

MGM STUDIOS, INC. V. GROKSTER, LTD. & IN RE AIMSTER LITIGATION: A STUDY OF SECONDARY COPYRIGHT LIABILITY IN THE PEER-TO-PEER CONTEXT

By Andrew J. Lee

Twenty years ago, copyright owners challenged the legality of the Sony Betamax video tape recorder (“VTR”) in the landmark Supreme Court case *Sony Corp. of America v. Universal City Studios, Inc.*¹ The fundamental question posed to the Court was whether Sony, as the manufacturer of a copying device, could be held secondarily liable for the copyright infringements of its end users.² In a 5-4 decision the Court declined to find Sony liable,³ and articulated a broad standard that shields a technology provider from secondary liability if its product is capable of “substantial noninfringing uses.”⁴

This past year, in *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd.* (“*Grokster II*”),⁵ the Ninth Circuit affirmed the applicability of the *Sony* doctrine to peer-to-peer (P2P) file sharing computer software.⁶ Specifically, the court determined that P2P software distributors Grokster and StreamCast Networks could not be held liable as contributory copyright infringers because, like Sony in part, their products were capable of substantial noninfringing uses.⁷

Grokster II is a significant legal victory for technology advocates because it marks the first time a P2P provider has been able to successfully invoke *Sony* as a defense. However, the future reach of secondary copyright liability in the digital age remains fluid for several reasons. First, the Ninth Circuit opinion now arguably conflicts with the Seventh Circuit’s *In re Aimster Copyright Litigation* decision in its interpretation of the scope

© 2005 Andrew J. Lee

1. See 464 U.S. 417 (1984).

2. *Id.* at 420.

3. *Id.* at 418, 456.

4. See *id.* at 442.

5. 380 F.3d 1154 (9th Cir. 2004) [hereinafter *Grokster II*].

6. See *id.* at 1162.

7. See *id.* at 1162-64. The Ninth Circuit applied the *Sony* rule in the course of analyzing the defendants’ liability under the common law test for contributory liability. The court also determined that the defendants could not be held liable as vicarious infringers. *Id.* at 1164-66. The distinction between contributory and vicarious copyright infringement is discussed further in Part I.

of the *Sony* shield,⁸ setting the stage for a re-examination of the *Sony* doctrine by the Supreme Court.⁹ Second, in the absence of clear Supreme Court adjudication, it is uncertain whether other circuits will choose to adopt the Ninth Circuit, Seventh Circuit, or some alternative analysis. Finally, copyright owners from the entertainment industries have made, and continue to make, concerted attempts to overturn *Sony* through legislative action.¹⁰

Part I of this Note gives context to the *Grokster II* opinion by reviewing the common law doctrines of secondary copyright liability, the *Sony* decision, and the basics of P2P technology. Part II examines the two P2P cases that preceded *Grokster II*—*Napster* and *Aimster*—and discusses how the respective courts assessed the secondary copyright liability of those providers. Part III reviews the Ninth Circuit's decision in *Grokster II*. Finally, Part IV explores the doctrinal differences between the Ninth and Seventh Circuits' interpretation of *Sony*, and proposes that the *Grokster II* decision creates a circuit split requiring clarification by the Supreme Court. Part IV also considers the legal and policy issues that are implicated by *Grokster II* and *Aimster*.

8. See 334 F.3d 643, 649 (7th Cir. 2003) (suggesting, *inter alia*, that courts should take into account the ratio of infringing to noninfringing uses of a product in determining secondary liability). The Seventh Circuit's interpretation of *Sony* is discussed further in Part II.

9. The plaintiff copyright owners in *Grokster II* filed a petition for a writ of certiorari on October 8, 2004, which can be found at http://www.eff.org/IP/P2P/MGM_v_Grokster. The Supreme Court granted certiorari on December 10, 2004, and scheduled oral arguments for March 29, 2005; it will likely make a final ruling by the summer of 2005. *MGM Studios, Inc. v. Grokster, Ltd.*, 125 S. Ct. 686 (2004); see Elec. Frontier Found., *Supreme Court to Hear MGM v. Grokster*, http://eff.org/news/archives/2004_12.php#002139 (last visited Jan. 20, 2005).

10. The Inducing Infringement of Copyrights (INDUCE) Act, the latest proposed bill targeting peer-to-peer file sharing networks, would hold secondarily liable anyone who "induces" the direct copyright infringement of another. See U.S. COPYRIGHT OFFICE, 09/02/04 DISCUSSION DRAFT (2004) (U.S. Copyright Office discussion draft of the INDUCE Act), available at http://www.corante.com/importance/archives/Copyright_Office_Discussion_Draft_Alternative_INDUCE_Act.pdf. Negotiations over the draft form of the bill appear to have ended without resolution in the last congressional term, but may be revived this term. See Reuters, *Controversial Copyright Bill Dies in Senate*, MSNBC NEWS, Oct. 8, 2004, <http://msnbc.msn.com/id/6208947>.

I. BACKGROUND

A. Theories of Secondary Copyright Liability

The purpose of copyright law is to promote the public welfare by encouraging the creation and dissemination of expressive works.¹¹ To that end, the Copyright Act grants authors the exclusive right to reproduce, distribute, perform, display, or license their works.¹²

While the Copyright Act imposes liability only for direct infringement of authors' exclusive rights, courts have also protected copyright monopoly privileges through the imposition of secondary infringement liability. Direct liability is codified at § 501(a) of the Copyright Act: "Anyone who violates any of the exclusive rights of the copyright owner as provided by sections 106 through 122 . . . is an infringer."¹³ In contrast, the two recognized theories of secondary copyright liability, contributory and vicarious infringement, are common law doctrines.¹⁴

Contributory liability evolved from the tort concept of enterprise liability, and exists when: (1) the alleged secondary infringer has knowledge of direct infringement by another and (2) said infringer causes, induces, or materially contributes to the infringement.¹⁵ Vicarious copyright infringement grew out of the agency doctrine of *respondeat superior*, although a finding of vicarious infringement does not require a formal agency relationship between the vicarious and direct infringer.¹⁶ Rather, liability under this theory arises from: (1) direct financial interest in the

11. The Constitution grants to Congress 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." U.S. CONST. art. I, § 8, cl. 8; see also *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 432 (1984) ("The immediate effect of our copyright law is to secure a fair return for an 'author's' creative labor. But the ultimate aim is, by this incentive, to stimulate artistic creativity for the general public good.").

12. See 17 U.S.C. § 106 (2000). There are certain exceptions to these exclusive rights, such as fair use. See *id.* § 107.

13. *Id.* § 501(a).

14. See 3 MELVIN B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 12.04 (2004).

15. *Id.*; see also *Gershwin Publ'g Corp. v. Columbia Artists Mgmt., Inc.*, 443 F.2d 1159, 1162 (2d Cir. 1971) (defining a contributory copyright infringer as "one who, with knowledge of the infringing activity, induces, causes, or materially contributes to the infringing conduct of another").

