CONVERTING OBSOLETE MUSICAL MEDIA TO CURRENT FORMATS: A COPYRIGHT INFRINGEMENT DEFENSE ARISING FROM THE RIGHT TO REPAIR AND IMPLIED WARRANTY OF FITNESS

I. INTRODUCTION

The problem of unplayable recorded music has plagued consumers almost as long as there has been recorded music. Since the days of piano rolls, consumers have purchased media for reproducing music on a variety of players.[1] The available formats for prerecorded music have changed over the decades. Wax cylinders gave way to acetate seventy-eight r.p.m. records, just as eight-track cassette tapes yielded to CDs. Consumers who purchased prerecorded music found, after most of these transitions, that the players for the previous generation of media began to disappear from the market.[2] As a consequence, once a consumer's old player failed, there would often be no way to appreciate the music stored on the older media.

This Comment proposes that conversion of the music stored on obsolete media to a new format is not only a viable technological solution to the problem, but that such conversion should be within the rights of consumers who own obsolete media. Persons who perform such conversion should have no liability for copyright infringement, because such conversion should be viewed as repair of their property.

Part II reviews the law concerning the rights of both sides of the music consumer's original transaction: the owners of the copyrights in what is recorded on the media and the purchaser of the media containing the musical recording.[3] Starting from the constitutional underpinnings of copyright law in Part II.A, Part II examines the statutory framework and common law that developed into copyright law in Part II.B. The section also examines contract law doctrine relevant to the consumer's purchase. Part II.C examines case law that has interpreted and expanded various relevant legal doctrines, starting with time shifting and the fair use doctrine, then moving on to space shifting and noninfringing digital recording, before concluding by exploring the permissible repair doctrine from patent law.[4]

1. *See generally* The Player Piano Group, http://www.pianolasociety.com (last visited Nov. 16, 2009) (detailing history of piano rolls and providing resource for their aficionados).

2. See *infra* Part III.A for a discussion of the disappearance of the market for obsolete players.

3. See *infra* Part II for a discussion of the development of the law concerning these rights.

4. See *infra* Part II.C for a discussion of doctrines developed or expanded by case law.

Part III applies the relevant law to the problem of conversion of musical recordings from obsolete formats to current formats.[5] Part III argues that the doctrines discussed in Part II give the consumer a defense to a copyright infringement action. Part IV concludes that this defense arises from the right of an owner to maintain a piece of property as fit for its intended purpose.[6]

II. OVERVIEW

A diverse body of law shapes the rights of copyright owners in musical recordings and the rights of owners of phonorecords of those musical recordings. The relevant law includes not only law explicitly directed to copyright, but also intellectual property concepts and law developed outside of copyright, as well as aspects of contract law and general property law.

The constitutional Intellectual Property Clause is the basis for all federal intellectual property law in the United States.[7] Congress and the courts have created a significant body of statutory and common law to implement the constitutionally mandated copyright bargain between the public and the limited monopoly holder.[8]

The Uniform Commercial Code ("UCC") contains an embodiment of the contract law doctrine of implied warranty of fitness for a particular purpose. A sale of goods meant for a particular purpose will contain an implied warranty of fitness for that purpose, in the absence of an explicit disclaimer of such a warranty.[9]

Since before the advent of musical recording and continuing through the present, courts deciding copyright cases have created and expanded the legal doctrine of fair use.[10] The Supreme Court determined in the context of recording broadcast television that "time shifting," which is recording a copyrighted work and replaying it at a time other than when its licensee provided it, does not infringe the copyright holder's rights.[11] The Court held that the fair use doctrine covers such actions.[12] The Supreme Court has not reached the issue of whether the fair use doctrine covers "space shifting" (also known as "medium shifting"),[13]

5. See *infra* Part III for a discussion of consumers' rights in phonorecords in light of the doctrines discussed in Part II.

6. See *infra* Part IV for a summary of the support for a successful defense.

7. See *infra* Part II.A for a discussion of the constitutional basis in its historical context.

8. See *infra* Part II.B.1 for a discussion of the evolution of the rights of the copyright holder through statutes and case law.

9. See *infra* Part II.B.2 for a discussion of the relevant UCC provisions and related warranty law.

10. See *infra* Part II.C.1 for a discussion of the evolution of fair use with an emphasis on the rights of owners of phonorecords.

11. Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 421, 456 (1984).

12. *Id.* at 454–55.

13. Michael Albert & Liza Vertinsky, *From* Sony *to* Napster *– and Back?: Copyright Law Implications of File-Sharing Technology*, BOSTON B.J., Jan./Feb. 2004, at 10, 12.

which is converting a copyrighted work from one format to another.[14] Lower courts that have addressed the issue have reached inconsistent results.[15]

In contrast to the evolutionary development of the fair use doctrine, Congress enacted a prenegotiated bargain into statute with the Audio Home Recording Act of 1992 ("AHRA").[16] One provision of this Act prohibits copyright infringement actions against consumers for recording done with certain narrowly defined equipment.[17] The legislative history of the Sound Recording Amendment of 1971[18] and the Copyright Act of 1976[19] suggests that these actions are only a subset of what was already allowed under the fair use doctrine at the time the AHRA was passed.[20]

Courts deciding patent cases crafted the permissible repair doctrine to allow owners of patented products to repair them without having to seek permission from the patent holders.[21] The Supreme Court did not describe the permissible repair doctrine as a narrow rule applicable only to patents or to intellectual property, but rather characterized it as but one aspect of "the lawful right of the owner to repair his property."[22]

A. Constitutional Basis

The Constitution gives authority to Congress to create legislation "[t]o 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."[23] This constitutional provision grants authority to Congress to reward creators in two distinct domains: the creation of "Writings," which is the subject of copyright, and the invention of "Discoveries," which is the subject of patents. In both domains, Congress is empowered to grant limited monopolies to further progress,[24] which was seen as a benefit to the public as a whole.[25] This

14. See *infra* Part II.C.2 for a discussion of space shifting's reception in the courts.

15. *Compare* Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., Inc., 180 F.3d 1072, 1079 (9th Cir. 1999) (finding fair use to cover "space-shift[ing]" copyrighted musical recording from computer hard drive to portable player), *with* UMG Recordings, Inc. v. MP3.com, Inc., 92 F. Supp. 2d 349, 352 (S.D.N.Y. 2000) (holding medium shifting copyrighted musical recording from purchased CDs to computer hard drive not to be fair use). *But see* A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004, 1019 (9th Cir. 2001) (attempting to harmonize holdings of these two cases, but ignoring their respective reasoning to do so).

16. Pub. L. No. 102-563, 106 Stat. 4237 (codified as amended at 17 U.S.C. §§ 1001–1010 (2006)).

17. *See* 17 U.S.C. § 1008 (prohibiting actions for consumer recording done with "digital audio recording device," "analog recording device," "digital audio recording medium," or "analog recording medium").

18. Pub. L. No. 92-140, 85 Stat. 391.

19. Pub. L. No. 94-553, 90 Stat. 2541 (codified as amended at 17 U.S.C. §§ 101–810).

20. See *infra* notes 62–73 and accompanying text for a discussion of AHRA and its redundancy. See *infra* Part II.C.3 for a discussion of AHRA's limited applicability as revealed by the case law.

21. See *infra* Part II.C.4 for a discussion of the permissible repair doctrine as a specific application of a universal principle of property law.

22. Aro Mfg. Co. v. Convertible Top Replacement Co., 365 U.S. 336, 346 (1961).

23. U.S. CONST. art. I, § 8, cl. 8.

24. *Id.*

bargain whereby the public suffers the existence of a monopoly (for a limited time) in exchange for a benefit (be it knowledge of an invention or access to ideas in a work) is common to the statutory schemes for both patents and copyrights.[26]

The Framers included the constitutional grant of power to create copyrights with the expectation that the United States would adopt statutes that would address the same areas of activity that were regulated by the Statute of Anne, the British copyright law then in force.[27] The Statute of Anne contained many elements that the later United States copyright statutes adopted. The copyright holder was granted the exclusive right to create and distribute the work.[28] There were explicit statutory damages for infringement of these rights.[29] The bargain between the public and the monopoly holder was made explicit in the Statute of Anne in its requirement that a work be provided to an enumerated set of libraries throughout Great Britain in order to qualify for the monopoly.[30]

Pursuant to the constitutional grant of power, Congress has passed a number of copyright statutes, beginning with the Copyright Act of 1790[31] and continuing throughout the life of the nation.[32] The volume of federal copyright

25. *See, e.g.*, JAMES MADISON, *Letter from James Madison to Thomas Jefferson (Oct. 17, 1788)*, *in* 5 THE WRITINGS OF JAMES MADISON 269, 274–75 (Gaillard Hunt ed., 1904) (reflecting contemporary attitude that encouraging creative works and practical discoveries justified nuisance of government-granted monopoly).

