

United States Court of Appeals,
Seventh Circuit.

In re: AIMSTER COPYRIGHT LITIGATION.
Appeal of: John Deep, Defendant.

No. 02-4125.

334 F.3d 643 (7th Cir. 2003)

Argued June 4, 2003.
Decided June 30, 2003.

Recording industry owners of copyrights in musical performances brought contributory and vicarious infringement action against Internet website operator. The United States District Court for the Northern District of Illinois, 252 F.Supp.2d 634, Marvin E. Aspen, J., granted preliminary injunction for plaintiffs, and appeal was taken. The Court of Appeals, Posner, Circuit Judge, held that: (1) evidence supported finding that plaintiffs were likely to prevail on merits, and (2) balance of harms favored granting of preliminary injunction.

Affirmed.

Before POSNER, RIPPLE, and WILLIAMS, Circuit Judges.

POSNER, Circuit Judge.

Owners of copyrighted popular music filed a number of closely related suits, which were consolidated and transferred to the Northern District of Illinois by the Multidistrict Litigation Panel, against John Deep and corporations that are controlled by him and need not be discussed separately. The numerous plaintiffs, who among them appear to own most subsisting copyrights on American popular music, claim that Deep's "Aimster" Internet service (recently renamed "Madster") is a contributory and vicarious infringer of these copyrights. The district judge entered a broad preliminary injunction, which had the effect of shutting down the Aimster service until the merits of the suit are finally resolved, from which Deep appeals. Aimster is one of a number of enterprises (the former Napster is the best known) that have been sued for facilitating the swapping of digital copies of popular music, most of it copyrighted, over the Internet. (For an illuminating discussion, see Tim Wu, "When Code Isn't Law," 89 *Va. L. Rev.* 679 (2003), esp. 723-41; and with special reference to Aimster, see Alec Klein, "Going Napster One Better; Aimster Says Its File-Sharing Software Skirts Legal Quagmire," *Wash. Post*, Feb. 25, 2001, p. A1.) To simplify exposition, we refer to the appellant as "Aimster" and to the appellees (the plaintiffs) as the recording industry.

Teenagers and young adults who have access to the Internet like to swap computer files containing popular music. If the music is copyrighted, such swapping, which involves making and transmitting a digital copy of the music, infringes copyright. The swappers, who are ignorant or more commonly disdainful of copyright and in any event discount the likelihood of being sued or prosecuted for copyright infringement, are the direct infringers. But firms that facilitate their infringement, even if they are not themselves infringers because they are not making copies of the music that is shared, may be liable to the copyright owners as contributory infringers. Recognizing the impracticability or futility of a copyright owner's suing a multitude of individual infringers ("chasing individual consumers is time consuming and is a teaspoon solution to an ocean problem," Randal C. Picker, "Copyright as Entry Policy: The Case of Digital Distribution," 47 *Antitrust Bull.* 423, 442 (2002)), the law allows a copyright holder to sue a contributor to the infringement instead, in

*646 effect as an aider and abettor. Another analogy is to the tort of intentional interference with contract, that is,

inducing a breach of contract. See, e.g., *Sufrin v. Hosier*, 128 F.3d 594, 597 (7th Cir.1997). If a breach of contract (and a copyright license is just a type of contract) can be prevented most effectively by actions taken by a third party, it makes sense to have a legal mechanism for placing liability for the consequences of the breach on him as well as on the party that broke the contract.

The district judge ruled that the recording industry had demonstrated a likelihood of prevailing on the merits should the case proceed to trial. He so ruled with respect to vicarious as well as contributory infringement; we begin with the latter, the more familiar charge.

The Aimster system has the following essential components: proprietary software that can be downloaded free of charge from Aimster's Web site; Aimster's server (a server is a computer that provides services to other computers, in this case personal computers owned or accessed by Aimster's users, over a network), which hosts the Web site and collects and organizes information obtained from the users but does not make copies of the swapped files themselves and that also provides the matching service described below; computerized tutorials instructing users of the software on how to use it for swapping computer files; and "Club Aimster," a related Internet service owned by Deep that users of Aimster's software can join for a fee and use to download the "top 40" popular-music files more easily than by using the basic, free service. The "AIM" in "Aimster" stands for AOL instant-messaging service. Aimster is available only to users of such services (of which AOL's is the most popular) because Aimster users can swap files only when both are online and connected in a chat room enabled by an instant-messaging service.

