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SPECIAL FEATURE

THE NAPSTER LITIGATION

Introduction: From Sheet Music to MP3 Files— A Brief Perspective on Napster

BY HAROLD R. WEINBERG*

I.

The *Napster* case is the current *cause célèbre* of the digital age.¹ The story has color. It involves music-sharing technology invented by an eighteen-year-old college dropout whose high school classmates nicknamed him “The Napster” on account of his perpetually kinky hair.² The story has drama. Depending on your perspective, it pits rapacious big music companies against poor and hardworking students who just want to enjoy some tunes; or it pits creative and industrious music companies seeking a fair return on their invested effort, time, and money against greedy and irreverent music thieves.³ And the case has importance. Music may be intellectual property’s “canary in the digital coal mine” because the copyright infringement issues now confronting the

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¹ *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004 (9th Cir. 2001).

² Karl Taro Greenfeld, *Meet the Napster*, *TIME*, Oct. 2, 2000, at 60, 63.

³ The plaintiffs in *Napster* are engaged in the commercial recording, distribution, and sale of copyrighted musical compositions and sound recordings. *Napster*, 239 F.3d at 1011. Although certainly not Napster’s only users, students, especially college students, represent Napster’s most important group of consumers. *A&M Records, Inc. v. Napster, Inc.*, 114 F. Supp. 2d 896, 909 (N.D. Cal. 2000).

music industry have important implications for other producers of digital information products including books and movies.⁴

I will not use this space to discuss the *Napster* case in depth. That analysis is provided elsewhere in this issue.⁵ Instead, I would like to briefly place *Napster* within the broad sweep of copyright law as it has applied to music over the last 170 years. Copyright always has been “technology’s child.”⁶ The *Napster* case, while the latest big thing of the digital age, is just one of many judicial and legislative adaptations of music-related copyright law to technological innovation.⁷

II.

The Constitution provides Congress with the power “To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”⁸ Congress first provided protection for musical compositions in 1831, forty-one years after it enacted the United States’ first copyright statute which protected only maps, charts, and books.⁹ The 1831 law protected musical compositions printed on paper using score and staff notation.¹⁰ Sheet music publishing became commercially important to-

⁴ COMPUTER SCIENCE AND TELECOMMUNICATIONS BOARD NATIONAL RESEARCH COUNCIL, *THE DIGITAL DILEMMA: INTELLECTUAL PROPERTY IN THE INFORMATION AGE* 76-77 (2000).

⁵ See Shawn Chapman, Note, *Pushing the Limits of Copyright Law and Upping the Ante in the Digital World: The Strange Case of A&M Records, Inc. v. Napster, Inc.*, 89 KY. L.J. 793 (2001); Ryan C. Edwards, Note, *Who Said Nothing in This World is Free? A&M Records, Inc. v. Napster, Inc.: Problems Presented, Solutions Explored, and Answers Posed*, 89 KY. L.J. 835 (2001).

⁶ PAUL GOLDSTEIN, *COPYRIGHT’S HIGHWAY: FROM GUTENBERG TO THE CELESTIAL JUKE BOX* 27 (1994).

⁷ Copyright law has adapted to technological innovation in many other fields as well. A judicial example: the Supreme Court decided that the copyright on a book extended to a movie version of that book. *Kalem v. Harper Bros.*, 222 U.S. 55 (1911) (the “Ben-Hur” case). A legislative example: Congress ultimately defined the copyright liability of cable television systems that retransmit over-the-air broadcasts. Copyright Act of 1976, 17 U.S.C. § 111 (1976) (most recently amended 1999).

⁸ U.S. CONST. art I, § 8, cl. 8.

⁹ EATON S. DRONE, *A TREATISE ON THE LAW OF INTELLECTUAL PRODUCTIONS IN GREAT BRITAIN AND THE UNITED STATES* 89-90 (1879).

¹⁰ *Id.* at 175-76.

wards the end of the nineteenth century.¹¹ The printing press made it possible to reproduce and vend sheet music on a large scale, but that is another story.¹²

III.