26. *Compare* 35 U.S.C. §§ 101, 112, 154 (2006) (granting, by patent, twenty-year exclusive rights to make, use, offer to sell, sell, or import invention in exchange for clear disclosure of invention sufficient for any person skilled in its field to make and use it), *and* Brenner v. Manson, 383 U.S. 519, 534 (1966) (describing "quid pro quo" established by Congress for patents as monopoly in exchange for public benefit of useful invention), *with* 17 U.S.C. §§ 102–104, 106, 108, 302–305 (2006) (granting, by copyright, up to 120-year exclusive rights to copy, create derivative works from, distribute, or publicly perform or display certain creative work in exchange for, inter alia, right of libraries to reproduce limited numbers of work), *and* Twentieth Century Music Corp. v. Aiken, 422 U.S. 151, 156 (1975) (noting that limited copyright monopoly's main function is to promote broad public availability of creative product).

27. Statute of Anne, 1709, 8 Ann., c. 19 (Eng.). *But see* Dotan Oliar, The Origins and Meaning of the Intellectual Property Clause 31–32 (Sept. 15, 2004) (unpublished manuscript), *available at* http://cyber.law.harvard.edu/ip/oliar_ipclause.pdf (concluding from analysis of idiom that Statute of Anne was no more than third order source for constitutional provision and that its main influence was on state copyright laws, which federal law would preempt).

28. *Compare* Statute of Anne § 1 (granting sole rights to print and sell books), *with* 17 U.S.C. § 106(1), (3) (granting exclusive rights to reproduce and distribute copies or phonorecords).

29. *Compare* Statute of Anne § 1 (defining penalties based on number of infringing sheets, rather than number of complete works), *with* Copyright Act of 1790, ch. 15, § 2, 1 Stat. 124, 124–25 (defining penalties of fifty cents per sheet of infringing material), *and* 17 U.S.C. § 504 (authorizing copyright owner to elect either actual damages and infringer's profits or statutory damages for infringement).

30. Statute of Anne § 5.

31. Ch. 15, 1 Stat. 124.

32. *See, e.g.*, Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860 (1998) (codified as amended in scattered sections of 17 U.S.C.) (adding and amending copyright provisions); Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541 (codified as amended at 17 U.S.C. §§ 101–810) (same); Copyright Act of 1909, ch. 320, 35 Stat. 1075 (codified as amended at 17 U.S.C. §§ 101–810) (same).

law has increased dramatically since the Copyright Act of 1790,[33] but the constitutionally mandated bargain of a limited-time monopoly in exchange for benefit to the public has remained.[34]

B. Statutory and Common Law

1. Contours of the Copyright Bargain

The current copyright statute defines infringement as a violation of "any of the exclusive rights of the copyright owner as provided by sections 106 through 122" of title 17 of the United States Code.[35] Section 106 grants rights to the owner of the copyright, including, among others, the following exclusive rights:

> (1) to reproduce the copyrighted work in copies or phonorecords;
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> (2) to prepare derivative works based upon the copyrighted work;
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> (3) to distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership . . . ;
>
> . . . .
>
> (6) in the case of sound recordings, to perform the copyrighted work publicly by means of a digital audio transmission.[36]

These rights granted by 17 U.S.C. § 106 are not absolute, as shown by the titles of sections 107 through 112, which begin with the phrase "Limitations on exclusive rights."[37]

Even before statutory codification of these limitations, courts recognized limitations on a copyright holder's exclusive rights at common law. One of the most important judicial doctrines limiting a copyright holder's rights was the equitable rule of reason called "fair use."[38] The courts developed fair use analysis to provide a way for sections of copyrighted works to be used in criticism, teaching, and other manners beneficial to society, for "in literature, in science and in art, there are, and can be, few, if any, things, which, in an abstract

33. *Compare* Copyright Act of 1790, ch. 15, 1 Stat. 124 (weighing in at seven sections), *with* Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541 (encompassing twenty-four sections in just first of its thirteen chapters).

34. *Compare, e.g.*, Copyright Act of 1790 § 4 (requiring disclosure of work to U.S. government for preservation as condition of enjoying copyright protection), *with* 17 U.S.C. § 108 (granting right to libraries to reproduce and distribute limited numbers of work for preservation and scholarly access as condition of enjoying copyright protection).

35. 17 U.S.C. § 501(a).

36. *Id.* § 106.

37. *See id.* § 107 ("Limitations on exclusive rights: Fair use"); *id.* § 108 ("Limitations on exclusive rights: Reproduction by libraries and archives"); *id.* § 109 ("Limitations on exclusive rights: Effect of transfer of particular copy or phonorecord"); *id.* § 110 ("Limitations on exclusive rights: Exemption of certain performances and displays"); *id.* § 111 ("Limitations on exclusive rights: Secondary transmissions"); *id.* § 112 ("Limitations on exclusive rights: Ephemeral recordings").

38. *See* H.R. REP. NO. 94-1476, at 65 (1976), *reprinted in* 1976 U.S.C.C.A.N. 5659, 5679 (declaring fair use doctrine to be "equitable rule of reason" not amenable to precise definition).

sense, are strictly new and original throughout."[39] By the mid-nineteenth century, fair use analysis had arrived at contours similar to those used today, analyzing factors of "'the nature and objects of the selections made, the quantity and value of the materials used, and the degree in which the use may . . . diminish the [actual or potential] profits [for the copyrighted work].'"[40] Although the current copyright statute contains a section explicitly noting that the fair use doctrine can negative infringement,[41] it does not precisely define fair use, but rather gives a nonexclusive list of four factors to be considered when analyzing the issue, which include

> (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
>
> (2) the nature of the copyrighted work;
>
> (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
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> (4) the effect of the use upon the potential market for or value of the copyrighted work.[42]

Another doctrine crafted by the courts[43] and subsequently codified in title seventeen of the United States Code is that of first sale, which permits the owner of a particular copy of a copyrighted work to sell, rent, give away, or otherwise dispose of the copy without such actions being considered infringement of the copyright holder's exclusive distribution right.[44] This provision forms another part of the benefit that the public receives in exchange for granting the copyright holder a limited monopoly. The copyright holder cannot further restrict sale or disposal of a purchased copy by its purchaser.[45]

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39. Emerson v. Davies, 8 F. Cas. 615, 619 (C.C.D. Mass. 1845) (No. 4436).

40. Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 576 (1994) (quoting Folsom v. Marsh, 9 F. Cas. 342, 348 (C.C.D. Mass. 1841) (No. 4901)).

41. 17 U.S.C. § 107 (providing that "the fair use of a copyrighted work . . . is not an infringement").

42. *Id.*

43. Bobbs-Merrill Co. v. Straus, 210 U.S. 339, 350–51 (1908).

44. 17 U.S.C. § 109(a). *But see id.* § 109(b)(1)(A) (making rental, lease, or lending of phonorecord infringement, notwithstanding § 109(a)).

45. *Id.* § 109(a). Note that the common software industry practice of including exclusive, nontransferable end user license agreements ("EULAs") with software packages appears to violate the first sale doctrine. Common practice in the software industry is to assert that the copyright holder is not selling a copy of the software at all, but rather selling a right to use the software. *E.g.*, Microsoft Windows XP Professional: End-User License Agreement (July 27, 2001), http://download.microsoft.com/documents/useterms/Windows%20XP_Professional_English_9e8a2f82-c320-4301-869f-839a853868a1.pdf (asserting that end user has purchased only right to use software, and limiting transferability of software product). Courts in some circuits have held that the industry's position is sound. *E.g.*, Adobe Sys., Inc. v. One Stop Micro, Inc., 84 F. Supp. 2d 1086, 1089 (N.D. Cal. 2000) (upholding EULA and rejecting applicability of first sale doctrine). Opinions from other circuits can be interpreted as rejecting the industry's position in support of the consumer's first sale rights. *E.g.*, Step-Saver Data Sys., Inc. v. Wyse Tech., 939 F.2d 91, 96 n.7 (3d Cir. 1991) (holding EULA invalid and mentioning that EULA's only purpose was to attempt to avoid first sale doctrine). This topic, though tangential to the thesis of this Comment, is worthy of its own detailed analysis.