Someone who wants to use Aimster's basic service for the first time to swap files downloads the software from Aimster's Web site and then registers on the system by entering a user name (it doesn't have to be his real name) and a password at the Web site. Having done so, he can designate any other registrant as a "buddy" and can communicate directly with all his buddies when he and they are online, attaching to his communications (which are really just e-mails) any files that he wants to share with the buddies. All communications back and forth are encrypted by the sender by means of encryption software furnished by Aimster as part of the software package downloadable at no charge from the Web site, and are decrypted by the recipient using the same Aimster-furnished software package. If the user does not designate a buddy or buddies, then *all* the users of the Aimster system become his buddies; that is, he can send or receive from any of them.

Users list on their computers the computer files they are willing to share. (They needn't list them separately, but can merely designate a folder in their computer that contains the files they are willing to share.) A user who wants to make a copy of a file goes online and types the name of the file he wants in his "Search For" field. Aimster's server searches the computers of those users of its software who are online and so are available to be searched for files they are willing to share, and if it finds the file that has been requested it instructs the computer in which it is housed to transmit the file to the recipient via the Internet for him to download into his computer. Once he has done this he can if he wants make the file available for sharing with other users of the Aimster system by listing it as explained above. In principle, therefore, the purchase of a single CD could be levered into the distribution within days or even hours of millions of identical, near-perfect (depending on the compression format used) copies of the music recorded on the CD--hence the recording industry's anxiety about file-sharing services oriented toward consumers of popular music. But because copies of the songs reside on the computers of the users *647 and not on Aimster's own server, Aimster is not a direct infringer of the copyrights on those songs. Its function is similar to that of a stock exchange, which is a facility for matching offers rather than a repository of the things being exchanged (shares of stock). But unlike transactions on a stock exchange, the consummated "transaction" in music files does not take place in the facility, that is, in Aimster's server.

What we have described so far is a type of Internet file-sharing system that might be created for innocuous purposes such as the expeditious exchange of confidential business data among employees of a business firm. See Daniel Nasaw, "Instant Messages Are Popping Up All Over," *Wall St. J.*, June 12, 2003, p. B4; David A. Vise, "AOL Makes Instant-Messaging Deal," *Wash. Post*, June 12, 2003, p. E5. The fact that copyrighted materials might sometimes be shared between users of such a system without the authorization of the copyright owner or a fair-use privilege would not make the firm a contributory infringer. Otherwise AOL's instant-messaging system, which Aimster piggybacks on, might be deemed a contributory infringer. For there is no doubt that some of the attachments that AOL's multitudinous subscribers transfer are copyrighted, and such distribution is an infringement unless authorized by the owner of the

copyright. The Supreme Court made clear in the *Sony* decision that the producer of a product that has substantial noninfringing uses is not a contributory infringer merely because some of the uses actually made of the product (in that case a machine, the predecessor of today's videocassette recorders, for recording television programs on tape) are infringing. *Sony Corp. of America, Inc. v. Universal City Studios, Inc.*, 464 U.S. 417, 104 S.Ct. 774, 78 L.Ed.2d 574 (1984); see also *Vault Corp. v. Quaid Software Ltd.*, 847 F.2d 255, 262-67 (5th Cir.1988). How much more the Court held is the principal issue that divides the parties; and let us try to resolve it, recognizing of course that the Court must have the last word.

Sony's Betamax video recorder was used for three principal purposes, as Sony was well aware (a fourth, playing home movies, involved no copying). The first, which the majority opinion emphasized, was time shifting, that is, recording a television program that was being shown at a time inconvenient for the owner of the Betamax for later watching at a convenient time. The second was "library building," that is, making copies of programs to retain permanently. The third was skipping commercials by taping a program before watching it and then, while watching the tape, using the fast-forward button on the recorder to skip over the commercials. The first use the Court held was a fair use (and hence not infringing) because it enlarged the audience for the program. The copying involved in the second and third uses was unquestionably infringing to the extent that the programs copied were under copyright and the taping of them was not authorized by the copyright owners--but not all fell in either category. Subject to this qualification, building a library of taped programs was infringing because it was the equivalent of borrowing a copyrighted book from a public library, making a copy of it for one's personal library, then returning the original to the public library. The third use, commercial-skipping, amounted to creating an unauthorized derivative work, see *WGN Continental Broadcasting Co. v. United Video, Inc.*, 693 F.2d 622, 625 (7th Cir.1982); *Gilliam v. American Broadcasting Cos.*, 538 F.2d 14, 17-19, 23 (2d Cir.1976); cf. *Ty, Inc. v. GMA Accessories, Inc.*, 132 F.3d 1167, 1173 (7th Cir.1997), namely a commercial-free copy that would reduce the copyright owner's income from his original program, *648 since "free" television programs are financed by the purchase of commercials by advertisers.