By 1908, piano rolls and the player pianos that played them were commercially successful technologies.¹³ In *White-Smith Music Publishing Co. v. Apollo Co.*, the Supreme Court was called upon to decide whether the copyright in a musical composition printed as sheet music was infringed by an unauthorized reproduction of the same composition in piano rolls.¹⁴ White-Smith, a sheet music publisher and the copyright holder, argued that its copyright protected the intellectual conception of the musical composition against unauthorized reproduction in piano rolls or any other means of expressing the order of the collection of musical notes composing the composition. Apollo, a manufacturer of piano rolls and player pianos, conceded that copyright law was intended to reward mental creation; however, it argued that the copyright statute protected only music expressed on paper.¹⁵

The Court viewed the issue as one of statutory construction, and concluded that a copy of a musical composition is a record of it written or printed in visually intelligible symbols. Testimony in the case established that even persons skilled in the making of piano rolls were unable to read the musical compositions incorporated into the rolls.¹⁶ Therefore, these mechanical devices enabling musical sounds to be heard by listeners were not copies under the then-current copyright act. *White-Smith* also suggested in dictum that the copyright in a musical composition would not be infringed if the composition were incorporated into a phonograph cylinder

¹¹ EDWARD SAMUELS, *THE ILLUSTRATED STORY OF COPYRIGHT* 32 (2000).

¹² GOLDSTEIN, *supra* note 6, at 39-40.

¹³ Music rolls consisted of perforated paper sheets which were passed over ducts connected with the operating parts of a player piano. The ducts were kept sealed until, by means of the perforations in the rolls, air pressure was admitted to the ducts which operated pneumatic devices to sound musical notes. The perforations were arranged so that the effect was to produce the melody for which the roll had been cut. *White-Smith Music Publ'g Co. v. Apollo Co.*, 209 U.S. 1, 9-10 (1908). Music rolls were the subject of patents. See, e.g., U.S. Patent No. 736,228 (issued Aug. 11, 1903).

¹⁴ *White-Smith*, 209 U.S. at 9-10.

¹⁵ *Id.* at 11.

¹⁶ *Id.* at 18.

or record capable of audibly reproducing the composition when played on a phonograph.¹⁷

Justice Oliver Wendell Holmes concurred in *White-Smith's* holding, but clearly was unhappy with the result.¹⁸ He preferred a more expansively contoured copyright:

A musical composition is a rational collocation of sounds apart from concepts, reduced to a tangible expression from which the collocation can be reproduced either with or without continuous human intervention. On principle anything that mechanically reproduces that collocation of sounds ought to be held a copy, or if the statute is too narrow ought to be made so by a further act¹⁹

In 1909, Congress agreed with Justice Holmes and provided composers with the exclusive right to mechanical reproductions of their copyrighted musical compositions.²⁰ When considering the mechanical reproduction right, Congress was concerned that a single manufacturer of piano rolls might monopolize the piano roll market by acquiring a large share of all composers' mechanical reproduction rights. Therefore, Congress also enacted a compulsory license insuring that if a copyright holder licensed the mechanical reproduction right for a musical composition, then competitors of the licensee would be entitled to lawfully make mechanical reproductions of the same work by paying a statutory royalty.²¹

¹⁷ *Id.* at 13. The opinion cited *Stearn v. Rosey*, 17 App. D.C. 562 (D.C. Cir. 1901), where the court stated that "[i]t is not pretended that the marking upon waxed cylinders can be made out by the eye or that they can be utilized in any other way than as parts of the mechanism of a phonograph." *White-Smith*, 209 U.S. at 12 (citing *Stearn*, 17 App. D.C. at 562). *White-Smith* also suggested that a federal statutory copyright in a musical composition was not infringed when the composition was incorporated into the toothed metal cylinders employed in music boxes. *Id.* at 13.