Further exceptions to the rights of the holder of a copyright in a nondramatic musical work are the mandatory licensing requirements incorporated into 17 U.S.C. § 115. These provisions mandate that the copyright holder permit the production of copies and derivative works and allow their distribution for royalty fees specified in the statute.[46] As originally envisioned and incorporated into the Copyright Act of 1909, the mandatory licensing scheme was intended to allow the copyright holder to be compensated for reproductions in piano rolls, which the Supreme Court had held were not covered by the pre-1909 copyright law.[47] By legislating mandatory licensing, while also extending musical composition copyright protection to piano rolls, Congress's 1909 scheme also prevented some of the worst consequences to the public of a monopoly in the context of piano rolls, because no license for their manufacture could be exclusive.[48]

The copyright statute contains another explicit exception to a copyright holder's rights under 17 U.S.C. § 106 that applies to computer software.[49] Section 117 of title 17 of the United States Code provides:

> (a) MAKING OF ADDITIONAL COPY OR ADAPTATION BY OWNER OF COPY. – Notwithstanding the provisions of section 106, it is not an infringement for the owner of a copy of a computer program to make or authorize the making of another copy or adaptation of that computer program provided:
>
> (1) that such new copy or adaptation is created as an essential step in the utilization of the computer program in conjunction with a machine and that it is used in no other manner, or
>
> (2) that such new copy or adaptation is for archival purposes only and that all archival copies are destroyed in the event that continued possession of the computer program should cease to be rightful.[50]

The purpose of the cited provisions of § 117 is to keep a copy of a copyrighted work accessible.[51] This is accomplished by creating a duplicate

46. 17 U.S.C. § 115(a), (c); *see also* 37 C.F.R. § 255 (2008) (defining procedure for adjustment of royalty rate, which is currently either flat rate of 9.1 cents or rate of 1.75 cents per minute, whichever is greater).

47. *See* Copyright Act of 1909, ch. 320, sec. 1(e), 35 Stat. 1075, 1075–76 (introducing compulsory mechanical licensing); White-Smith Music Publ'g Co. v. Apollo Co., 209 U.S. 1, 12–13, 18 (1908) (holding player piano rolls are not copyrightable representations of music, but rather machine parts, and mentioning in dicta that same applied to wax cylinders that directly preceded flat disk records).

48. *See* Irving Lowens, *Broadside at the Pirates: Law Protecting Recordings Takes Effect This Month*, MUSIC EDUCATORS J., Feb. 1972, at 69, 69 (recounting how one company attempted to capitalize on anticipated legislative reversal of *White-Smith* by buying up recording rights that it believed would become monopolies).

49. 17 U.S.C. § 117 (defining limitations on exclusive rights to computer programs).

50. *Id.* § 117(a).

51. *See* H.R. REP. NO. 96-1307, at 23 (1980), *reprinted in* 1980 U.S.C.C.A.N. 6460, 6482 (noting that Computer Software Copyright Act of 1980, Pub L. No. 96-517, 94 Stat. 3015, 3028 (codified as amended at 17 U.S.C. § 117), which added cited provisions to § 117, embodied Commission on New Technological Uses of Copyrighted Works Final Report recommendations); NAT'L COMM'N ON NEW TECHNOLOGICAL USES OF COPYRIGHTED WORKS, FINAL REPORT 12–15 (1978) (recommending to

"archival" copy that will not be subject to the physical wear of contact with a disk drive mechanism on a continuing basis.[52] The function of the archival copy is to recreate the working copy if and when the working copy becomes unreadable due to wear.[53]

It is worth noting that the statute makes no mention of the medium or format to be used for the archival copy.[54] For example, one is not prohibited from making an archival copy of a set of five and one-quarter inch floppy diskettes onto a Compact Flash card.[55] Similarly, the required characteristic that makes an "adaptation" noninfringing is not its format, but its intended purpose—"as an essential step in the utilization of the computer program in conjunction with a machine."[56]

Another contour of the bargain between the public and the copyright holder is shown by the limitation on a copyright holder's exclusive rights with respect to reproductions by libraries and archives.[57] Echoing the purpose of the provisions of the Statute of Anne that mandated disclosure to certain university libraries,[58] the provisions of 17 U.S.C. § 108 serve to insulate libraries and archives from actions of copyright infringement when they reproduce a limited number of copies or phonorecords which are then made available to the public or researchers in the field served by the library or archives.[59] One provision, § 108(c), explicitly addresses the sort of medium wear and technological obsolescence issues that are addressed for software in § 117. It provides as follows:

> (c) The right of reproduction under this section applies to three copies or phonorecords of a published work duplicated solely for the purpose of replacement of a copy or phonorecord that is damaged, deteriorating, lost, or stolen, or if the existing format in which the work is stored has become obsolete . . . .
>
> . . . .
>
> For purposes of this subsection, a format shall be considered obsolete if the machine or device necessary to render perceptible a work stored

Congress before § 117 was passed that it should allow copying and adaptation to permit program use and that archival right's purpose was to guard against destruction or damage).

52. 17 U.S.C. § 117(a)(2).

53. *Id.* § 117(a)(1) (providing for such recreation).

54. *See id.* § 117(a) (remaining silent on medium or format).

55. *See id.* § 117(a)(2) (permitting creation of "copy" for archival purposes); *id.* § 101 (defining "copies" as objects in which work is fixed "by any method now known or later developed").

56. 17 U.S.C. § 117(a)(1).

57. *Id.* § 108.

58. Statute of Anne, 1709, 8 Ann., c. 19, § 5 (Eng.).

59. *See, e.g.*, 17 U.S.C. § 108(a) (permitting single copy to be made and distributed if such actions are not for commercial advantage, if library or archives are open to public or to other researchers, and if copyright notice is included on copy); *id.* § 108(b) (permitting up to three copies of phonorecord of unpublished work for purposes of preservation); *id.* § 108(c) (permitting same activities as § 108(b) for published works for wider range of purposes).

> in that format is no longer manufactured or is no longer reasonably available in the commercial marketplace.[60]

After many years of lobbying efforts by the music industry,[61] the Audio Home Recording Act of 1992[62] was codified into the Copyright Act. These provisions form a scheme by which owners of copyrights in musical works and sound recordings are compensated via a royalty pool administered by the Register of Copyrights of the United States.[63] For every digital audio recording device or recordable medium imported into or manufactured in the United States, a royalty payment, usually equal to two or three percent of the item's price, must be paid to the United States,[64] which invests the receipts and distributes them to various funds managed by industry groups, as well as to parties with claims.[65] The judiciary of the United States provides Copyright Royalty Judges to conduct proceedings relating to claims for and disputes over royalty payments.[66] In exchange for paying this levy and funding this bureaucracy, the public received a new section in the Copyright Act, "Prohibition on Certain Infringement Actions," which consists of the following single sentence:

> No action may be brought under this title alleging infringement of copyright based on the manufacture, importation, or distribution of a digital audio recording device, a digital audio recording medium, an analog recording device, or an analog recording medium, or based on the noncommercial use by a consumer of such a device or medium for making digital musical recordings or analog musical recordings.[67]

A cursory examination of the latter half of § 1008 might lead one to believe that, prior to its enactment, the actions it describes constituted infringement, but the following evidence points to the opposite conclusion. Prior to the passage of the Sound Recording Amendment of 1971,[68] sound recordings were not protected by the Copyright Act.[69] The legislative history of the Sound Recording Amendment explicitly stated that Congress did not intend to "restrain the home recording . . . from tapes or records . . . for private use."[70] The Copyright Act of

60. 17 U.S.C. § 108(c). The last paragraph, defining obsolescence, was amended by § 404(3)(E) of the Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860, 2890 (1998) (codified at 17 U.S.C. § 108(c)).

61. *See generally* Gary S. Lutzker, *DAT's All Folks:* Cahn v. Sony *and the Audio Home Recording Act of 1991 - Merrie Melodies or Looney Tunes?*, 11 CARDOZO ARTS & ENT. L.J. 145, 180 (1992) (noting AHRA was largely drafted by different industry groups).

62. Pub. L. No. 102-563, 106 Stat. 4237 (codified at 17 U.S.C. §§ 1001–1010).

63. 17 U.S.C. §§ 1005–1006.

64. *Id.* §§ 1003–1005.

65. *Id.* §§ 1006–1007.

66. *Id.* § 1007.

67. *Id.* § 1008.

68. Pub. L. No. 92-140, 85 Stat. 391.

69. *See* H.R. REP. NO. 92-487, at 5 (1971), *reprinted in* 1971 U.S.C.C.A.N. 1566, 1570 (declaring it Congress's intention to extend statutory copyright protection to sound recordings).

70. *Id.* at 1572.