Thus the video recorder was being used for a mixture of infringing and noninfringing uses and the Court thought that Sony could not demix them because once Sony sold the recorder it lost all control over its use. *Sony Corp. of America, Inc. v. Universal City Studios, Inc.*, *supra*, 464 U.S. at 438, 104 S.Ct. 774. The court ruled that "the sale of copying equipment, like the sale of other articles of commerce, does not constitute contributory infringement if the product is widely used for legitimate, unobjectionable purposes. Indeed, it need merely be capable of substantial noninfringing uses. The question is thus whether the Betamax is capable of commercially significant noninfringing uses. In order to resolve that question, we need not explore *all* the different potential uses of the machine and determine whether or not they would constitute infringement. Rather, we need only consider whether on the basis of the facts as found by the district court a significant number of them would be non-infringing. Moreover, in order to resolve this case we need not give precise content to the question of how much use is commercially significant. For one potential use of the Betamax plainly satisfies this standard, however it is understood: private, noncommercial timeshifting in the home." *Id.* at 441, 104 S.Ct. 774.

[1] In our case the recording industry, emphasizing the reference to "articles of commerce" in the passage just quoted and elsewhere in the Court's opinion (see *id.* at 440, 104 S.Ct. 774; cf. 35 U.S.C. § 271(c)), and emphasizing as well the Court's evident concern that the copyright holders were trying to lever their copyright monopolies into a monopoly over video recorders, *Sony Corp. of America, Inc. v. Universal City Studios, Inc.*, *supra*, 464 U.S. at 441-42 and n. 21, 104 S.Ct. 774, and also remarking Sony's helplessness to prevent infringing uses of its recorders once it sold them, argues that *Sony* is inapplicable to services. With regard to services, the industry argues, the test is merely whether the provider knows it's being used to infringe copyright. The industry points out that the provider of a service, unlike the seller of a product, has a continuing relation with its customers and therefore should be able to prevent, or at least limit, their infringing copyright by monitoring their use of the service and terminating them when it is discovered that they are infringing. Although Sony could have engineered its video recorder in a way that would have reduced the likelihood of infringement, as by eliminating the fast-forward capability, or, as suggested by the dissent, *id.* at 494, 104 S.Ct. 774, by enabling broadcasters by scrambling their signal to disable the Betamax from recording their programs (for that matter, it could have been engineered to have only a play, not a recording, capability), the majority did not discuss these possibilities and we agree with the recording industry that the ability of a service provider to prevent its customers from infringing is a factor to be considered in determining whether the provider is a contributory infringer. Congress so

recognized in the Digital Millennium Copyright Act, which we discuss later in this opinion.

It is not necessarily a controlling factor, however, as the recording industry believes. If a service facilitates both infringing and noninfringing uses, as in the case of AOL's instant-messaging service, and the detection and prevention of the infringing uses would be highly burdensome, the rule for which the recording industry is contending could result in the shutting down of the service or its annexation by the copyright owners (contrary to the clear *649 import of the *Sony* decision), because the provider might find it impossible to estimate its potential damages liability to the copyright holders and would anyway face the risk of being enjoined. The fact that the recording industry's argument if accepted might endanger AOL's instant-messaging service (though the service might find shelter under the Digital Millennium Copyright Act--a question complicated, however, by AOL's intention, of which more later, of offering an encryption option to the visitors to its chat rooms) is not only alarming; it is paradoxical, since subsidiaries of AOL's parent company (AOL Time Warner), such as Warner Brothers Records and Atlantic Recording Corporation, are among the plaintiffs in this case and music chat rooms are among the facilities offered by AOL's instant-messaging service.