16. 3 NIMMER & NIMMER, *supra* note 14, § 12.04.

infringement of another and (2) the right and ability to supervise the infringing conduct.¹⁷

B. *Sony Corp. of Am. v. Universal Studios, Inc.*

In 1984, the *Sony* Court faced the question of how to assess the secondary liability of a technology provider that markets or distributes a product that may be used for infringing purposes.¹⁸ Plaintiffs Disney and Universal Studios sought to establish Sony's liability based upon the allegations that Sony: (1) supplied the "means" to accomplish infringement of their copyrighted television programs and movies through the "record" function of the Betamax VTR and (2) encouraged infringing activity by advertising its product.¹⁹ The *Sony* majority specifically rejected this argument, stating that there existed no judicial precedent or statutory mandate to support such a theory of liability.²⁰ Instead, the Court turned to the "staple article of commerce" doctrine from patent law for guidance.²¹ This exception to secondary liability, codified at § 271 of the Patent Act, states that a patentee cannot enjoin others from making, using, or selling an article, even if the article capable of being used to infringe a patent, if the article is also "a staple article or commodity of commerce suitable for substantial noninfringing use."²² The Court recognized two important concepts underlying this doctrine: (1) "the critical importance of not allowing the patentee to extend his monopoly beyond the limits of his specified grant"²³ and (2) the need to "strike a balance between . . . effective—not merely symbolic—protection of the statutory monopoly, and the rights of others freely to engage in substantially unrelated areas of commerce."²⁴ Finding these issues

17. *Id.* In a series of early decisions known as the "Dance Hall cases," federal courts first defined the contours of vicarious copyright liability. *See, e.g.,* *Dreamland Ball Room, Inc. v. Shapiro, Bernstein & Co.*, 36 F.2d 354 (7th Cir. 1929) (holding that the proprietor of a dance hall is liable for unauthorized performances of copyrighted musical compositions in the hall if the performances are for the profit of the proprietor).

18. *See Sony Corp. of America v. Universal City Studios, Inc.*, 464 U.S. 417, 420 (1984).

19. *Id.* at 436.

20. *Id.* at 437-38. The plaintiffs asserted that the Court's previous ruling in *Kalem Co. v. Harper Bros.*, 222 U.S. 55 (1911), substantiated their theory. However, the *Sony* majority rejected this argument, stating that "*Kalem* did not merely provide the 'means' to accomplish an infringing activity; the producer supplied the work itself, albeit in a new medium of expression"—namely, an unauthorized film version of the book *Ben Hur*. *Id.* at 436.

21. *See id.* at 440-41.

22. *Id.* at 440.

23. *Id.* at 441.

24. *Id.* at 442.

equally relevant to the question of secondary copyright liability,²⁵ the majority declared “the sale of copying equipment, like the sale of other articles of commerce, does not constitute contributory [copyright] infringement if the product is . . . capable of substantial noninfringing uses.”²⁶

Under this newly created standard, the majority concluded that Sony could not be held liable as a contributory infringer because the Betamax VTR was capable of at least one substantial noninfringing use: the private, noncommercial time-shifting of television programs.²⁷

C. Understanding Peer-To-Peer File Sharing Systems

“Peer-to-peer” is one species of a general class of computer networking paradigms. These paradigms prescribe the way in which nodes of a network are connected to each other (sometimes referred to as the logical network topology) and the direction in which data flows from node to node.²⁸

Perhaps the most familiar type of networking paradigm is the “client/server” model utilized by many popular Internet applications, such as the World Wide Web (WWW) and File Transfer Protocol (FTP).²⁹ In the client/server model, there are two types of network nodes: the data provider (server) and data consumer (client).³⁰ Data consumers connect to data providers in a “hub and spoke” fashion, and data on the network

25. *Id.* (“[I]n both areas [copyright and patent law] the contributory infringement doctrine is grounded on the recognition that adequate protection of a monopoly may require the courts to look beyond actual duplication of a device or publication to the products or activities that make such duplication possible.”)

26. *Id.*

27. *Id.*

28. *See generally* DAVID BARKAI, PEER-TO-PEER COMPUTING: TECHNOLOGIES FOR SHARING AND COLLABORATING ON THE NET 4-19 (2002); Jim McKeeth, *A Guide to Peer-2-Peer*, at <http://www.bsdg.org/Jim/Peer2Peer/Paper/3214.html> (last visited Jan. 14, 2005).

29. *See* Jesse M. Feder, *Is Betamax Obsolete?: Sony Corp. of America v. Universal City Studios, Inc. in the Age of Napster*, 37 CREIGHTON L. REV. 859, 863 (2004) (noting that the client/server paradigm is the “predominant model for most interactions between Internet users and Internet resources”); *see also* Tim Wu, *When Code Isn’t Law*, 89 VA. L. REV. 679, 719-20 (2003) (identifying the World Wide Web as the “archetypal client-server model”).

30. Client/server systems are occasionally referred to as “two tier” architectures to reflect the hierarchical relationship between provider and consumer. Note, however, that there also exist multi-tier architectures that fall under the rubric of “client/server.” These multi-tier approaches incorporate intermediate processing layers between the logical client and server for various purposes, such as queuing and application execution. *See Client/Server Software Architectures—An Overview*, at http://www.sei.cmu.edu/str/descriptions/clientserver_body.html (last updated Jan. 9, 2004).

flows from provider to consumer.³¹ By way of illustration, consider the typical, two-step WWW transaction. A client user first requests a resource (such as a webpage or file) by typing in a Uniform Resource Locator (URL) address or clicking a hypertext link in her browser window. The web server identified by the URL receives this request and then responds by transmitting, or “serving,” the specified resource. Note that the WWW client does not in turn “serve” information to the server or other clients. Thus, the information flow is unidirectional and all of the data available on the network is centralized on server nodes.³²

In the peer-to-peer paradigm, the dichotomy between client and server is lost.³³ Each network node is considered an equal “peer” that has the ability to serve data to, and consume data from, each other.³⁴ Thus, the total information pool accessible on this type of network is decentralized among all of the nodes, rather than centralized on servers.³⁵

P2P file sharing applications such as Grokster and Napster are built upon the P2P model and allow users to perform two functions: (1) “share” files with other online users by designating local files as available for download (usually by placing them in a “shared” folder recognized by the program) and (2) search for and download other users’ shared files.³⁶ Computer users can participate in a P2P file sharing network by first downloading application software, usually from the P2P provider’s website, and then installing and executing the software.³⁷ This will log in the user’s computer as a node on the P2P network and allow the user to begin sending data to, or receiving data from, other users.³⁸ The “P2P network” itself is simply the aggregate of all of the users of a P2P application online at a particular point in time.³⁹

There are several types of P2P file sharing systems, and they represent different approaches to managing the data decentralization inherent in the P2P paradigm.⁴⁰ Recall that the information pool in P2P networks, unlike client/server networks, is spread out among all of the nodes. Therefore, a

31. See McKeeth, *supra* note 28 (describing the client/server model as exhibiting a “star” or “hub and spoke” topology at the logical level).