1976, which superseded the Sound Recording Amendment of 1971, incorporated its protection of sound recordings.[71]

Justice Stevens, who wrote the majority opinion in *Sony Corp. of America v. Universal City Studios*,[72] reasoned in his draft opinion that the legislative history of the Sound Recording Amendment of 1971, which amended a copyright act without an explicit fair use provision, combined with the explicit adoption of a fair use provision in the 1976 Copyright Act, prevented home recording from being actionable copyright infringement.[73] The final opinion in *Sony* held that home video taping for the purposes of appreciation of a work at a later time was permissible under the fair use doctrine.[74]

2. Implied Warranty of Fitness

The sale of any goods conveys an implied warranty of fitness for their purpose, in the absence of an explicit disclaimer of that function, under Article 2 of the UCC.[75] Contracts for sale are governed primarily by state law. As of September 2007, forty-nine states, the District of Columbia, and the U.S. Virgin Islands had adopted sections 315 and 316 of Article 2 of the UCC.[76]

Additionally, federal law provides some assistance in interpreting implied warranties and minimum standards for warranties through several provisions of the Magnuson-Moss Warranty Act.[77] These provisions operate in conjunction with state contract law, and in certain situations supersede state law.[78]

The Connecticut case *Acme Pump Co. v. National Cash Register Co.*[79] is typical of actions for breach of implied warranty of fitness. In *Acme Pump* a defendant purchased a National Cash Register Co. bookkeeping machine (and leased a number of programs for the machine).[80] The seller was aware that the buyer intended to use the machine for bookkeeping.[81] The machine failed to

71. *See* 17 U.S.C. §§ 101, 102, 106, 109 (incorporating phonorecords into 1976 act).

72. 464 U.S. 417 (1984). See *infra* Part II.C.1 for a discussion of this case.

73. *See* Peter S. Menell & David Nimmer, *Unwinding* Sony, 95 CAL. L. REV. 941, 965–66 (2007) (explaining differing views of Justices Stevens and Blackmun reflected in their first drafts).

74. See *infra* Part II.C.1 for a discussion of the holding in greater detail.

75. *See* U.C.C. §§ 2-315 to 2-316 (2000) (providing that in sales of goods such as copies of musical recordings, "there is unless excluded or modified under . . . [§ 316] an implied warranty that the goods shall be fit for such purpose"); U.C.C. §§ 2-315 to 2-316 (2008) (providing warranty of fitness).

76. Louisiana is the lone exception among U.S. states. Cornell University Law School, Legal Information Institute, Uniform Commercial Code Locator, http://www.law.cornell.edu/uniform/ucc.html (last visited Nov. 16, 2009) [hereinafter Uniform Commercial Code Locator]. No states have adopted the revised version of Article 2.

77. 15 U.S.C. § 2308 (2006) (concerning implied warranties); *id.* § 2304 (setting federal minimum standards for warranties).

78. *See, e.g.*, *id.* § 2308(c) (preventing certain limitations of warranties from having any effect under state law and federal law).

79. 337 A.2d 672 (Conn. C.P. 1974).

80. *Acme Pump Co.*, 337 A.2d at 674.

81. *Id.* at 676.

perform bookkeeping functions properly.[82] The court found that an implied warranty of fitness for a particular purpose existed, and that the seller breached it.[83] The remedy sought and awarded was damages.[84]

C. Case Law

1. Time Shifting, Noninfringing Uses, and Fair Use

In *Sony*, the Supreme Court held that copying a copyrighted work for the purpose of time shifting it, i.e., appreciating the copyrighted work at a time other than when it was provided by its licensee, was permitted under the fair use doctrine.[85] *Sony* was an action for contributory infringement, in which copyright holders attempted to hold the manufacturer of a video tape recorder liable for copyright violations that could be committed by the purchasers of its device.[86] The Court reasoned by analogy to the provisions of the Patent Act concerning contributory infringement, because there was no explicit statutory provision for contributory copyright infringement.[87] The Court reduced the question of whether the manufacturer of the device was free from liability for contributory infringement to the question of whether the device was capable of "commercially significant noninfringing uses."[88] The Court found that the practice of time shifting, which necessarily involves copying a work, was unobjectionable to a significant percentage of copyright holders.[89]

More significantly, the Court determined that even when copyright holders object to copying for the purpose of time shifting, an analysis under the fair use doctrine is required to determine if such copying is infringement.[90] Analyzing the four factors of fair use mentioned in the statute,[91] the Court determined (1) that "time-shifting for private home use" was a "noncommercial, nonprofit activity";[92] (2) that the fact that the entire work was copied did not weigh against fair use, because the copier was merely perceiving the work that he or she "had been invited to witness in its entirety";[93] and (3) that the potential harm to the market for the copyright holder's works had not been shown, and had in fact

82. *Id.* at 674.

83. *Id.* at 675–76.

84. *Id.* at 678.

85. Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 421 (1984).

86. *Id.* at 420.

87. *Id.* at 441–42.

88. *Id.* at 442.

89. *Id.* at 445; *see also Sony*, 464 U.S. at 445 n.27 (quoting Mr. Fred Rogers, president of corporation holding copyright to his show, asserting his belief that families "can make healthy decisions" about when they find it convenient to tape and watch his show).

90. *Id.* at 447.

91. 17 U.S.C. § 107 (2006) (enumerating purpose and character of use, nature of work, amount and substantiality, and effect on potential market or value of work).

92. *Sony*, 464 U.S. at 449.

93. *Id.* (identifying this invitation with nature of work).

been admitted by the plaintiff as being "not a great deal of harm."[94] The Court's analysis, and its decision finding fair use for Sony's Betamax VTR, was followed by a line of cases finding no liability for manufacturers of other devices that could be put to noninfringing as well as infringing uses.[95]

The *Sony* fair use analysis by no means guarantees a victory for the copier; the Court's analysis can be seen as a guide to plaintiff copyright holders as to what factual findings they need to make at the trial level to prevail.[96] The Court also narrowed the scope of the *Sony* holding in *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd.*,[97] in which it held that advertisement of a software system's ability to violate copyright was evidence of inducement, even if the software system was capable of substantial noninfringing uses.[98]

2. Space Shifting and Fair Use

The district court for the Southern District of New York declined to extend the fair use analysis from *Sony* to "medium shifting," i.e., converting a work from one format to another, in *UMG Recordings v. MP3.com*.[99] The court, in its opinion explaining its grant of summary judgment in favor of UMG, made no mention of a theory of implied warranty for fitness for a particular purpose, and instead rejected medium shifting based on MP3.com's failure under the facts of the case to satisfy all the factors of fair use.[100] In *UMG*, the defendant operated a company that provided to its customers compressed digital audio versions of the music customers owned on CD (which was either purchased from MP3.com or read on the user's computer to verify the user's possession of the CD).[101] The court looked at the actual mechanics of the service that MP3.com provided, which involved preconversion and storage of all CDs that MP3.com determined that their customers were likely to own, and distinguished that from storage of

94. *Id.* at 451.

95. *See, e.g.*, Dynacore Holdings Corp. v. U.S. Philips Corp., 363 F.3d 1263, 1277 (10th Cir. 2004) (holding network products capable of substantial noninfringing uses did not violate patent on similar product); Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., Inc., 180 F.3d 1072, 1079 (9th Cir. 1999) (finding "space shifting" copyrighted musical recording from hard drive of computer into portable player to be covered by fair use); Vault Corp. v. Quaid Software Ltd., 847 F.2d 255, 266 (5th Cir. 1988) (finding no contributory infringement for manufacturer of software designed to break copy protection, because of noninfringing uses including those recognized in 17 U.S.C. § 117).

96. *See, e.g.*, A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004, 1018 (9th Cir. 2001) (noting that plaintiffs demonstrated damage to their potential markets, which included alleged damage to "developing digital download market").

97. 545 U.S. 913 (2005).

98. *Metro-Goldwyn-Mayer Studios*, 545 U.S. at 935–39 (characterizing ruling as consistent with *Sony*).

99. 92 F. Supp. 2d 349, 351 (S.D.N.Y. 2000). Note that the terms "medium shifting" and "space shifting" are synonymous. *UMG*, 92 F. Supp. 2d at 351.

100. *Id.* at 350–52; *see also* 17 U.S.C. § 107 (2006) (enumerating several factors in fair use analysis).