[2] We also reject the industry's argument that *Sony* provides no defense to a charge of contributory infringement when, in the words of the industry's brief, there is anything "more than a mere showing that a product may be used for infringing purposes." Although the fact was downplayed in the majority opinion, it was apparent that the Betamax was being used for infringing as well as noninfringing purposes--even the majority acknowledged that 25 percent of Betamax users were fast forwarding through commercials, *id.* at 452 n. 36, 104 S.Ct. 774--yet Sony was held not to be a contributory infringer. The Court was unwilling to allow copyright holders to prevent infringement effectuated by means of a new technology at the price of possibly denying noninfringing consumers the benefit of the technology. We therefore agree with Professor Goldstein that the Ninth Circuit erred in *A & M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004, 1020 (9th Cir.2001), in suggesting that actual knowledge of specific infringing uses is a sufficient condition for deeming a facilitator a contributory infringer. 2 Paul Goldstein, *Copyright* § 6.1.2, p. 6:12-1 (2d ed.2003)

The recording industry's hostility to the *Sony* decision is both understandable, given the amount of Internet-enabled infringement of music copyrights, and manifest--the industry in its brief offers five reasons for confining its holding to its specific facts. But it is being articulated in the wrong forum.

[3] Equally, however, we reject Aimster's argument that to prevail the recording industry must prove it has actually lost money as a result of the copying that its service facilitates. It is true that the Court in *Sony* emphasized that the plaintiffs had failed to show that they had sustained substantial harm from the Betamax. *Id.* at 450-54, 456, 104 S.Ct. 774. But the Court did so in the context of assessing the argument that time shifting of television programs was fair use rather than infringement. One reason time shifting was fair use, the Court believed, was that it wasn't hurting the copyright owners because it was enlarging the audience for their programs. But a copyright owner who can prove infringement need not show that the infringement caused him a financial loss. Granted, without such a showing he cannot obtain compensatory damages; but he can obtain statutory damages, or an injunction, just as the owner of physical property can obtain an injunction against a trespasser without proving that the trespass has caused him a financial loss.

What is true is 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. The Court's action in striking the cost-benefit tradeoff in favor of Sony came to seem prescient *650 when it later turned out that the principal use of video recorders was to allow people to watch at home movies that they bought or rented rather than to tape television programs. (In 1984, when *Sony* was decided, the industry was unsure how great the demand would be for prerecorded tapes compared to time shifting. The original Betamax played one-hour tapes, long enough for most television broadcasts but too short for a feature film. Sony's competitors used the VHS format, which came to market later but with a longer playing time; this contributed to VHS's eventual displacement of Betamax.) An enormous new market thus opened for the movie industry--which by the way gives point to the Court's emphasis on potential as well as actual noninfringing uses. But the balancing of costs and benefits is necessary only in a case in which substantial noninfringing uses, present or prospective, are demonstrated.

[4] We also reject Aimster's argument that because the Court said in *Sony* that mere "constructive knowledge" of infringing uses is not enough for contributory infringement, 464 U.S. at 439, 104 S.Ct. 774, and the encryption feature

of Aimster's service prevented Deep from knowing what songs were being copied by the users of his system, he lacked the knowledge of infringing uses that liability for contributory infringement requires. Willful blindness is knowledge, in copyright law (where indeed it may be enough that the defendant *should* have known of the direct infringement, *Casella v. Morris*, 820 F.2d 362, 365 (11th Cir.1987); 2 Goldstein, *supra*, § 6.1, p. 6:6), as it is in the law generally. See, e.g., *Louis Vuitton S.A. v. Lee*, 875 F.2d 584, 590 (7th Cir.1989) (contributory trademark infringement). One who, knowing or strongly suspecting that he is involved in shady dealings, takes steps to make sure that he does not acquire full or exact knowledge of the nature and extent of those dealings is held to have a criminal intent, *United States v. Giovannetti*, 919 F.2d 1223, 1228 (7th Cir.1990), because a deliberate effort to avoid guilty knowledge is all that the law requires to establish a guilty state of mind. *United States v. Josefik*, 753 F.2d 585, 589 (7th Cir.1985); *AMPAT/Midwest, Inc. v. Illinois Tool Works Inc.*, 896 F.2d 1035, 1042 (7th Cir.1990) ("to know, and to want not to know because one suspects, may be, if not the same state of mind, the same degree of fault.") In *United States v. Diaz*, 864 F.2d 544, 550 (7th Cir.1988), the defendant, a drug trafficker, sought "to insulate himself from the actual drug transaction so that he could deny knowledge of it," which he did sometimes by absenting himself from the scene of the actual delivery and sometimes by pretending to be fussing under the hood of his car. He did not escape liability by this maneuver; no more can Deep by using encryption software to prevent himself from learning what surely he strongly suspects to be the case: that the users of his service--maybe *all* the users of his service--are copyright infringers.