32. See Feder, *supra* note 29.

33. See BARKAI, *supra* note 28, at 5 (“The client-server duality exhibited by a peer is a central feature of P2P.”).

34. See *id.* at 4-5.

35. See Feder, *supra* note 29.

36. See Wu, *supra* note 29, at 717-18.

37. *Id.* at 721.

38. See *id.* at 717-18.

39. *Id.*

40. See *id.* at 727-40.

P2P platform must provide some mechanism for searching the data that is available. At present, there are three methods that have been implemented to tackle this problem: centralized indexing, supernode indexing, and local indexing.⁴¹

In the case of centralized indexing, the P2P provider operates and maintains one or more servers that handle the job of indexing the files available on the network and processing user queries.⁴² This arrangement places the P2P provider in the position of an arbiter between those users requesting and offering a given file. This also requires the provider to maintain and store a physical list of users' files (the index) on its own machine(s).⁴³ Despite the administrative requirements involved, this indexing model has certain technical benefits. For example, the use of dedicated computers as indexing servers means that search performance will likely be better than other, more decentralized schemes.⁴⁴ In addition, the extra measure of control provided by centralized search processing may allow the P2P provider to better regulate security of the system.⁴⁵ The Napster platform, discussed below, employed a centralized indexing model.⁴⁶ Napster also used its central servers for non-search related functions such as user registration and authentication.⁴⁷

Supernode indexing is a hybrid scheme that attempts to capture the performance advantages of centralized indexing, but without the burden on the provider to maintain any central servers.⁴⁸ The indexing servers in this model, known as supernodes, are actually user computers on the network selected by the software's protocols based on detected bandwidth.⁴⁹ These select user nodes handle the duties of the above described centralized indexing servers. The clear advantage to this method is that the P2P provider is taken "out of the loop" of its users' file sharing activities to the extent that (1) the provider does not need to store any information pertaining to shared files and (2) the provider's equipment is not physically involved in the chain of events from user request to file download.⁵⁰

41. See Feder, *supra* note 29, at 864-67.

42. *Id.* at 864.

43. See *id.*

44. See *id.* at 865-66.

45. See generally BARKAI, *supra* note 28, at 192-203 (discussing the security issues implicated in P2P networks).

46. See Feder, *supra* note 29, at 864-65.

47. See *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004, 1011-12 (9th Cir. 2001).

48. See Feder, *supra* note 29, at 865.

49. Wu, *supra* note 29, at 734.

50. See Feder, *supra* note 29, at 865-66.

Finally, the local indexing model is a completely decentralized approach to user searching. In this case there is no aggregated index, whether on user or corporate servers. Instead, each node on the network simply maintains an index of the local files being shared on that node.⁵¹ User queries are propagated from node to node until the file is found (or, more likely, an arbitrary propagation cap is reached).⁵² Like the supernode model, this approach is attractive to P2P providers because it does not require the administration of central indexing resources. However, local indexing is not as bandwidth efficient as the previously described solutions because of the large amount of network traffic generated by node-to-node searching.⁵³

II. THE PRIOR PEER-TO-PEER CASES

P2P file sharing systems enable the trading of any type of digital file, including digitized forms of copyrighted media such as music, books, and even motion pictures. Not surprisingly then, the proliferation of unregulated P2P file sharing on the Internet has been accompanied by an explosion in online copyright infringement.⁵⁴ In response, copyright owners and stakeholders from the music recording industry have filed a series of lawsuits against P2P software providers.⁵⁵

It is worthwhile to note here that all of the P2P cases decided thus far have agreed on a few basic points. First, as a threshold matter, the reproduction and distribution of copyrighted works by users of P2P networks constitute direct infringement.⁵⁶ Second, *Sony* is the controlling authority

51. *Id.* at 865.

52. *See id.* P2P platforms based on the local indexing model often use propagation caps to limit user search requests to a manageable subset of the network. *Id.*

53. *Id.* at 866.

54. *See generally* Peter S. Menell, *Can Our Current Conception of Copyright Law Survive the Internet Age?: Envisioning Copyright Law's Digital Future*, 46 N.Y.L. SCH. L. REV. 62 (2002-2003) (discussing the impact of digital technologies such as P2P networks, and the widespread copyright infringement they have engendered, on the entertainment industries).

55. While copyright owners continue their legal battles against P2P providers, they have also begun to target individual P2P users for infringement lawsuits. *See* Elizabeth Miles, Note, *In re Aimster & MGM Studios, Inc. v. Grokster, Ltd.: Peer-to-Peer and the Sony Doctrine*, 19 BERKELEY TECH. L.J. 21, 56-57 (2004).

56. The Ninth Circuit engaged in a fair use analysis to determine whether users of the Napster system were direct infringers. The court concluded that trading copyrighted MP3 files over the Napster network did not constitute fair use and thus directly infringed the copyrights on the traded works. *See A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004, 1013-18 (9th Cir. 2001).

on the issue of secondary copyright liability. Where the courts have differed is in interpreting the extent to which the *Sony* “substantial noninfringing uses” standard shields P2P providers.

A. *A&M Records, Inc. v. Napster*

Napster was the first mainstream P2P platform to appear, and it quickly grew in size and notoriety; within a year of its debut, tens of millions of users were actively trading MP3 files on its network daily.⁵⁷ However, Napster also quickly attracted the attention of the music industry and the Recording Industry Association of America (RIAA). Hoping to shut down online infringement at its apparent source, copyright owners and the RIAA brought suit against Napster in December of 1999.⁵⁸ The Ninth Circuit found Napster liable for both contributory and vicarious copyright infringement, and the company went bankrupt shortly thereafter.⁵⁹

The Napster system employed a central indexing P2P model whereby Napster maintained central servers for file indexing and user registration.⁶⁰ These servers played a key role in shaping the Ninth Circuit’s legal analysis. Napster claimed that, as a technology provider of a product capable of substantial noninfringing uses, it was shielded from secondary liability under *Sony*.⁶¹ The court acknowledged the relevance of the *Sony* standard to the case, but also asserted that Napster’s maintenance and operation of central servers created a separate basis of liability regarding its conduct under the common law test for contributory copyright infringement.⁶² Therefore, the court held that (1) under *Sony*, it could not impute constructive knowledge of infringement if the Napster software was capable of substantial noninfringing uses, but (2) *Sony* aside, Napster could still be liable as a contributory infringer if it had actual knowledge of specific acts of infringement and materially contributed to those acts.⁶³ In a separate part of its decision, the court also considered Napster’s vicarious liability under the common law vicarious infringement test.⁶⁴

57. See Wu, *supra* note 29, at 728.

58. See *id.*

59. *Id.* at 729.