101. *UMG*, 92 F. Supp. 2d at 350 (noting by use of quotations that they did not accept possession of CD by user as proof of ownership).

the user's CDs.[102] Casting this as presumptive copyright infringement, the court analyzed and dismissed the defense that MP3-compressed digital audio is not a reproduction, because the sounds reproducible from such MP3 files are not identical to the original work.[103]

The court then turned to the affirmative defense of fair use and analyzed the familiar four factors.[104] The court found it undisputed that the use was commercial, and looked next to whether the use was transformative.[105] In the essence of the opinion, the court found that space shifting was not transformative, but was rather the creation of "unauthorized copies . . . being retransmitted in another medium."[106] The court then analyzed the remaining factors. The court found that the nature of the copied works was creative, and therefore copies of them were less likely to be seen as fair use.[107] The court also asserted that since the entirety of the work was copied, a finding of fair use would not be possible.[108] Finally, the court determined that even though plaintiffs were not developing a market in the area in which MP3.com provided service, MP3.com was nonetheless depriving them of a potential market.[109] The court dismissed the other factors raised by MP3.com in support of its claim of fair use.[110] The court then granted partial summary judgment to plaintiff UMG Recordings, Inc.[111]

Though the Second Circuit did not rule on *UMG*,[112] the Ninth Circuit cited the case positively in *A&M Records, Inc. v. Napster, Inc*.[113] In *A&M Records, Inc.*, the court noted that space shifting is fair use when confined to one's own computer system, but not when it involves a transmission.[114]

102. *Id.* (noting actual service involved copying and playing copyrighted recordings).

103. *Id.* at 350 n.1 (finding differences in sound to be slight and undetectable by humans).

104. *Id.* at 350–51.

105. *Id.* at 351 (noting that transformative uses are allowed under fair use, even when commercial).

106. *UMG*, 92 F. Supp. 2d at 351.

107. *Id.* at 351–52.

108. *Id.* at 352 (stating novel position that copying in entirety "negate[s]" fair use). *But see* Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 449–50 (1984) (declaring Supreme Court's position that there are types of works for which copying in entirety does "not . . . militat[e] against a finding of fair use").

109. *UMG*, 92 F. Supp. 2d at 352 (asserting that copyright holder's exclusive rights include right to prevent development of new market by refusing to license or licensing only under copyright holder's own terms). *But see* 17 U.S.C. § 115(a), (c) (2006) (allowing compulsory licenses of musical works on statutory terms).

110. *UMG*, 92 F. Supp. 2d at 352 (characterizing MP3.com's arguments as being choice between MP3.com's service and activities of "pirates").

111. *Id.* at 353.

112. UMG Recordings v. MP3.com, No. 00 Civ. 472 (JSR), 2000 WL 710056, at *1 (S.D.N.Y. June 1, 2000).

113. 239 F.3d 1004, 1017 (9th Cir. 2001).

114. *Recording Indus. Ass'n of Am.*, 239 F.3d at 1019 (attempting to harmonize holdings of Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., Inc., 180 F.3d 1072 (9th Cir. 1999) with *UMG*, 92 F. Supp. 2d at 351–52).

These cases demonstrate the difficulty of predicting how courts will see the constitutionally mandated bargain between the copyright monopoly holder and the public when advocates frame the issue as one of fair use. This lack of predictability makes it difficult for consumers and providers of services to confidently rely on a fair use defense in medium shifting cases.

3. Applicability and Relevance of the Audio Home Recording Act

It may seem surprising, given the previous discussion of the redundancy of § 1008 with the fair use doctrine as applied to home taping,[115] to learn that some courts have applied the section very narrowly, finding it inapplicable to actions that are permissible even under fair use. The Ninth Circuit, in *Recording Industry Ass'n of America v. Diamond Multimedia Systems*,[116] held that § 1008 did not cover copying music files from a computer's hard disk to a portable player,[117] but that the same activity fell under fair use.[118] The narrow interpretation of digital musical recording makes § 1008 inapplicable to a slew of fact patterns that fall within fair use;[119] the decision in *Recording Industry Ass'n of America* is only a sample.

Given the broader coverage of the fair use doctrine, § 1008's only advantage is a more concrete definition of what would not constitute infringement,[120] but without a corresponding increase in clarity as to what would constitute infringement.[121] This lack of clarity fails to allow consumers and providers of

115. See *supra* notes 67–71 and accompanying text for an examination of the prohibition of infringement actions.

116. 180 F.3d 1072 (9th Cir. 1999).

117. *Recording Indus. Ass'n of Am.*, 180 F.3d at 1081 (concluding portable player connected to computer failed to satisfy statutory definition of digital audio player in § 1001, so § 1008 could not apply to it).

118. *Id.* at 1079 (finding fair use to cover "space shifting" copyrighted musical recording from computer's hard drive to portable player and noting that such use was consistent with purpose behind AHRA).

119. AHRA defines a "digital audio recording device" as a device that is "designed or marketed for the primary purpose of . . . making a digital audio copied recording." 17 U.S.C. § 1001(3) (2006). Any digital recording done with any device that does not fit this definition cannot fall within the language of § 1008 that prohibits infringement actions. *Id.* § 1008. For example, a laptop computer's primary use is general purpose computing, not the creation of digital audio copied recordings, yet most laptop computers have microphones or audio jacks suitable for microphones. No recording done with such a laptop could qualify for the protection of § 1008, because the laptop's "primary purpose" is not "making a digital audio copied recording." *Id.* § 1001(3). If such recording were done for nonprofit, educational purposes, to create criticism or a historical record, and consisted of only a few, not extraordinarily salient seconds of an hour-long speech, which would have no impact on any potential or real market for the speech, then such recording done with the laptop computer would fall squarely within any court's interpretation of fair use. *See id.* § 107 (defining four factors to consider when determining fair use).

120. *Compare id.* § 107 (listing nonexclusive set of factors to be evaluated on case-by-case basis), *with* 17 U.S.C. § 1008 (limiting its applicability to defined terms). *But cf. Recording Indus. Ass'n of Am.*, 180 F.3d at 1081 (judicially reading terms into § 1008's definition).

121. *See* 17 U.S.C. § 1008 (defining only very small subset of things that are not infringement, but saying nothing about what is infringement).

service to assert a defense based on § 1008 with confidence in many circumstances.

After the threshold question of whether a device is a digital audio recording device is answered, there remain the other requirements of § 1008: that the use be noncommercial, by a consumer, and to make digital musical recordings or analog musical recordings.[122] In *Atlantic Recording Corp. v. XM Satellite Radio, Inc.*[123] the Southern District of New York determined that a digital radio capable of recording an entire song, regardless of when a user tuned into it, was a digital audio recording device.[124] The court went on to hold that § 1008 does not insulate from liability any who derive value from a copyrighted work.[125] Even though § 1008's language has a precision that the nonexclusive factor test of § 107 lacks, § 1008 is nonetheless subject to differing interpretations from various courts.[126]

4. Permissible Repair

Courts created a doctrine in patent law of permissible repair and element replacement, which recognizes that a license to use a patented item includes the right "to preserve its fitness for use so far as it may be affected by wear or breakage."[127] This implied license to do what is necessary to preserve an item's fitness for use extends to replacing any component of a patented combination, "however essential it may be to the patented combination and no matter how costly or difficult replacement may be[,]" as long as the component is not itself individually patented.[128] This right reaches its limit only when the repair becomes reconstruction, i.e., when the licensee makes "a second creation of the patented entity" "after the entity, viewed as a whole, has become spent."[129] The Supreme Court characterized the permissible repair doctrine not as a patent-specific doctrine, but as the application of a universal principle—"the lawful right of the owner to repair his property."[130]

122. *Id.* (defining all of Congress's requirements for AHRA's applicability).

123. No. 06 Civ. 3733(DAB), 2007 WL 136186 (S.D.N.Y. Jan. 19, 2007).

124. *Atlantic Recording Corp.*, 2007 WL 136186, at *5 n.4.

125. *Id.* at *7 (applying not Congress's requirements but rather Paul Goldstein's views on copyright law).

126. *Compare* Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., 180 F.3d 1072, 1078–79 (9th Cir. 1999) (supplementing plain language of §§ 1001–1008 with legislative history to construe § 1008), *with Atlantic Recording Corp*., 2007 WL 136186, at *7 (reading into § 1008 views of PAUL GOLDSTEIN, GOLDSTEIN ON COPYRIGHT § 7.7.2 (3d ed. 2005 & 2006 Supp.)).

127. Aro Mfg. Co. v. Convertible Top Replacement Co., 365 U.S. 336, 345–46 (1961) (quoting Leeds & Catlin Co. v. Victor Talking Mach. Co., 213 U.S. 325, 336 (1909)).

128. *Id.* at 345.

129. *Id.* at 346.