¹⁸ One commentator describes Holmes' opinion in *White-Smith* and other early copyright cases (including *Herbert v. Shanley Co.*, 242 U.S. 591 (1917) discussed in Part IV of this Article) as "brilliant" in adapting copyright to new twentieth-century technologies. GOLDSTEIN, *supra* note 6, at 38, 60-61.

¹⁹ *White-Smith*, 209 U.S. at 19-20.

²⁰ Copyright Act of 1909, 17 U.S.C. § 26 (1909) (repealed 1976).

²¹ *Id.* § 1(e). See generally Sidney A. Diamond, *Sound Recordings and Phonorecords: History and Current Law*, 1979 ILL. L.F. 337, 361. This compulsory license still exists. 17 U.S.C. § 115 (1994 & Supp. IV 1998).

IV.

The development of radio also provided new technological challenges for copyright law.²² One important question was whether the radio broadcast of a live performance of a copyrighted musical composition violated the copyright holder's exclusive right to perform the composition "publicly for profit."²³ *M. Witmark & Sons v. L. Bamberger & Co.* addressed this issue in 1923.²⁴ The defendant Bamberger operated a large department store in which it sold merchandise including radio equipment. It also operated WOR, a licensed radio station broadcasting concerts and other entertainment. The plaintiff alleged that Bamberger performed or caused to be performed the plaintiff's copyrighted musical composition by means of live singing from WOR and that this performance was public and for profit. The department store denied that the broadcast was for profit because everything it broadcast was transmitted without any cost to radio listeners.

In deciding for the plaintiff copyright holder, the *M. Witmark* court was strongly influenced by Justice Oliver Wendell Holmes' recent opinion in *Herbert v. The Shanley Company*.²⁵ There, the alleged copyright infringer operated a public restaurant in which instrumental and vocal music was

²² The word "radio" refers to the radiation and detection of signals that are transmitted in the form of electromagnetic waves picked up by a receiving antenna. Audio information such as the music on an analog record or audio tape is superimposed on an electromagnetic carrier wave. The electric signals are converted back into audible sounds by the radio. See JOHNS. RIGDEN, PHYSICS AND THE SOUND OF MUSIC 282-92 (2d ed. 1985). Entertainment radio broadcasting commenced in the United States in 1920. 15 THE NEW ENCYCLOPEDIA BRITANNICA 423, 427 (1978).

²³ Copyright Act of 1909, 17 U.S.C. § 1(e) (repealed 1976) (describing the exclusive right "[t]o perform the copyrighted work publicly for profit if it be a musical composition"). Cases also arose concerning whether the radio broadcast of a previously-recorded performance of a musical composition required authorization by the holder of the copyright in the composition. Compare *RCA Mfg. Co. v. Whiteman*, 114 F.2d 86 (2d Cir. 1940) (holding, per Judge Learned Hand, that any right in a recorded performance ends with the sale of the record), with *Waring v. WDAS Broad. Station*, 194 A. 631 (Pa. 1937) (holding that performers have property rights in their recorded performances and may seek injunctive relief). The law protecting sound recordings is discussed in Part V of this Article.

²⁴ *M. Witmark & Sons v. L. Bamberger & Co.*, 291 F. 776 (D.N.J. 1923).

²⁵ *Herbert v. Shanley Co.*, 242 U.S. 591 (1917).

performed by paid performers for the entertainment of the restaurant's patrons. No admission fee was charged. The holder of a copyrighted musical composition claimed that the restaurant's performances of the composition were for profit and, therefore, infringed its rights. Justice Holmes, again preferring a robust copyright, held for the copyright holder:

If the rights under the copyright are infringed only by a performance where money is taken at the door they are very imperfectly protected. Performances not different in kind from those of the [defendant restaurant] . . . could be given that might compete with and even destroy the success of the monopoly that the law intends [the plaintiff copyright holder] . . . to have. It is enough to say that there is no need to construe the statute so narrowly. The . . . performances are not eleemosynary. . . . If music did not pay it would be given up. If it pays it pays out of the public's pocket. Whether it pays or not the purpose of employing it is profit and that is enough.²⁶