60. *Napster*, 239 F.3d at 1011.

61. *Id.* at 1020.

62. See *id.* (“We are compelled to make a clear distinction between the architecture of the Napster system and Napster’s conduct in relation to the operational capacity of the system.”).

63. *Id.* at 1020-21.

64. *Id.* at 1022. The Ninth Circuit declined to apply *Sony* to the doctrine of vicarious liability, although some commentators have suggested that the *Sony* majority did, in fact, intend for its rule to extend to both theories of secondary liability. See, e.g., Mark A.

In retrospect, the court's combination of the *Sony* substantial noninfringing use inquiry with the knowledge prong of the common law test is awkward because there is no clear doctrinal connection between the *Sony* standard and constructive knowledge.⁶⁵ Even in *Sony* itself, the Supreme Court acknowledged that Sony knew its VTRs were being used to commit acts of infringement.⁶⁶ Nevertheless, Sony was shielded from liability due to the noninfringing capabilities of its product.

The issue of conduct became the lynchpin in the copyright owners' case against Napster. The court made no finding as to whether the Napster software satisfied the substantial noninfringing uses standard,⁶⁷ but held Napster liable for contributory infringement because (1) it had actual knowledge of infringing content on its network from notices provided by the RIAA and (2) it materially contributed to infringement by providing its centralized services.⁶⁸ Similarly, the court found Napster liable for vicarious infringement because it stood to financially benefit from increasing levels of infringing activity on its network, and it had the right and ability to supervise its users by way of its user registration and authentication system.⁶⁹

The Ninth Circuit's application of *Sony* can best be understood as a two-stage analysis of Napster as a provider of both (1) a *service* (Napster's maintenance and operation of its network) and (2) a *product* (the Napster P2P software). In the former case, a measure of control over infringing activity is implicated and, thus, the common law contributory infringement test applies. In the latter, *Sony* applies. The court can be understood to have held Napster liable as a service provider because Napster was in a position to materially contribute to known acts of infringement and it did

Lemley & R. Anthony Reese, *Reducing Digital Copyright Infringement Without Restricting Innovation*, 56 STAN. L. REV. 1345, 1358-59 (2004).

65. See 2 PAUL GOLDSTEIN, COPYRIGHT § 6.1.2 (Supp. 2005).

66. *Sony Corp. of America v. Universal City Studios, Inc.*, 464 U.S. 417, 426 (1984) ("The District Court assumed that Sony had constructive knowledge of the probability that the Betamax machine would be used to record copyrighted programs.").

67. *Napster*, 239 F.3d at 1021 (noting that "the district court improperly confined the use analysis to current uses, ignoring the system's capabilities," but "whether we might arrive at a different result is not the issue here").

68. *Id.* at 1022.

69. *Id.* at 1023 (noting that Napster had the ability to block individual infringers' access to the system and failed to exercise that right to prevent known acts of infringement).

so.⁷⁰ As a result, the court did not have to resolve the question of Napster's contributory liability as a product provider.

The injunction the court imposed upon Napster reflected this distinction between service and product. The injunction's terms did not require Napster to stop distributing its software; rather, the order required Napster to modify its conduct in administering its network in order to comply with the applicable common law.⁷¹ As a practical matter, however, Napster was unable to fully comply with the court's injunction and ultimately shut down.⁷²

B. *In re Aimster Copyright Litigation*

In the *Aimster* case, music copyright owners brought suit for secondary copyright infringement against Aimster, a P2P service that piggy-backed on America Online's Instant Messenger technology.⁷³ The Seventh Circuit addressed the question of whether the district court was correct in granting a preliminary injunction against Aimster,⁷⁴ and concluded that the injunction was appropriate because Aimster failed to show any actual substantial noninfringing uses of its service and thus the plaintiffs were likely to prevail at trial.⁷⁵

In reaching its decision, the Seventh Circuit outlined a number of considerations that it believed to be relevant in applying the *Sony* doctrine to P2P technology cases. These considerations, although mainly dicta, significantly limited the protection offered by the "substantial noninfringing uses" shield. First, the court recognized that, unlike Sony, P2P service providers may have an ongoing relationship with their customers, and such a relationship (to the extent to which the provider has control over its users' activities) should be a factor in determining the liability of the provider as a contributory infringer.⁷⁶

70. See Lee B. Burgunder, Comment, *Reflections on Napster: The Ninth Circuit Takes a Walk on the Wild Side*, 39 AM. BUS. L.J. 683, 687-88 (2002) (identifying control as the distinguishing factor between providers Sony and Napster).

71. *Napster*, 239 F.3d at 1027.

72. See Wu, *supra* note 29, at 730.

73. The Aimster service was only available to users of AOL; furthermore, Aimster users could only trade files by connecting to a chat room enabled by the AOL service. *In re Aimster Litigation*, 334 F.3d 643, 646 (7th Cir. 2003).

74. *Id.*

75. *Id.* at 652.

76. However, the Seventh Circuit also noted that a court must take into account the provider's ability to stop known infringing conduct without practically affecting the availability of substantial noninfringing uses of the service. Thus, as an example, the court theorized that a provider of instant messenger software should not be held contribu-

Second, the Seventh Circuit interpreted *Sony* to suggest that courts must estimate and balance the proportion of infringing and noninfringing uses of a product or service in order to assess contributory liability.⁷⁷ To support its contention, the court asserted that the *Sony* majority implicitly engaged in a balancing of the infringing and noninfringing uses of the Betamax VTR.⁷⁸ According to the *Aimster* court, the *Sony* majority's "action in striking the cost-benefit trade-off in favor of Sony came to seem prescient" once the potential of the prerecorded videocassette market became evident.⁷⁹

Third, the Seventh Circuit addressed the concept of "willful blindness" and stated that purposely preventing oneself from acquiring actual knowledge of infringing activity could not serve as a defense against contributory liability.⁸⁰ *Aimster* employed encryption technology in its network to purposely shield itself from any actual knowledge of the material its users shared.⁸¹ The court rejected the defendant's argument that it could escape contributory liability through such a tactic.⁸²

Fourth, the *Aimster* court suggested that even when there are substantial noninfringing uses of an "Internet file-sharing service, . . . to avoid liability as a contributory infringer the provider of the service must show that it would have been disproportionately costly for him to eliminate or at least to reduce substantially the infringing uses."⁸³ It is not clear whether the court meant to apply this rule to all products and services, or specifically to Internet file-sharing services.