130. *Id.*

III. Discussion

The purchaser of a copy of a copyrighted musical recording who converts the copy to a new format as the devices allowing playback of the purchased copy become unavailable, due to technological obsolescence or market evaporation, should have a successful defense to a copyright infringement action. This defense is based on the right of maintaining a piece of property as fit for its intended purpose, a right that is articulated in contract law[131] and buttressed by limitations of a copyright owner's rights in copyright law other than the fair use provisions,[132] and by the repair doctrine, as articulated in patent law.[133]

A. The Problem

The machines that played many of the older musical media have disappeared from the market, leaving the owners of the older media unable to listen to them. A search on Google reveals no company that manufacturers wax cylinder players,[134] but a similar search on eBay shows numerous persons who still own undamaged media for such players, who are attempting to get rid of the cylinders.[135] Conspicuously absent in consumer musical equipment stores like Best Buy and Radioshack are any eight-track tape players.[136] No piano company currently manufactures player pianos that take the standard piano rolls that were ubiquitous at the turn of the last century, yet such piano rolls have not disappeared from the Earth.[137]

Some of the players that are still manufactured are no longer mass produced, but created in limited forms and quantities, or priced out of a consumer's range. Such limited availability or dropping of functionality makes such a machine not "reasonably available," as the term is used in § 108 of the Copyright Act.[138]

In many cases, the ability to repair existing players is no longer available to consumers. Repair shops may be unable to obtain parts that have not been manufactured in decades, or worse, may not be able to obtain proprietary electronics. If consumers cannot reasonably repair or replace a broken player,

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131. See *infra* Part III.C.1 for an argument that this right is expressed in contract law principles.

132. See *infra* Part III.C.3 for an argument that several Copyright Act provisions support this right.

133. See *infra* Part III.C.4 for an argument that patent law principles also express this right.

134. Google Search, Wax Cylinder Players, http://www.google.com (search for "wax cylinder players") (last visited Nov. 14, 2009).

135. eBay, Wax Cylinders, http://www.ebay.com (search for "wax cylinders") (last visited Nov. 14, 2009).

136. Best Buy - Audio, http://www.bestbuy.com/site/olspage.jsp?id=abcat0200000&type=category (last visited Nov. 14, 2009); Radioshack.com, Home Entertainment, http://www.radioshack.com/category/index.jsp?categoryId=2032057 (last visited Nov. 16, 2009).

137. *See* The Player Piano Group, *supra* note 1 (discussing history of piano rolls and noting many still exist).

138. 17 U.S.C. § 108(c) (2006) (defining phonorecord's format as "obsolete if the machine or device necessary to render perceptible a work stored in that format is no longer manufactured or is no longer reasonably available in the commercial marketplace").

the musical media for the player becomes unplayable and no longer serves its purpose of allowing reproduction of the music.

B. The Solution

The best way for the consumer to address the problem of obsolete media is with medium shifting. A consumer can take a phonorecord[139] that the consumer owns, like an LP record, and pay a party who has a working player and appropriate equipment to convert the phonorecord to a new format, like MP3. Alternately, the consumer could anticipate and avoid the problem by performing the conversion himself or herself before final failure of the consumer's own player. This process is called medium shifting, and many persons are familiar with it from their own experiences with software such as Apple's iTunes, which converts CDs to MP3s for their owner.[140]

C. Medium Shifting from Obsolete Media Is Not Actionable Copyright Infringement

Medium shifting is a viable solution to the problem of obsolete musical media, but the recording industry would like you to believe that, § 1008 and the fair use doctrine notwithstanding,[141] someone who engages in medium shifting is liable for copyright infringement. Fair use is a common defense defendants raise in medium shifting cases, but under certain fact patterns courts have held that medium shifting is not fair use of a copyrighted work, and have found defendants engaging in medium shifting to be guilty of copyright infringement.[142] A better defense for one accused of copyright infringement after shifting music off obsolete media is a defense based on the owner's right to maintain property as fit for its intended purpose. This right is illustrated by the implied warranty of fitness for a particular purpose in contract law, and it is consistent with the explicit limitations on a copyright owner's rights contained in the Copyright Act, as well as being embodied as the repair doctrine of patent law.

1. Contract Law Basis—Implied Warranty

This Comment concerns the conversion of a legal copy of a copyrighted work from an obsolete format to a current format, and it should be distinguished

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139. "Phonorecord" is a term used throughout the Copyright Act that is defined therein as a "material object[] in which sounds, other than those accompanying a motion picture or other audiovisual work, 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.

140. *See* LAWRENCE LESSIG, THE FUTURE OF IDEAS: THE FATE OF THE COMMONS IN A CONNECTED WORLD 9 (2001) (noting Apple's iTunes advertisement encouraged consumers to "Rip, mix, burn . . . After all, it's your music").

141. *See* 17 U.S.C. § 107 (confirming existence of fair use); *id.* § 1008 (statutorily exempting noncommercial recording by consumer with certain devices from being infringement).

142. *See, e.g.*, UMG Recordings, Inc. v. MP3.com, Inc., 92 F. Supp. 2d 349, 352 (S.D.N.Y. 2000) (reasoning that medium shifting is not fair use and finding copyright infringement).

from the creation of additional copies. The copyright holder already consented to the creation of one copy when granting the license to the manufacturer of the media to create and sell the one copy.[143] The end user is clearly prohibited from duplicating the work and distributing multiple copies to others,[144] but that is not the right asserted in this Comment. The right is to have the owned phonorecord of the musical recording remain fit for its intended purpose, which is reproduction of the music. Once a player for the medium on which the copy is fixed becomes unavailable, the copy is no longer fit for its intended purpose.

The sale of a copy of a musical recording conveys an implied warranty of fitness for the purpose of reproducing a particular piece of music, in the absence of an explicit disclaimer of that function.[145] This doctrine from contract law, that goods sold for a particular purpose have an implicit warranty of fitness for that purpose (unless it is disclaimed), can provide a defense against a copyright infringement action when medium shifting is performed to restore the usefulness of obsolete media, as the following example demonstrates.

When in 1978 a consumer bought the latest BeeGees album, the consumer had a legitimate expectation that that piece of vinyl would be suitable for the purpose of reproducing the music encoded on it. Now, in 2009, the consumer finds, to her dismay, that it is nearly impossible to get a record player, especially if she needs to listen to seventy-eight r.p.m. albums. This means that the piece of vinyl the consumer bought is no longer fit for its intended purpose, the reproduction of the music fixated on it.

Courts should recognize that under section 315 of article two of the UCC, the consumer has an implied license to do what is necessary to make the object that she bought fit for its intended purpose again.[146] This implied warranty should be seen to grant a license to the copy owner to do what is required to satisfy the warranty. In this case, that would amount to a license to have the phonorecord converted into a form that she can actually use.

Contract law, and section 2-315 of the UCC in particular, do not alone form the basis of the consumer's right to perform medium shifting of phonorecords in obsolete formats. Because the UCC is a matter of state contract law, it governs only where it has been adopted, which includes the District of Columbia, the U.S. Virgin Islands, and every state except Louisiana.[147] If no other authority

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143. *Cf.* 17 U.S.C. § 106(1), (3) (allowing copyright holder exclusive right to authorize media manufacturer to create phonorecord and distribute it); *id.* § 109(a) (prohibiting copyright holder from restricting purchaser's further sale or disposal of phonorecord).

144. *See id.* § 501(a) (defining infringement); *id.* § 106(1), (3) (defining copyright holder's exclusive rights to make and distribute copies). *But see id.* § 109(a) (noting owner of article of media on which copyrighted work is fixated is free to sell, destroy, or otherwise dispose of it).

145. *See* U.C.C. §§ 2-315 to 2-316 (2000) (describing implied warranty of fitness for particular purpose).

146. *See id.* § 2-315 (noting in sales of goods "there is unless excluded or modified under [§ 316] an implied warranty that the goods shall be fit for such purpose").

147. Uniform Commercial Code Locator, *supra* note 76.

than the UCC supported the defense that is the subject of this Comment, it would not be available to Louisianans.[148]

The provisions of section 316 of Article 2 of the UCC permit a seller, such as a phonorecord vendor, to explicitly disclaim the implied warranty of fitness for a particular purpose.[149] If an implied warranty of fitness for a particular purpose under the UCC were the only basis for the defense to copyright infringement proposed in this Comment, the music industry would be able to use such an explicit disclaimer in the future to destroy a defense to copyright infringement by medium shifting.[150]

The UCC is not the only basis for a defense to copyright infringement in the context of medium shifting. The defense to an infringement action for medium shifting of obsolete formats arises from a more fundamental right, which is embodied in specific forms in other provisions of the Copyright and Patent Acts.[151] These provisions buttress the same conclusion as the implied warranty provisions of the UCC,[152] that the consumer is permitted to make the obsolete media useful for its intended purpose of making music perceptible.