[5] This is not to say that the provider of an encrypted instant-messaging service or encryption software is ipso factor a contributory infringer should his buyers use the service to infringe copyright, merely because encryption, like secrecy generally, facilitates unlawful transactions. ("Encryption" comes from the Greek word for concealment.) Encryption fosters privacy, and privacy is a social benefit though also a source of social costs. "AOL has begun testing an encrypted version of AIM [AOL Instant Messaging]. Encryption is considered critical for widespread adoption of IM in some industries and federal agencies." *Vise, supra*. Our point is only that a service provider that would otherwise be *651 a contributory infringer does not obtain immunity by using encryption to shield itself from actual knowledge of the unlawful purposes for which the service is being used.

We also do not buy Aimster's argument that since the Supreme Court distinguished, in the long passage from the *Sony* opinion that we quoted earlier, between actual and potential noninfringing uses, all Aimster has to show in order to escape liability for contributory infringement is that its file-sharing system *could* be used in noninfringing ways, which obviously it could be. Were that the law, the seller of a product or service used *solely* to facilitate copyright infringement, though it was capable in principle of noninfringing uses, would be immune from liability for contributory infringement. That would be an extreme result, and one not envisaged by the *Sony* majority. Otherwise its opinion would have had no occasion to emphasize the fact (at least the majority thought it a fact--the dissent disagreed, 464 U.S. at 458-59, 104 S.Ct. 774) that Sony had not in its advertising encouraged the use of the Betamax to infringe copyright. *Id.* at 438, 104 S.Ct. 774. Nor would the Court have thought it important to say that the Betamax was used "principally" for time shifting, *id.* at 421, 104 S.Ct. 774; see also *id.* at 423, 104 S.Ct. 774, which as we recall the Court deemed a fair use, or to remark that the plaintiffs owned only a small percentage of the total amount of copyrighted television programming and it was unclear how many of the other owners objected to home taping. *Id.* at 443, 104 S.Ct. 774; see also *id.* at 446, 104 S.Ct. 774.

There are analogies in the law of aiding and abetting, the criminal counterpart to contributory infringement. A retailer of slinky dresses is not guilty of aiding and abetting prostitution even if he knows that some of his customers are prostitutes--he may even know which ones are. See *United States v. Giovannetti, supra*, 919 F.2d at 1227; *People v. Lauria*, 251 Cal.App.2d 471, 59 Cal.Rptr. 628 (1967); Rollin M. Perkins & Ronald N. Boyce, *Criminal Law* 746-47 (3d ed.1982). The extent to which his activities and those of similar sellers actually promote prostitution is likely to be slight relative to the social costs of imposing a risk of prosecution on him. But the owner of a massage parlor who employs women who are capable of giving massages, but in fact as he knows sell only sex and never massages to their customers, is an aider and abettor of prostitution (as well as being guilty of pimping or operating a brothel). See *United States v. Sigalow*, 812 F.2d 783, 784, 785 (2d Cir.1987); *State v. Carpenter*, 122 Ohio App.3d 16, 701 N.E.2d 10, 13, 18-19 (1997); cf. *United States v. Luciano-Mosquera*, 63 F.3d 1142, 1149- 50 (1st Cir.1995). The slinky-dress case corresponds to *Sony*, and, like *Sony*, is not inconsistent with imposing liability on the seller of a product or service that, as in the massage-parlor case, is capable of noninfringing uses but in fact is used only to infringe. To the recording industry, a single known infringing use brands the facilitator as a contributory infringer. To the Aimsters of this world,

a single noninfringing use provides complete immunity from liability. Neither is correct.

[6] To situate Aimster's service between these unacceptable poles, we need to say just a bit more about it. In explaining how to use the Aimster software, the tutorial gives as its *only* examples of file sharing the sharing of copyrighted music, including copyrighted music that the recording industry had notified Aimster was being infringed by Aimster's users. The tutorial is the invitation to infringement that the Supreme Court found was missing in *Sony*. In addition, membership in Club *652 Aimster enables the member for a fee of \$4.95 a month to download with a single click the music most often shared by Aimster users, which turns out to be music copyrighted by the plaintiffs. Because Aimster's software is made available free of charge and Aimster does not sell paid advertising on its Web site, Club Aimster's monthly fee is the only means by which Aimster is financed and so the club cannot be separated from the provision of the free software. When a member of the club clicks on "play" next to the name of a song on the club's Web site, Aimster's server searches through the computers of the Aimster users who are online until it finds one who has listed the song as available for sharing, and it then effects the transmission of the file to the computer of the club member who selected it. Club Aimster lists only the 40 songs that are currently most popular among its members; invariably these are under copyright.

