proper solution is not to hinder progress, but instead to adapt accordingly. Clearly, there is a significant consumer demand for digital music, and music labels have a healthy supply of digital content to release into the marketplace. By using anti-piracy software or inhibiting digital audio recording devices, the music labels would achieve little more than to create a source of frustration for consumers and retailers, and perhaps even create an underground market for accessible music and recording devices. Instead, Congress and the music industry should look to what has already proven to be a successful formula in the AHRA, and make the necessary changes in the legislation to make it more effective in the 21st century.

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⁴³ Quotation by Mason Cooley (b. 1927), U.S. aphorist. *City Aphorisms, Eleventh Selection*, New York (1993).