Finally, the court held that the mere physical capability of a product or service for noninfringing use is insufficient to invoke the *Sony* shield.⁸⁴ Rather, in the context of possible future noninfringing uses, the important inquiry is how probable those potential uses are.⁸⁵ To hold otherwise, claimed the court, would "be an extreme result, and one not envisaged by

torily liable for the infringing conduct of its users, even though it could prevent those infringements by policing its service, because such liability would be overly burdensome to the provider and would threaten the continued availability of legitimate uses for its instant messenger software. *Id.* at 648.

77. *See id.* at 649.

78. *Id.*

79. *Id.* at 649-50.

80. *Id.* at 650-51.

81. *Id.*

82. *Id.*

83. *Id.* at 653.

84. *Id.* at 651.

85. *Id.*

the *Sony* majority.”⁸⁶ Applying this last rule, the court found that Aimster failed to show either actual or probable future noninfringing uses of its service, and thus the *Sony* shield did not apply.⁸⁷

III. *MGM STUDIOS, INC. V. GROKSTER, LTD.*

A. Facts and Procedural Posture

In the district court case *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd.* (“*Grokster I*”), plaintiff copyright owners, a consolidated group of organizations from the music recording and motion picture industries, sued defendants Grokster and StreamCast Networks for contributory and vicarious copyright infringement.⁸⁸ Grokster and StreamCast distributed P2P file sharing software that was conceptually similar to, but technically distinguishable from, previous generations such as Napster.⁸⁹ Grokster’s software was a self-branded version of “FastTrack” networking technology that it licensed from Kazaa BV.⁹⁰ StreamCast also originally used FastTrack, but by the time of this lawsuit had migrated its product, known as Morpheus, to an open source P2P protocol called Gnutella.⁹¹

The Grokster platform employed the supernode P2P model whereby select user computers on the network acted as indexing servers.⁹² The Morpheus platform employed a fully decentralized local indexing P2P model.⁹³ Thus, neither defendant stored any file information on its own machines to facilitate user searching. This was in contrast to Napster, which owned and operated central indexing servers.⁹⁴ Additionally, Grokster and StreamCast did not collect any user registration information and therefore possessed no ability to authenticate or track users on its networks.⁹⁵ In short, “[n]o infringing files or lists of infringing files [were] hosted by defendants, and the defendants [did] not regulate or provide access.”⁹⁶

86. *Id.*

87. *Id.* at 653.

88. 259 F. Supp. 2d 1029, 1031 (C.D. Cal. 2003) [hereinafter *Grokster I*].

89. *Id.* at 1032.

90. *Id.* Kazaa BV was also a defendant in the district court case, but failed to defend against the action (Kazaa had, by that time, passed its P2P software platform to Sharman Networks). Consequently, the court entered a default judgment against Kazaa. *Id.*

91. *Id.*

92. *Grokster II*, 380 F.3d 1154, 1159 (9th Cir. 2004).

93. *See id.*

94. *Id.*

95. *Id.* at 1164.

96. *Id.*

It was undisputed that users of the Grokster and Morpheus software engaged in direct copyright infringement by reproducing and distributing digital versions of copyrighted media.⁹⁷ However, defendants asserted that they merely provided a product to the public over which they had no control and therefore were free from any secondary liability for how end users chose to use their networks.⁹⁸

The plaintiffs and defendants filed cross-motions for summary judgment on the issues of contributory and vicarious liability.⁹⁹ The district court granted partial summary judgment in favor of Grokster and Stream-Cast,¹⁰⁰ which the copyright owners then appealed to the Ninth Circuit. In August 2004, the Ninth Circuit affirmed the district court's decision.¹⁰¹

B. The Ninth Circuit's Analysis

With respect to the question of contributory liability, the Ninth Circuit closely followed the precedents set in *Sony* and *Napster*. As in *Napster*, the court first determined that it could not impute constructive knowledge of infringement to the defendants if their software was capable of substantial noninfringing uses.¹⁰² Absent constructive knowledge, the court held that defendants could only be liable as contributory infringers if they (1) had actual knowledge of specific acts of infringement at the time they contributed to the infringement and (2) materially contributed to the infringement by failing to act upon that knowledge.¹⁰³

Looking to the facts of the case, the court found that there were several substantial noninfringing uses of the Grokster and Morpheus software.¹⁰⁴ As one "striking example," the court pointed to the music band Wilco, which released its music onto the file sharing networks after it failed to negotiate a recording contract.¹⁰⁵ As a result of the widespread interest generated by this release, the band was able to secure a new contract.¹⁰⁶

97. *Grokster I*, 259 F. Supp. 2d 1029, 1034 (C.D. Cal. 2003). The plaintiffs alleged that approximately 90% of the files available on the defendants' networks constituted copyrighted material, of which the plaintiffs owned 70%. *Grokster II*, 380 F.3d at 1158.

98. *Grokster I*, 259 F. Supp. 2d at 1031.

99. *Id.*

100. *Id.* The grant of summary judgment applied only to the defendants' liability arising from the versions of their software in distribution at the start of the district court trial. *Grokster II*, 380 F.3d at 1166.

101. *Grokster II*, 380 F.3d at 1157.

102. *Id.* at 1160.

103. *Id.* at 1161.

104. *Id.*

105. *Id.*

106. *Id.*

The court also noted that both the Grokster and Morpheus systems were used to facilitate the distribution of public domain and government materials.¹⁰⁷ In the court's view, these uses were sufficient to satisfy the *Sony* standard.

Having found that the defendants did not have constructive knowledge of infringement under *Sony* and *Napster*, the court also concluded that defendants did not have actual knowledge *at a time when they contributed* to infringement.¹⁰⁸ Although the record indicated that the defendants did have actual knowledge of infringing activity through various means,¹⁰⁹ the decentralized architecture of the Grokster and Morpheus platforms necessarily precluded the defendants from contributing to infringement at *any* time. Specifically, the defendants did not store any file indexes on their own machines and, therefore, did not provide the "site" or "facilities" for infringement.¹¹⁰ Thus, Grokster and Morpheus did not have the requisite control over users' infringing conduct to constitute contribution. This analysis also meant that the defendants did not materially contribute to infringement under the second prong of the common law test.

With respect to the question of vicarious liability, the Ninth Circuit again followed *Napster* and applied the common law vicarious infringement test (rather than *Sony*).¹¹¹ The court first found that defendants clearly derived a financial benefit through their advertising revenue.¹¹² Nevertheless, the court held that Grokster and StreamCast did not have the right and ability to supervise its users, as is required by the common law test, because they did not have the technical ability to regulate their users' access to their networks.¹¹³ The copyright owners argued that the defendants could have modified their client software, such as by installing "filters" to block infringing content and thus had the ability to "police" their

107. *Id.*

108. *See id.* at 1162.