The evidence that we have summarized does not exclude the *possibility* of substantial noninfringing uses of the Aimster system, but the evidence is sufficient, especially in a preliminary-injunction proceeding, which is summary in character, to shift the burden of production to Aimster to demonstrate that its service has substantial noninfringing uses. (On burden-shifting in preliminary-injunction proceedings, see *FTC v. University Health, Inc.*, 938 F.2d 1206, 1218-19 (11th Cir.1991); cf. *Johnson v. Cambridge Industries, Inc.*, 325 F.3d 892, 897 (7th Cir.2003); *SEC v. Lipson*, 278 F.3d 656, 661 (7th Cir.2002); *Liu v. T & H Machine, Inc.*, 191 F.3d 790, 795 (7th Cir.1999).) As it might:

1. Not all popular music is copyrighted. Apart from music on which the copyright has expired (not much of which, however, is of interest to the teenagers and young adults interested in swapping music), start-up bands and performers may waive copyright in the hope that it will encourage the playing of their music and create a following that they can convert to customers of their subsequent works.
2. A music file-swapping service might increase the value of a recording by enabling it to be used as currency in the music-sharing community, since someone who only downloads and never uploads, thus acting as a pure free rider, will not be very popular.
3. Users of Aimster's software might form select (as distinct from all-comers) "buddy" groups to exchange noncopyrighted information about popular music, or for that matter to exchange ideas and opinions about wholly unrelated matters as the buddies became friendlier. Some of the chat-room messages that accompany the listing of music files offered or requested contain information or opinions concerning the music; to that extent, though unremarked by the parties, some noninfringing use is made of Aimster's service, though it is incidental to the infringement.
4. Aimster's users might appreciate the encryption feature because as their friendship deepened they might decide that they wanted to exchange off-color, but not copyrighted, photographs, or dirty jokes, or other forms of expression that people like to keep private, rather than just copyrighted music.
5. Someone might own a popular-music CD that he was particularly fond of, but he had not downloaded it into his computer and now he finds himself out of town but with his laptop and he wants to listen to the CD, so he uses Aimster's service to download a copy. This might be a fair use rather than a copyright infringement, by analogy to the time shifting approved as fair use in the *Sony* case. *653 *Recording Industry Ass'n of America v. Diamond Multimedia Systems, Inc.*, 180 F.3d 1072, 1079 (9th Cir.1999); cf. *Vault Corp. v. Quaid Software Ltd.*, *supra*, 847 F.2d at 266-67. The analogy was sidestepped in *A & M Records, Inc. v. Napster, Inc.*, *supra*, 239 F.3d at 1019, because Napster's system did not limit downloading to music on CDs owned by the downloader. The analogy was rejected in *UMG Recordings v. MP3.com, Inc.*, 92 F.Supp.2d 349 (S.D.N.Y.2000), on the ground that the copy on the defendant's server was an unauthorized derivative work; a solid ground, in light of *Sony's* rejection of the parallel argument with respect to time shifting, would have been that the defendant's method for requiring that its customers "prove" that they owned the CDs containing the music they wanted to download was too lax.

All five of our examples of actually or arguably noninfringing uses of Aimster's service are possibilities, but as should be evident from our earlier discussion the question is how probable they are. It is not enough, as we have said, that a product or service be physically capable, as it were, of a noninfringing use. 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. In the words of the district judge, "defendants here have provided no evidence whatsoever (besides the unsupported declaration of Deep) that Aimster is *actually* used for any of the stated non-infringing purposes. Absent is any indication from real-life Aimster users that their primary use of the system is to transfer non-copyrighted files to their friends or identify users of similar interests and share information. Absent is any indication that even a single business without a network administrator uses Aimster to exchange business records as Deep suggests." *In re Aimster Copyright Litigation*, 252 F.Supp.2d 634, 653 (N.D.Ill.2002) (emphasis in original). We have to assume for purposes of deciding this appeal that no such evidence exists; its absence, in combination with the evidence presented by the recording industry, justified the district judge in concluding that the industry would be likely to prevail in a full trial on the issue of contributory infringement. Because Aimster failed to show that its service is ever used for any purpose other than to infringe the plaintiffs' copyrights, the question (as yet unsettled, see Wu, *supra*, at 708 and nn. 95 and 98) of the net effect of Napsterlike services on the music industry's income is irrelevant to this case. If the *only* effect of a service challenged as contributory infringement is to enable copyrights to be infringed, the magnitude of the resulting loss, even whether there is a net loss, becomes irrelevant to liability.