2. Copyright Law Basis—Irrelevance of Failure to Satisfy Fair Use

Medium shifting may fail to satisfy "fair use." Although use of the statutory terms with their common meanings may lead to the conclusion that it is only "fair" to "use" what you purchased for the purpose for which you purchased it,[153] courts use "fair use" as a term of art to refer to the equitable rule of reason codified in § 107 of title 17 of the United States Code.[154] Although the text of § 107 does not exclude a finding of "fair use" for medium shifting off of obsolete media, courts have great latitude in interpreting the fair use doctrine, and results for cases in which defendants alleged fair use for medium shifting are mixed.[155]

Although it is tempting to rely on the doctrine of fair use of copyrighted material to cover the medium shifting off of phonorecords in obsolete formats,

148. Louisiana has not adopted Article 2 of the UCC. *Id.*

149. U.C.C. § 2-316(2) (2000) (permitting explicit disclaimer of implied warranty of fitness through language stating that "[t]here are no warranties which extend beyond the description on the face hereof").

150. This would only be an issue for phonorecords sold after the industry began to include explicit disclaimers with its products.

151. See *infra* Parts III.C.2–4 for an examination of other instances of this right.

152. U.C.C. §§ 2-315 to 2-316 (2000).

153. I am indebted to Susan Cheng for this observation.

154. 17 U.S.C. § 107 (2006) (noting fair use includes, but is not limited to, certain uses, and that certain factors should be among those considered on case-by-case basis); *see also* H.R. REP. NO. 94-1476, at 65 (1976), *reprinted in* 1976 U.S.C.C.A.N. 5659, 5679 (declaring fair use "equitable rule of reason" not amenable to precise definition).

155. *Compare* Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., Inc., 180 F.3d 1072, 1079 (9th Cir. 1999) (allowing fair use defense for shifting music from computer to portable player), *with* UMG Recordings, Inc. v. MP3.com, Inc., 92 F. Supp. 2d 349, 352 (S.D.N.Y. 2000) (holding that medium shifting copyrighted musical recording from purchased CDs to computer hard drive is not fair use).

the uncertainty reflected in the case law is unappealing. It is possible for a court to perform an analysis limited to the four factors of fair use stated in the statute.[156] This is not only possible, but it is consistent with the reasoning of the Southern District of New York in *UMG Recordings, Inc. v. MP3.com, Inc*.[157] In such a case a court might find that in the medium shifting proposed in this Comment, the copyrighted work that was shifted had a nature that weighed against a finding of fair use, such as being a work created solely for aesthetic appreciation, rather than, for example, a work of historical significance.[158] The court would also determine that the entire work, rather than an excerpt, was copied.[159] The court might find that the new copy impacts a potential market for the original copyright owner.[160] If the owner of the phonorecord had paid someone else to do the medium shifting, the court might find that there was a commercial character to the copying.[161] With these four factors determined to the court's satisfaction, and by limiting its analysis to these factors, such a court, reasoning as did the court in *UMG*, might hold that medium shifting off of a phonorecord in an obsolete format was not covered by fair use.[162]

Let us assume for the sake of argument that the Southern District of New York ruled correctly in its summary judgment in *UMG*, when it distinguished medium shifting from time shifting, and held that the finding of fair use that the Supreme Court made in *Sony Corp. of America v. Universal City Studios, Inc.*[163] was not applicable to medium shifting.[164] When the court found that MP3.com had committed copyright infringement by performing medium shifting for its customers, the court did so based on a failure of the case's facts to satisfy all the factors of fair use.[165]

The argument that medium shifting is not fair use because it has a negative effect on "the potential market for . . . the copyrighted work" and it involves duplication of the whole work, rather than a limited excerpt,[166] is not relevant to any defense to copyright infringement other than fair use. In particular, it has no relevance to a defense based on a customer response to a breached implied warranty of fitness for reproducing music. Market factors do not come into an

156. 17 U.S.C. § 107 (listing following nonexclusive set of factors to be applied on case-by-case basis to evaluate equitable rule of reason: "(1) the purpose and character of the use . . . ; (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion used . . . ; and (4) the effect of the use upon the potential market for or value of the copyrighted work").

157. 92 F. Supp. 2d 349 (S.D.N.Y. 2000).

158. 17 U.S.C. § 107(2).

159. *Id.* § 107(3).

160. *Id.* § 107(4).

161. *Id.* § 107(1).

162. *See UMG*, 92 F. Supp. 2d at 350–52 (following essentially this analysis).

163. 464 U.S. 417 (1984).

164. But see *supra* notes 99–109 and accompanying text for a discussion of the discrepancies between earlier Supreme Court precedent and the *UMG* court's statements, and between the black letter law of 17 U.S.C. and the *UMG* court's statements.

165. *UMG*, 92 F. Supp. 2d at 350–52. See also *supra* notes 99–111 and accompanying text for a discussion of the specific reasoning used by the *UMG* court in its analysis.

166. 17 U.S.C. § 107(3), (4).

implied warranty analysis.[167] Courts do not weigh the benefits and disadvantages to a seller and buyer of the buyer honoring a warranty; if a vendor sells as a working car a car that has no engine, the court does not look at how much it would cost the vendor to purchase the engine before enforcing the implied warranty. Nor does the court look at how much profit the seller will lose if the seller refunds the buyer's money for a defective product; the court just requires that the seller do so.

Nor is it consistent with an implied warranty for a phonorecord to limit such a warranty to an excerpt from a musical piece fixated on the phonorecord. The purpose of the purchased phonorecord is reproduction of the entire musical recording fixed on it. To limit it to an excerpt would be as inconsistent with implied warranty theory as it would be to limit the implied warranty on a watch to its accurate display of the hours from 9:00 a.m. through 11:45 a.m.

Regardless of how swayed one is by the reasoning regarding fair use in *UMG*, it is not necessary to rely on fair use to provide a defense to medium shifting off of phonorecords in obsolete formats.[168] The reasoning under which the district court for the Southern District of New York rejected medium shifting in *UMG* does not impact the issues the court did not address, such as implied warranty of fitness for a particular purpose and the right of an owner to repair the owner's property.

3. Copyright Law Basis—Limitations on Exclusive Rights Other than Fair Use

Several other provisions in the Copyright Act buttress the argument that a consumer should have a successful defense to copyright infringement under the facts of medium shifting a phonorecord from an obsolete format to a playable format. The right to create archival copies of software[169] and the provisions for libraries and archives[170] both support such a defense.

Converting the phonorecord from its original, obsolete format to a new format can be conceptualized as a process of conversion or adaptation, rather than as the creation of a copy.[171] At the end of the conversion process, only one phonorecord that is fit for the consumer to use to reproduce the copyrighted musical piece exists. At the start of the process, the consumer had one phonorecord that the consumer had originally purchased to reproduce the copyrighted musical piece.

By analogy to the provisions of the Copyright Act concerning the right to make backup copies of copyrighted software without the permission of the

167. *See* U.C.C. § 2-315 (2000) (defining existence and effect of implied warranty of fitness in terms not including effect on seller or seller's current or future markets).

168. See *supra* Part III.C.1 and *infra* Parts III.C.3–4 for alternate rationales.

169. 17 U.S.C. § 117(a)(2).

170. *Id.* § 108.

171. *Cf. id.* § 117 (using terms "copy" and "adaptation" and implying distinct meanings for them through statutory construction principle of giving effect to all words in statute).

copyright holder,[172] and the right of libraries to make archival copies of copyrighted works without the permission of the copyright holder,[173] the purchaser of the phonorecord in an obsolete format of a copyrighted musical recording should be allowed to medium shift to a different medium for the purpose of keeping the purchased phonorecord useful.

Section 117 of the Copyright Act explicitly allows a person to make a backup copy of copyrighted software without permission from the copyright owner, and makes no restriction as to the eventual media or format of the copy.[174] This archival copy serves to recreate the purchased copy when the medium on which it is stored wears out from repeated use. The user is not permitted to employ the archival copy for any purpose other than "as an essential step in the utilization of the computer program in conjunction with a machine."[175] In common practice with computer software distributed on floppy disks, this is accomplished by recreating a usable working disk from the archival disk.[176] The underlying intent of the provision is to keep the copy useful to its owner for the purpose for which it was sold, without permitting the owner to create multiple usable copies.[177]

Another source of authority that suggests that it is reasonable to allow medium shifting off of obsolete formats to keep a phonorecord perceptible, and therefore usable for its intended purpose, is § 108, concerning rights granted to libraries and archives, whether or not the copyright owner wishes to grant them.[178] Section 108(c) explicitly allows conversion of phonorecords by making up to three copies of a published work if "the existing format in which the work is stored has become obsolete."[179] The section defines a format as obsolete if a "machine or device necessary to render perceptible a work stored in that format is no longer manufactured or is no longer reasonably available in the commercial marketplace."[180] This definition of obsolete covers hard-to-get record players, as well as wax cylinder players, player pianos, and eight-track tape players.