109. *Grokster I*, 259 F. Supp. 2d 1029, 1036-37 (C.D. Cal. 2003) (noting that there was a "massive volume" of evidence pointing to the defendants' actual knowledge, including "documents suggesting that both Defendants marketed themselves as 'the next Napster,' that various searches were performed by Defendants' executives for copyrighted song titles or artists, that various internal documents reveal Defendants were aware that their users were infringing copyrights, and that Plaintiffs sent Defendants thousands of notices regarding alleged infringement").

110. *Id.* at 1038 (borrowing the "site and facilities" test for material contribution from *Napster*).

111. *See Grokster II*, 380 F.3d at 1164.

112. *Id.*

113. *See id.* at 1164-65 (noting that the Grokster and Morpheus systems did not have a user registration or log-in capability and therefore could not restrict individual user access to the networks).

users' conduct.¹¹⁴ The court rejected this argument by drawing a distinction between (1) the obligation to police when there is an ongoing measure of control and (2) the obligation to design one's product to be less susceptible to infringement.¹¹⁵ The court noted that there is, in fact, no obligation of the latter kind under the copyright law and that the defendants' software was more akin to a product than an "integrated service."¹¹⁶ Therefore, the court held that the defendants were not liable as vicarious infringers.¹¹⁷

The Ninth Circuit concluded its opinion with a caution to other circuits. In its view, P2P software is simply the latest in a long series of technologies that have threatened, but now peacefully coexist with, our copyright regime.¹¹⁸ Thus, the courts should be wary of expanding the copyright monopoly in the face of emergent technologies:

[A]s we have observed, we live in a quicksilver technological environment with courts ill-suited to fix the flow of internet innovation. The introduction of new technology is always disruptive to old markets, and particularly to those copyright owners whose works are sold through well-established distribution mechanisms. Yet, history has shown that time and market forces often provide equilibrium in balancing interests, whether the new technology be a player piano, a copier, a tape recorder, a video recorder, a personal computer, a karaoke machine, or an MP3 player. Thus, it is prudent for courts to exercise caution before restructuring liability theories for the purposes of addressing specific market abuses, despite their apparent present magnitude.¹¹⁹

IV. DISCUSSION

In *Grokster II*, the Ninth Circuit took a large step towards protecting future innovation in digital technologies by declining to hold P2P providers *Grokster* and *StreamCast* liable as secondary infringers. At the same time, the Ninth Circuit's decision has created a conflict with the Seventh Circuit on the proper application of the *Sony* doctrine, thus requiring final adjudication by the Supreme Court. The following discussion will proceed in five parts. Section A demonstrates the existence of a bona fide circuit

114. *Id.* at 1165-66.

115. *See id.*

116. *Id.*

117. *Id.* at 1166.

118. *See id.* at 1166-67.

119. *Id.* at 1167 (citations omitted).

split between the Ninth and Seventh Circuits. Section B highlights doctrinal differences that do not necessarily constitute a circuit split, but nevertheless should be clarified by the Supreme Court. The discussion in Section C argues that the language of the *Sony* decision is inconsistent in parts and thus engenders confusion. Section D demonstrates that the *Grokster II* and *Aimster* opinions reflect fundamental differences of opinion on the proper balance of technology and copyright in the P2P context. The final section, Section E, concludes by elucidating some of the legal and policy issues implicated by the Ninth and Seventh Circuit outcomes.

A. *Grokster II* Creates a Circuit Split with the Seventh Circuit on the Issue of Potential Noninfringing Uses

While the *Grokster II* and *Aimster* opinions reached sharply divergent conclusions on the applicability of the *Sony* defense, some commentators have questioned whether a circuit split actually exists.¹²⁰ Viewed narrowly, the Seventh Circuit's holding can be seen as merely invalidating the *Sony* shield in the absence of *any* showing of a potential or actual, substantial noninfringing use.¹²¹ This reasoning is arguably implicit in *Sony* itself and not disputed in *Grokster II*. However, the Seventh Circuit's decision can also be read as turning specifically on the *improbability* of a potential noninfringing use.¹²² This consideration is inconsistent with the Ninth Circuit's understanding of *Sony* as explained in *Grokster II*, and provides the basis for a legitimate circuit split.¹²³

In determining whether the *Aimster* service fell within the scope of *Sony* doctrine, the Seventh Circuit enumerated five potential noninfringing uses of the software.¹²⁴ These included the distribution of musical works by startup artists who have waived their copyrights and the formation of user "buddy" groups through which users would be able to share ideas and opinions on topics such as popular music¹²⁵—two uses which *Aimster* had specifically cited as possible legitimate applications of its software at the district court level.¹²⁶ The Seventh Circuit acknowledged that all five of the uses were "possibilities," but stated that the mere capability of nonin-

120. See, e.g., Derek Slater, *A Copyfighter's Musings*, *Grokster, Intent, and Cert*, <http://blogs.law.harvard.edu/cmusings/2004/08/22#a752> (last updated Aug. 22, 2004) ("Posner's broader interpretation of *Sony* was irrelevant to the *Aimster* case, and thus its conflict with *Grokster* may also be irrelevant.").

121. See *In re Aimster Litigation*, 334 F.3d 643, 652 (7th Cir. 2003).

122. See *id.* at 653.

123. See *Grokster II*, 380 F.3d at 1162.

124. *Aimster*, 334 F.3d at 652-53.

125. *Id.* at 652.

126. See *In re Aimster Litigation*, 252 F. Supp. 2d 634, 653 (N.D. Ill. 2002).

fringing use would not be sufficient to implicate *Sony*: "It is not enough, as we have said, that a product or service be physically capable, as it were, of a noninfringing use."¹²⁷ Thus, the court's explicit narrowing of *Sony* to exclude "improbable" uses led directly to its holding against *Aimster*.

In *Grokster II*, the Ninth Circuit acknowledged that the *Aimster* ruling was based on an inquiry of "how 'probable' the noninfringing uses of a product are," and that this analysis was premised on a "fundamental disagreement" with its own interpretation of *Sony*.¹²⁸ Interestingly, the Ninth Circuit attempted to downplay the significance of this disagreement later in the same paragraph by suggesting that the outcome of the *Grokster* litigation would not have been different under *Aimster* principles.¹²⁹ The court was correct in the sense that *Grokster* and *StreamCast* were able to demonstrate actual noninfringing uses of its software, thus rendering the question of probability moot.¹³⁰ However, this does not diminish the existence of a doctrinal split; it merely demonstrates that the Ninth and Seventh Circuit interpretations can reach the same conclusion under certain fact patterns. It is apparent that the two approaches could produce differing results under slightly different facts.

B. *Grokster II* and *Aimster* Also Diverge on Other Important Doctrinal Issues That Require Clarification by the Supreme Court

Beyond the specific question of how to construe the validity of potential uses, the Ninth and Seventh Circuits diverged on three other key issues: (1) the need to estimate the proportion of noninfringing and infringing uses; (2) the role of willful blindness; and (3) the duty of a service provider to implement safeguards against user infringements. Although the Seventh Circuit's thoughts on these issues can be considered dicta, they shed further light on the extent of the current circuit conflict.