[7] Even when there are noninfringing uses of an Internet file-sharing service, moreover, if the infringing uses are substantial then 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 reduce substantially the infringing uses. Aimster failed to make that showing too, by failing to present evidence that the provision of an encryption capability *effective against the service provider itself* added important value to the service or saved significant cost. Aimster blinded itself in the hope that by doing so it might come within the rule of the *Sony* decision.

It complains about the district judge's refusal to hold an evidentiary hearing. But his refusal was consistent with our decision in *Ty, Inc. v. GMA Accessories, Inc.*, *supra*, 132 F.3d at 1171 (citations omitted), where we explained that "if genuine issues of material fact are created by *654 the response to a motion for a preliminary injunction, an evidentiary hearing is indeed required. But as in any case in which a party seeks an evidentiary hearing, he must be able to persuade the court that the issue is indeed genuine and material and so a hearing would be productive--he must show in other words that he has and intends to introduce evidence that if believed will so weaken the moving party's case as to affect the judge's decision on whether to issue an injunction." Aimster hampered its search for evidence by providing encryption. It must take responsibility for that self-inflicted wound.

[8] Turning to the second issue presented by the appeal, we are less confident than the district judge was that the recording industry would also be likely to prevail on the issue of vicarious infringement should the case be tried, though we shall not have to resolve our doubts in order to decide the appeal. "Vicarious liability" generally refers to the liability of a principal, such as an employer, for the torts committed by his agent, an employee for example, in the course of the agent's employment. The teenagers and young adults who use Aimster's system to infringe copyright are of course not Aimster's agents. But one of the principal rationales of vicarious liability, namely the difficulty of obtaining effective relief against an agent, who is likely to be impecunious, Alan O. Sykes, "The Economics of Vicarious Liability," 93 *Yale L.J.* 1231, 1241-42, 1272 (1984), has been extended in the copyright area to cases in which the only effective relief is obtainable from someone who bears a relation to the direct infringers that is analogous to the relation of a principal to an agent. See 2 Goldstein, *supra*, § 6.2, pp. 6:17 to 6:18. The canonical illustration is the owner of a dance hall who hires dance bands that sometimes play copyrighted music without authorization. The bands are not the dance hall's agents, but it may be impossible as a practical matter for the copyright holders to identify and obtain a legal remedy against the infringing bands yet quite feasible for the dance hall to prevent or at least limit infringing performances. And so the dance hall that fails to make reasonable efforts to do this is liable as a vicarious infringer. *Dreamland Ball Room v. Shapiro, Bernstein & Co.*, 36 F.2d 354, 355 (7th Cir.1929), and other cases cited in *Sony Corp. of America, Inc. v. Universal City Studios, Inc.*, *supra*, 464 U.S. at 437 n. 18, 104 S.Ct. 774; 2 Goldstein, *supra*, § 6.2, pp. 6:18 to 6:20. The dance hall could perhaps be described as a contributory infringer. But one thinks of a contributory infringer as someone who benefits directly from the infringement that he encourages, and that does not seem an apt description of the dance hall, though it does benefit to the extent that competition will force the dance band to charge the dance hall a smaller fee for performing if the band doesn't pay copyright royalties and so has lower costs than it would otherwise have.

How far the doctrine of vicarious liability extends is uncertain. It could conceivably have been applied in the *Sony* case itself, on the theory that while it was infeasible for the producers of copyrighted television fare to sue the viewers who used the fast-forward button on Sony's video recorder to delete the commercials and thus reduce the copyright holders' income, Sony could have reduced the likelihood of infringement, as we noted earlier, by a design change. But the Court, treating vicarious and contributory infringement interchangeably, see *id.* at 435 and n. 17, 104 S.Ct. 774, held that Sony was not a vicarious infringer either. By eliminating the encryption feature and monitoring the use being made of its system, Aimster could like Sony have limited the amount of infringement. *655 Whether failure to do so made it a vicarious infringer notwithstanding the outcome in *Sony* is academic, however; its ostrich-like refusal to discover the extent to which its system was being used to infringe copyright is merely another piece of evidence that it was a contributory infringer.