Justice Holmes' reasoning concerning the restaurant performances easily applied to the department store's broadcasts in *M. Witmark*.²⁷ The department store was operated to earn a profit, and the cost of the broadcasts was charged against the general costs of operating the store. Furthermore, in order to develop its business, the store broadcast its name and the slogan "One of America's Great Stores" at the beginning and end of every program.²⁸ There may have been some validity to the department store's argument that its broadcasts enhanced sales of sheet music containing musical compositions performed during the broadcasts.²⁹ Even if so, this benefit could not legally excuse the store's infringement of the copyright holder's exclusive right to perform its musical composition publicly for profit.

V.

Analog phonograph and audio tape technology provide means to capture performances of musical compositions performed by vocalists or

²⁶ *M. Witmark*, 291 F. at 777-78 (quoting *Herbert*, 242 U.S. at 595). The *M. Witmark* court also was influenced by *Harms v. Cohen*, 279 Fed. 276 (D.C. Pa. 1922), which held that a pianist's playing of a copyrighted musical composition in a motion picture theater infringed the copyright in the composition. *M. Witmark*, 291 F. at 778.

²⁷ *M. Witmark*, 291 F. at 779.

²⁸ *Id.*

²⁹ *Id.* at 779-80.

musicians.³⁰ Although commonplace today, these technologies were once considered revolutionary. As the Supreme Court noted:

In earlier times, a performing artist's work was largely restricted to the stage; once performed, it remained "recorded" only in the memory of those who had . . . heard it. Today, we can record that performance in precise detail and reproduce it again and again with utmost fidelity.³¹

The Court recognized that performers contribute something creative above and beyond the contribution of the author of the underlying musical composition that is performed.³² In a sense, a musical composition, although capable of supporting its own copyright, is "incomplete" until performing artists interpret and transform it into audible sounds.³³

Authorized recordings of performances of musical compositions early and often were copied or performed publicly without authorization.³⁴ Unauthorized copies of audio-taped performances became an especially serious problem because a "pirate" could purchase a single authorized tape containing a popular song, duplicate it in quantity, and then sell copies to the public.³⁵ The pirate's costs virtually were *de minimis* when compared with the costs of producing the authorized taped performance that the pirate copied.³⁶ Initially, recorded performances were protected, if at all, under state unfair competition case law or legislation specifically directed at

³⁰ Basic analog recoding technology dates back to Thomas Edison's nineteenth-century invention of the phonograph. See SAMUELS, *supra* note 11, at 33, 45-47. When performed live, music exists in analog form as waves in the air. Analog music recordings fix the musical sounds into a continuous machine-readable form. For example, vinyl records store music in a continuous wavy groove cut into the surface of the record. A phonograph converts the information contained in the groove into audible music. Analog audio tapes store music as a continuous magnetic signal which "follows" the audio signal of the music being recorded. A tape player converts the magnetic symbol back into an audible acoustical signal. RIGDEN, *supra* note 22, at 262-65, 274-76.

³¹ Goldstein v. California, 412 U.S. 546, 570 (1971).

³² *Id.* at 550-51.

³³ Waring v. WDAS Broad. Station, 194 A. 631, 635 (Pa. 1937).

³⁴ See, e.g., Fonotipia Ltd. v. Bradley, 171 F. 951, 955-56 (C.C.E.D.N.Y. 1909), *overruled in part by* G. Ricordi & Co. v. Haendler, 194 F.2d 914 (2d Cir. 1952).

³⁵ See generally Diamond, *supra* note 21, at 337, 349.