First, with respect to the proportion of uses, the *Aimster* court suggested that "when a supplier is offering a product or service that has noninfringing as well as infringing uses, some estimate of the respective magnitudes of these uses is necessary for a finding of contributory infringement."¹³¹ As a corollary, the Seventh Circuit claimed that *Aimster*'s evidentiary burden included demonstrating the frequency of any actual nonin-

127. *Aimster*, 334 F.3d at 653.

128. *Grokster II*, 380 F.3d at 1162 (stating that the mere capability of substantial noninfringing uses is sufficient to invoke the *Sony* shield).

129. *Id.*

130. *See id.* at 1161.

131. *Aimster*, 334 F.3d at 649.

fringing uses: "Aimster has failed to produce any evidence that its service has ever been used for a noninfringing use, let alone evidence concerning the frequency of such uses."¹³² Given the lack of evidence, the court did not have the opportunity to adjudicate on exactly how the "frequency" of a noninfringing use would factor into its analysis.¹³³ Nevertheless, the court's assertions suggest, particularly when viewed in the P2P context, that technology providers should not be protected from indirect liability if their technology is primarily used for infringement.¹³⁴

The Ninth Circuit specifically rejected any balancing of uses. In response to the copyright owners' argument that the "vast majority" of uses of the defendants' software were illegal, the court reiterated that *Sony* did not contemplate a substantial noninfringing use as a primary use; rather, the product "need only be *capable* of substantial noninfringing uses."¹³⁵

Second, on the issue of willful blindness, the Seventh Circuit noted "[w]illful blindness is knowledge, in copyright law (where indeed it may be enough that the defendant *should* have known of the direct infringement), as it is in the law generally."¹³⁶ This is a significant point because, if applied to the facts of *Grokster II*, the defendants could have been held liable. The Ninth Circuit no doubt understood that the *Grokster* and *Morpheus* platforms were designed, at least partially, to isolate its providers from the infringing activities of its end users. Thus, the court could have found that the defendants had constructive knowledge from this willful blindness, together with material contribution arising from the "design around" engineering itself. However, the Ninth Circuit did not address this possibility in the opinion. Instead, it stated:

the peer-to-peer file-sharing technology at issue is not simply a tool engineered to get around the holdings of the *Napster* cases. The technology has numerous other uses, significantly reducing the distribution costs of public domain and permissively shared

132. *Id.* at 653.

133. *Id.*

134. Commentators who disagree with a plain language interpretation of the *Sony* rule in the digital context have proposed a number of alternative legal tests for secondary infringement. *See, e.g.,* Feder, *supra* note 29, at 902-13 (suggesting that courts should find liability when "the commercial significance of the legitimate use of a product is small in relation to its illegitimate use"); *see* Miles, *supra* note 55, at 45-48 (discussing the various legal approaches that have been proposed).

135. *Grokster II*, 380 F.3d at 1162.

136. *Aimster*, 334 F.3d at 650 (citations omitted).

art and speech, as well as reducing the centralized control of that distribution.¹³⁷

Unfortunately, this statement does not really confront the hard issue of the defendants' willfulness because it says more about P2P technology in general than the defendants' application of it. Furthermore, from a technical standpoint, the court's implication that a for-profit enterprise would purposely decentralize its service to gain some sort of financial or architectural advantage is not particularly plausible. Increasing decentralization in a network service generally decreases the security, performance, and scalability of that service.¹³⁸ Thus, it is reasonable to assume that Grokster and StreamCast were driven by considerations separate from technical merits when creating their P2P platforms.

Finally, the Seventh Circuit suggested that, regardless of a service provider's liability under the *Sony* standard, it has a duty to implement economically feasible safeguards that either eliminate or substantially reduce any copyright infringement that might result from use of its service.¹³⁹ In other words, in the absence of such safeguards (or evidence that such mechanisms would be disproportionately costly to implement), a service provider could be guilty of secondary copyright infringement despite the existence of substantial noninfringing uses.¹⁴⁰ This is a duty that was not contemplated at all in *Sony or Grokster II*, and places a heavy, and likely unmanageable, burden on service providers.

C. The *Sony* Decision Does Not Provide Clear Guidance for Lower Courts

The doctrinal differences described above can be attributed, in part, to the equivocal manner in which the Supreme Court focused its analysis in the *Sony* decision. The *Sony* majority articulated a broad legal rule, but made a point of highlighting factual details from the district court's findings that implied a much narrower standard. For example, the majority noted that the consumer practice of time-shifting—a use that the majority spent a great deal of time and effort in justifying as a fair use—was the primary use of the Betamax VTR.¹⁴¹ The Court quoted various surveys

137. *Grokster II*, 380 F.3d at 1164.

138. See Wu, *supra* note 29, at 719; see also Feder, *supra* note 29, at 868 ("Peer-to-peer networking is an inferior choice to a central server configuration if the operator's priority is to be able to ensure reliable service, to exercise control over the nature and quality of content or to make the most efficient use of network resources.").

139. See *Aimster*, 334 F.3d at 653.

140. *Id.*

141. *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 423 (1984).

which showed that over 75% of Sony's customers used their VTRs to time-shift programs.¹⁴² Furthermore, the Court observed that the vast majority of Betamax owners still watched as much regularly scheduled television programming as before, suggesting that the commercial impact of time-shifting was minimal.¹⁴³ The Court also stressed that the plaintiffs in the case owned, at most, 10% of the copyrighted television programming on the air at the time.¹⁴⁴ While these comments do not preclude the Supreme Court from fashioning a broad rule, they raise the opportunity for courts like the Seventh Circuit to narrowly interpret *Sony* in a way that is still consistent with its factual posture.

D. *Grokster II* and *Aimster* Reflect Fundamental Differences of Opinion on the Proper Balancing of Technology and Copyright in the Digital Age

At a policy level, the Ninth and Seventh Circuits' divergent interpretations seem to be driven by a fundamental disagreement on the relative importance of technological progress and strict copyright protection in the digital era. The Seventh Circuit's secondary liability analysis in *Aimster* was specifically tailored to address the apparent abuses engendered by P2P file sharing technology. For example, P2P networks are primarily, although not solely, used for widespread infringement—thus, the need to consider the proportion of infringing and noninfringing uses. Additionally, P2P providers can structure their code to blind themselves to, but handsomely profit from, user infringement—thus, the need to impute knowledge and impose a duty to stop infringing activities. The *Aimster* court was clearly swayed by the new concerns raised by P2P and sought to stretch *Sony* in order to enforce copyright owners' rights.