[9] We turn now to Aimster's defenses under the Online Copyright Infringement Liability Limitation Act, Title II of the Digital Millennium Copyright Act (DMCA), 17 U.S.C. § 512; see 2 Goldstein, *supra*, § 6.3. The DMCA is an attempt to deal with special problems created by the so-called digital revolution. One of these is the vulnerability of Internet service providers such as AOL to liability for copyright infringement as a result of file swapping among their subscribers. Although the Act was not passed with Napster-type services in mind, the definition of Internet service provider is broad ("a provider of online services or network access, or the operator of facilities therefor," 17 U.S.C. § 512(k)(1)(B)), and, as the district judge ruled, Aimster fits it. See 2 Goldstein, *supra*, § 6.3.1, p. 6:27. The Act provides a series of safe harbors for Internet service providers and related entities, but none in which Aimster can moor. The Act does not abolish contributory infringement. The common element of its safe harbors is that the service provider must do what it can reasonably be asked to do to prevent the use of its service by "repeat infringers." 17 U.S.C. § 512(i)(1)(A). Far from doing anything to discourage repeat infringers of the plaintiffs' copyrights, Aimster invited them to do so, showed them how they could do so with ease using its system, and by teaching its users how to encrypt their unlawful distribution of copyrighted materials disabled itself from doing anything to prevent infringement.

[10] This completes our discussion of the merits of Aimster's appeal. But the fact that the recording industry is likely to win this case if it is ever tried is not by itself a sufficient basis for the issuance of a preliminary injunction. A court asked to issue such an injunction must also consider which party will suffer the greater harm as a result of a ruling for or against issuance. Aimster points out that the preliminary injunction has put it out of business; the recording industry ripostes that until it was put out of business Aimster, with an estimated 2 to 3 million users, undoubtedly was facilitating a substantial infringement of music copyrights--and remember that Aimster has presented no evidence of offsetting noninfringing uses. On this record, therefore, the harm to Aimster from the grant of the injunction must be reckoned comparable to the harm that the recording industry would suffer from denial of the preliminary injunction.

[11] The only harm that is relevant to the decision to grant a preliminary injunction is irreparable harm, since if it is repairable by an award of damages at the end of trial there is no need for preliminary relief. The recording industry's harm should the preliminary injunction be dissolved would undoubtedly be irreparable. The industry's damages from Aimster's contributory infringement cannot be reliably estimated and Aimster would in any event be unlikely ever to have the resources to pay them. Aimster's irreparable harm from the grant of the injunction is, if anything, less, because of the injunction bond of \$500,000 that the industry was required to post and that Aimster does not contend is inadequate. (Even without the bond, the recording industry would undoubtedly be good for any damages that Aimster may have sustained from being temporarily shut down, though, bond or no bond, there is still the measurement *656 problem.) Even if the irreparable harms are deemed the same, since the plaintiffs have a stronger case on the merits than Aimster does the judge was right to grant the injunction.

[12] Aimster objects to the injunction's breadth. But having failed to suggest alternative language either in the district court or in this court, it has waived the objection. We cannot find a case that makes this point expressly, but it is implicit in the general principle that arguments made but not developed do not preserve issues for appellate review. E.g., *Jones Motor Co. v. Holtkamp, Liese*, 197 F.3d 1190, 1192 (7th Cir.1999). We are not impressed by Aimster's argument that the district court had an independent duty, rooted in the free-speech clause of the First Amendment, to make sure that the impact of the injunction on communications over the Internet is no greater than is absolutely necessary to provide the recording industry with the legal protection to which it is entitled while the case wends its way to a conclusion. Copyright law and the principles of equitable relief are quite complicated enough without the superimposition of First

Amendment case law on them; and we have been told recently by the Supreme Court not only that "copyright law contains built-in First Amendment accommodations" but also that, in any event, the First Amendment "bears less heavily when speakers assert the right to make other people's speeches." *Eldred v. Ashcroft*, 537 U.S. 186, 123 S.Ct. 769, 788-89, 154 L.Ed.2d 683 (2003). Or, we add, to copy, or enable the copying of, other people's music.

AFFIRMED.