³⁶ Goldstein, 412 U.S. at 546, 549-51.

unauthorized copying.³⁷ Spurred by the need to deal with pirated audio tapes, Congress enacted the first federal law outlawing record and tape piracy in 1972.³⁸

The current copyright statute protects “sound recordings” which result from the fixation of musical sounds in material objects such as analog disks or tapes.³⁹ The statute labels these material objects “phonorecords.”⁴⁰ The sound-recording copyright includes the exclusive right to reproduce the sound recording, and is separate from the copyright in the underlying musical composition animated by the performing artists who recorded the composition. The underlying composition and any accompanying words is referred to as a “musical work.”⁴¹ Both sound recordings and musical works must be original to qualify for copyright protection.⁴² However,

³⁷ Misappropriation was the common law cause of action most frequently employed against pirates. *See* RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 38 cmt. c (1995). Many states also enacted statutes directed at record or tape piracy. *See, e.g.*, KY. REV. STAT. ANN. § 434.445 (1992) (making record or tape piracy a class D felony). *Goldstein* established that these statutes are not preempted by federal law. *Goldstein*, 412 U.S. at 546.

³⁸ Congress enacted the Sound Recording Amendment of 1971, which amended the Copyright Act of 1909 and became effective in 1972. 17 U.S.C. § 5(n) (1971) (repealed 1976). *See generally* Diamond, *supra* note 21, at 337, 345-51.

³⁹ 17 U.S.C. § 101 (1994 & Supp. IV 1998). The Copyright Act also prohibits the unauthorized fixation of the sounds of live musical performances. *Id.* § 1101 (1994).

⁴⁰ Phonorecords are “material objects in which sounds . . . are fixed by any method now known or later developed, and from which the sounds can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.” *Id.* § 101.

⁴¹ *Id.* § 102(a)(2) (1994). A composer can obtain a copyright in a musical work merely by recording it. *Id.* § 102(a). This changes prior federal copyright law which, influenced by the *White-Smith* case discussed in Part III of this Article, required that music be reduced to a visually-readable form in order to obtain federal copyright protection. *See generally* 1 NIMMER ON COPYRIGHT § 2.05[A] (2000).

⁴² Copyright protection subsists in “original works of authorship . . . [including sound recordings and musical works] fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.” 17 U.S.C. § 102(a). In general, originality sufficient to support a copyright requires independent creation plus a modicum of creativity. *Feist Publ’ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340 (1990).

A work is “fixed” in a tangible medium of expression when its embodiment in a copy or phonorecord, by or under the authority of the author, is

originality for each work does not provide identical copyrights. The holder of the copyright in a sound recording does not control the recording's public performance; that right belongs to the holder of the copyright in the underlying musical work.⁴³

The record company plaintiffs in the *Napster* case claimed infringement of their copyrights both in sound recordings and in musical works.⁴⁴ An interesting question is whether a record producer can make a sufficiently original contribution to a sound recording (perhaps by editing the recorded sounds) to qualify as an author of that work entitled to a copyright along with the artists performing the musical work being recorded. There is some authority that record producers might acquire author status.⁴⁵ However, even if they do not, record companies can become copyright holders by contractual assignments or other means.⁴⁶

VI.

The "digital revolution" had a significant impact on music-related copyright law even prior to the Internet, MP3 files, and the *Napster* case.⁴⁷ The advent of digital recording in compact disks (CDs) was in itself a momentous technological development.⁴⁸ It eliminated many of the problems inherent in analog records or tapes, and provided other improvement as well. For example, background noise is virtually eliminated from digitally-recorded music, which also has greater fidelity to the recorded performance.⁴⁹

sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration.

17 U.S.C. § 101.

⁴³ 17 U.S.C. §§ 106(4), 114 (1994 & Supp. IV 1998).

⁴⁴ *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004, 1010-11 (9th Cir. 2001).

⁴⁵ See *NIMMER*, *supra* note 41, § 2.10[A][2][b].

⁴⁶ 17 U.S.C. § 201(b), (d) (1994).

⁴⁷ Digital compression technology makes it possible to store audio recordings in a digital format that may be uploaded and downloaded over the Internet. MP3 is the digital format employed by Napster users to store compressed audio files. See *Napster*, 239 F.3d at 1011.