In contrast, the legal analysis in *Grokster II* indicates that the Ninth Circuit's primary concern was not for the rights of plaintiff copyright owners, but for the continued development of technology and commerce. Thus, the court declined to consider the willful blindness of P2P providers, or engage in any quantitative comparison of infringing to noninfringing uses. Instead, the court emphasized that the literal "capable of substantial noninfringing uses" standard should apply to P2P providers, regardless of "specific market abuses" or the plaintiffs' "immediate economic aims."¹⁴⁵

In a sense, the *Aimster* and *Grokster II* decisions are judicial manifestations of the opposing interests in the current P2P debate: strict protection

142. *Id.* at 424.

143. *Id.* at 423-24.

144. *Id.* at 443.

145. *Grokster II*, 380 F.3d 1154, 1166-67 (9th Cir. 2004).

of copyright on the one hand, and technological progress on the other.¹⁴⁶ The Supreme Court needs to provide definitive guidance on if, and how, the balance of these interests should be reweighed in the digital age.

E. Legal and Policy Implications of the Ninth and Seventh Circuit Approaches

Given the uncertain future of secondary copyright liability, it is useful to reflect on the implications of the current circuit decisions. From a legal perspective, *Grokster II* indicates that, at least in the Ninth Circuit, providers of digital technologies will be largely immune from secondary copyright infringement litigation, provided they can demonstrate the capability of substantial noninfringing uses and they do not structure their technology in a way that implicates control over their users' conduct. Considerations such as primary use of the product/service, commercial impact of infringing uses, and the developer's intent in creating the technology are irrelevant. On the other hand, the *Aimster* decision will likely trigger further lawsuits in the Seventh Circuit from the entertainment industry in the face of new technologies because the decision leaves important legal questions about secondary liability—such as how the proportion of infringing to noninfringing uses should be balanced—as yet unanswered.

From a public policy perspective, the relatively stable P2P legal landscape engendered by *Grokster II* will promote investment in and development of further P2P platforms and other digital technologies.¹⁴⁷ At the same time, that development will probably be distinctly influenced by law.¹⁴⁸ In the case of P2P software, the *Grokster II* holding creates the incentive, whether technically desirable or not, to decentralize services as much as possible. This result may have adverse implications on the security, performance, and stability of future P2P platforms that may be substantially used for newly discovered, noninfringing purposes.

Additionally, the Ninth Circuit's decision may be perceived by some as an endorsement of services used to infringe copyrights, thus reinforcing the popular perception that Internet copyright infringement is not an illegal

146. Commentators on both sides of this debate have weighed in on the relative merits of stronger or weaker protection for technology providers against secondary copyright liability. These different views are expressed in the amicus briefs that have been submitted to the Supreme Court in the *Grokster* case, which are listed at http://www.eff.org/IP/P2P/MGM_v_Grokster (last visited Feb. 27, 2005).

147. See Lemley & Reese, *supra* note 64, at 1386-90.

148. See generally Ryan Roemer, *The Digital Evolution: Freenet and the Future of Copyright on the Internet*, 2002 UCLA J.L. & TECH. 5 (discussing new P2P technologies such as Freenet that have been developed to withstand the legal challenges encountered by previous systems).

or, at least, a serious, offense.¹⁴⁹ This would, of course, exacerbate the problems of copyright owners trying to protect their intellectual property without the tools of contributory and vicarious copyright infringement litigation.¹⁵⁰

Aimster's interpretation of *Sony* will no doubt lead to more equitable consequences for copyright owners in certain cases.¹⁵¹ However, it will also likely put a freeze on the development of technologies that may be used by the public for both infringing and noninfringing purposes.¹⁵² The threat of expensive and risky litigation, the uncertainty in how to develop one's product to avoid secondary liability, and the impossibility of divining how consumers may exploit new technologies are all factors that will likely discourage the creation of new products and services.¹⁵³

V. CONCLUSION

Digital technologies such as P2P file sharing networks have fundamentally changed the way we deal with information. Unfortunately, these technologies have also created what is widely referred to as the "digital

149. See Wu, *supra* note 29, at 724 (highlighting a 1989 Congressional Office of Technology Assessment survey that found sixty-three percent of respondents considered making copies of copyrighted audio material for friends to be "perfectly acceptable"). Professor Wu further argues that P2P networks exploit this social norm by creating a sense of noncommercial "community sharing" among peers. *Id.* at 724-25.

150. Commentators have proposed a number of regulatory, business, and technological schemes as alternatives for copyright owners to pursuing secondary infringement litigation against P2P providers. See, e.g., Lemley & Reese, *supra* note 64, at 1406-25 (discussing, *inter alia*, a levy system for compensating copyright owners and a streamlined dispute resolution system for enforcing copyrights against direct infringers); Jennifer Norman, *Staying Alive: Can the Recording Industry Survive Peer-to-Peer?*, 26 COLUM. J.L. & ARTS 371, 401-09 (2003) (identifying the creation of legitimate online content distribution channels, stronger DRM technologies, and advertising campaigns aimed at changing social norms as alternatives).

151. However, whether such a rule would further promote the output of creative works by artists—a first principle of copyright law—is debatable. Some scholars suggest that artists would not be deterred from producing works in the absence of strong copyright protection, and that our existing copyright regime mainly serves to keep intact current mechanisms of content distribution. See, e.g., Raymond Shih Ray Ku, *The Creative Destruction of Copyright: Napster and the New Economics of Digital Technology*, 69 U. CHI. L. REV. 263, 266-69 (2002); Mark S. Nadel, *How Current Copyright Law Discourages Creative Output: The Overlooked Impact of Marketing*, 19 BERKELEY TECH. L.J. 785 (2004).

152. See Lemley & Reese, *supra* note 64, at 1374-89; see also Heather Green, *Commentary: Are the Copyright Wars Chilling Innovation?*, BUSINESSWEEK, Oct. 11, 2004, http://www.businessweek.com/magazine/content/04_41/b3903473.htm.

153. See Lemley & Reese, *supra* note 64, at 1374-89.

copyright dilemma”—namely, the uncontrolled and widespread proliferation of copyright infringement on the Internet.¹⁵⁴ Copyright owners have attempted to protect their rights against P2P software providers on theories of secondary liability, and the courts have responded with inconsistent results. The most recent P2P decision, *Grokster II*, creates a conflict with the Seventh Circuit’s *Aimster* decision on the interpretation of the *Sony* doctrine and, thus, raises important doctrinal questions that require clarification by the Supreme Court. The resolutions to those questions will ultimately define the future course of copyright and digital technology.

154. See COMMITTEE ON INTELLECTUAL PROPERTY RIGHTS AND THE EMERGING INFORMATION INFRASTRUCTURE, NAT’L RESEARCH COUNCIL, *THE DIGITAL DILEMMA: INTELLECTUAL PROPERTY IN THE INFORMATION AGE* 23 (2000), available at <http://www.nap.edu/books/0309064996/html>.