Although the text of these provisions do not cover a consumer's conversion from an obsolete format to a current one of a phonorecord that has become unplayable, both of the provisions show that Congress's goal was to ensure that physical objects embodying copyrighted works remain perceptible to those who purchased them for that purpose. To achieve that goal, Congress was willing to

172. *Id.* § 117.

173. *Id.* § 108(a), (b).

174. 17 U.S.C. § 117.

175. *Id.* § 117(a)(1).

176. *See generally* Atari, Inc. v. JS & A Group, Inc., 597 F. Supp. 5, 9 (N.D. Ill. 1983) (noting 17 U.S.C. § 117's purpose in allowing archival copies is to protect against destruction of working copy by mechanical or electrical failure).

177. 17 U.S.C. § 117(a)(1) (noting that copy's only noninfringing function is to enable "utilization" of copyrighted work).

178. *Id.* § 108.

179. *Id.* § 108(c).

180. *Id.*

curtail what the owners of the copyrights on the works might otherwise assert as their right to prevent copies from being made.[181]

4. Patent Law Basis—Permissible Repair

Patent doctrine can be relevant to understanding the limited monopoly bargain that copyright law implements.[182] The key case in contributory copyright infringement, *Sony Corp. of America v. Universal City Studios, Inc.*, took its reasoning on contributory infringement from patent law because there was no statute on contributory infringement in the Copyright Act, only in the Patent Act.[183]

The permissible repair doctrine in patent law is relevant to understanding rights of the owners of phonorecords, because both types of intellectual property, patents and copyrights, are subsets of property, and the repair doctrine is a specific form of a right applicable to all property—"the lawful right of the owner to repair his property."[184] The permissible repair doctrine grants the owner of a patented good the right to repair it "to preserve its fitness for use so far as it may be affected by wear or breakage,"[185] as long as the repair does not duplicate all components of a completely worn out item and reconstruct a copy.[186]

"Copies" and "phonorecords" are physical objects that embody a copyrighted work in a way that allows the work to be perceived or communicated.[187] As objects subject to wear, copies and phonorecords are subject to the permissible repair doctrine, as the following example shows. A person who owns a copy of a copyrighted book has the right to fix the book's binding when it breaks.[188] The copyright holder cannot use any of the exclusive rights granted by the copyright monopoly to prohibit this.[189] The book owner could razor out the pages, punch holes in them, and put the leaves in a three ring binder. She could contract with another for the other to do so for her. She could correct water damage by writing the faded words back in with a ball point pen. The holder of the copyright could not prevent the owner of the book from repairing her property. Similarly, a person who owns a CD that becomes

181. *See id.* § 106(1) (defining exclusive right to make copies).

182. *See* Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 434–35 (1984) (employing Patent Act to fill in missing statutory law in Copyright Act).

183. *Compare* 35 U.S.C. § 271(c) (2006) (defining contributory patent infringement), *with* 17 U.S.C. § 501 (defining copyright infringement, without any reference to contributory infringement).

184. Aro Mfg. Co. v. Convertible Top Replacement Co., 365 U.S. 336, 346 (1961).

185. *Id.* at 345 (quoting Leeds & Catlin Co. v. Victor Talking Mach. Co., 213 U.S. 325, 336 (1909)).

186. *Id.* at 346.

187. *See* 17 U.S.C. § 101 (defining these two terms).

188. I am indebted to Susan Cheng for this example.

189. *See id.* § 106 (enumerating only six exclusive rights, none of which are impacted by rebinding); *id.* § 109 (granting owner of copy or phonorecord total control over disposition of it). *But see id.* § 106A (putting limitations on certain activities with copies of works of visual arts that would impact their creator's reputation).

scratched is not prohibited from trying to fix it with an acrylic sealant.[190] The intent of both sets of repairs is to restore the work to perceptibility, to allow the property to have the "fitness for use" it had when originally purchased.[191]

One can characterize the conversion of an obsolete (and therefore imperceptible) phonorecord to a new format as a process of repair. In this process, an item that was a single useful phonorecord when originally sold enters, and one useful phonorecord exits. Such a conversion leaves the copyright holder in the same position at the end of the process as at the beginning, as the following example shows: The copyright holders to the English lyrics of the song *Bei Mir Bist Du Schoen*, Sammy Cahn and Vic Schöen, agreed in 1938 to the sale to an end user of one phonorecord from which their copyrighted work could be perceived. In November of 1938, when the acetate seventy-eight r.p.m. record of the Andrews Sisters singing the song was manufactured, one phonorecord from which the copyrighted work could be perceived existed. Seventy-one years later, when the unplayable seventy-eight r.p.m. record is converted to an MP3 file, only one phonorecord (the MP3 file) from which the copyrighted work can be perceived exists. The obsolete seventy-eight r.p.m. record is not perceptible in 2009, because the machines that can play it are no longer reasonably available. The MP3 file, however, is perceptible, by means of an iPod or other MP3 player.

Some might argue that unless the process that converts a phonorecord from an obsolete format to a new format involves the physical destruction of the obsolete, imperceptible phonorecord, it is not conversion for repair, but rather the creation of a new infringing copy. Such an argument ignores that the obsolete phonorecord is not useful to the consumer for reproduction of music any longer,[192] so it is not performing the essential function of a phonorecord—allowing the work "[to] be perceived."[193] Even without the obsolete phonorecord's destruction, the obsolete phonorecord is as useless for perceiving the copyrighted work as is a book that has been soaked in bleach.

This is conversion to make the old item usable for the purpose for which it was sold, not creation of a copy for secondary exploitation of the copyrighted work. The end product of conversion is not a new version of the copyrighted work that serves a new purpose, as, for example, a cell phone's ringtone would be.[194] The converted product is still a representation of the music meant to be played by the customer on a personal music system.

Viewed as a conversion from a format that has become imperceptible to one that is perceptible, serving the original purpose of the phonorecord, medium

190. This does not actually work, in spite of what the advertisements claim.

191. Aro Mfg. Co. v. Convertible Top Replacement Co., 365 U.S. 336, 345 (1961).

192. It may be useful for other purposes, however, such as for the art on its label, which is still perceptible to its owner. For this reason, the consumer may not wish it to be destroyed.

193. 17 U.S.C. § 101.

194. *See generally* Jennifer Mariano Porter, Comment, *Compulsory Licensing and Cell Phone Ringtones: The Phone Is Ringing, a Court Needs to Answer*, 80 TEMP. L. REV. 907, 934–47 (2007) (arguing distinctions between cell phone ringtones and their source material should prevent compulsory licensing from applying to them).

shifting off of obsolete formats operates like a repair on the phonorecord, restoring the property's usefulness to its owner.

IV. CONCLUSION

Courts should recognize the right of a consumer to convert the phonorecord he or she purchased to a new format to restore its usefulness. This right is a defense to a copyright infringement action. The defense is valid even for fact patterns that could fail a "fair use" analysis that limited itself to the statutory factors,[195] as well as for fact patterns that do not fit within the narrow statutory language of the Audio Home Recording Act's home taping exemption.[196]

This right is a basic principle of property, and it is expressed in many different ways. In patent law, the permissible repair doctrine allows the owner of a patented good to repair it, and does not allow the patent holder to restrict that right.[197] Contract law also reflects this principle, and the UCC contains a specific embodiment of it in the implied warranty of fitness for a particular purpose.[198]

Defendants in copyright infringement actions involving medium shifting off of obsolete media should emphasize this more expansive right rather than risking the traps of "fair use" analysis or other narrow doctrines, such as the AHRA statutory exemption.

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195. *See* 17 U.S.C. § 107 (noting that certain factors should be among those courts consider on case-by-case basis in fair use analysis).

196. *See id.* § 1008 (exempting from infringement only recording made with narrowly defined set of equipment, and only when made by consumer).

197. *See* Aro Mfg. Co. v. Convertible Top Replacement Co., 365 U.S. 336, 346 (1961) (noting that permissible repair doctrine is aspect of "the lawful right of the owner to repair his property").

198. U.C.C. § 2-315 (2000) (describing implied warranty of fitness, in which sale of goods meant for particular purpose will contain implied warranty of fitness for that purpose, in absence of explicit disclaimer of such warranty).

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