⁴⁸ *RIGDEN*, *supra* note 22, at 337. Digital recording translates the analog sound waves of a performance into binary numbers. These numbers may be encoded on an audio compact disk in the form of a series pits that, when "read" by a laser beam and light sensitive detector, are converted into an electrical signal and then into an analog signal that can drive speakers producing analog sound waves audible to humans. *Id.* at 338-42.

⁴⁹ *Id.* at 337.

There have been multiple legal efforts to adapt music-related copyright law to digital recording. For example, in 1984 Congress amended the copyright act to prohibit the unauthorized for profit rental of CDs and other phonorecords embodying sound recordings or musical works.⁵⁰ This legislation responded to record stores that facilitated unauthorized copying by simultaneously renting music CDs and selling blank analog recording tape to consumers who would record the CD by employing a CD player and an analog tape recorder.⁵¹ Subsequently, Congress enacted the Audio Home Recording Act of 1992.⁵² It responded to new digital recording technology enabling consumers to make nearly perfect digital copies of music fixed in CDs or analog media.⁵³ The act permits commercializing the technology for use in limited and infringement-free home digital copying, and creates a royalty system compensating holders of copyrights in sound recordings and musical works. The royalties are paid by manufacturers and importers of digital audio-recording equipment and blank digital recording media.

The Internet represents three key technological advances: the increased use of information in digital form including digitized music, the rapid increase of computer networks, and the emergence of the World Wide Web.⁵⁴ When information is in digital form, it is not possible to access the information by computer without making a copy, even if only a short-lived copy briefly resident in the computer's temporary memory or shown on the screen of its monitor. This is highly significant because copyright law historically distinguishes access from copying and seeks an appropriate

⁵⁰ See 17 U.S.C. § 109(b) (1994 & Supp. IV 1998).

⁵¹ This amendment created an exception to the general rule (often referred to as the "first sale doctrine") that lawful owners of phonorecords are free to sell or otherwise dispose of them without authorization by any copyright owner. See generally MARSHALL LEAFFER, UNDERSTANDING COPYRIGHT LAW §§ 8.14 - 8.15 (3d ed. 1999).

⁵² Audio Home Recording Act of 1992, 17 U.S.C. § 1008 (1994 & Supp. IV 1998).

⁵³ See generally LEAFFER, *supra* note 51, § 8.30.

⁵⁴ COMPUTER SCIENCE AND TELECOMMUNICATIONS BOARD NATIONAL RESEARCH COUNCIL, *supra* note 4, at 28. Computer networks enable the sending of information around the world inexpensively and almost instantaneously. *Id.* at 4. The World Wide Web is a vast collection of interconnected electronic documents employing hypertext. In a hypertext document, if the user wants more information about a particular subject mentioned, he or she merely clicks on a hypertext link to almost instantaneously obtain the information. Hypertext links documents by different authors, and the documents may consist of digitized text, audio, video, or graphics. *Id.* at 39.

balance between them. This distinction is not so easily drawn in a digital environment:

One of the essential elements of copyright—the right to control reproduction—works as expected in the world of traditional media, where there is an obvious distinction between access and reproduction and where the copyright owner's control of reproduction provides just that. But in the digital world, where no access is possible except by copying, complete control of copying would mean complete control of access as well.⁵⁵

The *Napster* case is about the proper balance between control of digitized music and access to it in the Internet environment.⁵⁶

VII.

And what of The Napster himself, who began this story? A recent report has him, now all of twenty years old, publicly defending Napster, Inc.'s efforts to protect its copyright in the computer code for its music-sharing technology.⁵⁷ Such is life in copyright's fast lane.

⁵⁵ *Id.* at 31.

⁵⁶ Congress also is addressing this new technological environment. For example, the 1998 Digital Millennium Copyright Act limits the copyright infringement liability of Internet online service providers such as America Online. See generally Justin Williamson, Note, *Online Service Provider Copyright Liability: Is the Digital Millennium Copyright Act the Answer?*, 88 KY. L.J. 987 (2000).

⁵⁷ Ted Bridis et al., *Digits*, WALL ST. J., Apr. 5, 2001, at B7.

