

IN THE
Supreme Court of the United States

METRO-GOLDWYN-MAYER STUDIOS INC., ET AL.,
Petitioners,

v.

GROKSTER, LTD., ET AL.,
Respondents.

**On Writ of Certiorari to the
United States Court of Appeals
for the Ninth Circuit**

**BRIEF OF THE
NATIONAL VENTURE CAPITAL ASSOCIATION
AS *AMICUS CURIAE* IN SUPPORT OF RESPONDENTS**

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<i>Hilton v. South Carolina Pub. Rys. Comm'n</i> , 502 U.S. 197 (1991)	13
<i>Matthew Bender & Co. v. West Publ'g Co.</i> , 158 F.3d 693 (2d Cir. 1998)	18
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<i>Sony Corp. of Am. v. Universal City Studios, Inc.</i> , 464 U.S. 417 (1984)	<i>passim</i>
<i>UMG Recordings, Inc. v. Bertelsmann AG</i> , 222 F.R.D. 408 (N.D. Cal. 2004)	17

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LEGISLATIVE MATERIALS

<i>Home Recording of Copyrighted Works: Hearings Before the Subcomm. on Courts, Civil Liberties, and the Administration of Justice of the House Comm. on the Judiciary, 97th Cong., 2d Sess. (1982), excerpt available at http://cryptome.org/hrcw-hear.htm.....</i>	12
Testimony of Michael D. Eisner, Chairman & CEO, The Walt Disney Company, Before the Committee on Commerce, Science, and Transportation, United States Senate (Feb. 28, 2002), available at http://commerce.senate.gov/hearings/022802eisner.pdf	29

OTHER AUTHORITIES

Apple Press Release, <i>iTunes Music Store Downloads Top a Quarter Billion Songs</i> (Jan. 24, 2005)	14
Brooks Boliek, <i>Mouse Grouse: Dis Boss Lays Into Computer Biz</i> , The Reporter.com, Mar. 1, 2002, available at http://www.larta.org/pl/NewsArticles/02Marc01_HR_Eisner.htm	23

Ted Bridis, <i>Music Group Files 261 Copyright Lawsuits Against Internet Users</i> , Assoc. Press Newswires (Sept. 9, 2003).....	15
Andrew Chin, <i>Antitrust Analysis in Software Product Markets: A First Principles Approach</i> , 18 Harv. J.L. & Tech. 1 (2004)	28
Nicolas Christin, Andreas S. Weigend & John Chuang, <i>Content Availability, Pollution and Poisoning in File Sharing Peer-to-Peer Networks</i> (2005), available at http://p2pecon.berkeley.edu/pub/CWC-EC05.pdf	15
Comm. Daily (Nov. 10, 1988).....	12
Consumer Electronics Association, <i>Video Source Components</i> , available at http://www.ce.org/publications/books_references/digital_america/home_theater/video_source_components.asp	12
Einer Elhauge, <i>Defining Better Monopolization Standards</i> , 56 Stan. L. Rev. 253 (2003)	24-25
Matthew Fagin, Frank Pasquale & Kim Weatherall, <i>Beyond Napster: Using Antitrust Law to Advance and Enhance Online Music Distribution</i> , 8 B.U. J. Sci. & Tech. L. 451 (2002)	17
William W. Fisher III, <i>Promises to Keep: Technology, Law, and the Future of Entertainment</i> (2004)	25
Brian Garrity, <i>Victory Eludes Legal Fight Over File Swapping</i> , Billboard, Apr. 13, 2002, at 86.....	20
Global Insight, <i>Venture Impact 2004: Venture Capital Benefits to the U.S. Economy</i> (2004)	1
2 Paul Goldstein, <i>Copyright</i> (2d ed. 1996)	19

Google News Release, <i>Google Achieves Search Milestone With Immediate Access To More Than 6 Billion Items</i> (Feb. 17, 2004).....	11
Carla Hall, <i>Buchwald Award Set at \$900,000; Both Sides Claim Victory in ‘Coming to America’ Dispute</i> , Wash. Post, Mar. 16, 1992, at B1	21
Assaf Hamdani, <i>Who’s Liable for Cyberwrongs?</i> , 87 Cornell L. Rev. 901 (2002)	17
Jon Healey, <i>MP3.com Sues Former Copyright Counsel</i> , L.A. Times, Jan. 19, 2002, at C2	17
Mary Holden, <i>Intellectual-Property Disputes Flare on the Electronic Frontier</i> , Chi. Daily L. Bull., Apr. 22, 1995, at 1	11
Jim Hu, <i>Music Group Sues Over MP3 Device</i> , CNet News.com (Oct. 9, 1998), available at http://news.com.com/Music+group+sues+over+MP3+device/2100-1023_3-216534.html	12
International Federation of the Phonographic Industry, <i>IFPI:05 Digital Music Report</i> (Jan. 2005), available at http://www.ifpi.org/site-content/library/digital-music-report-2005.pdf	15
Louis Kaplow, <i>The Patent-Antitrust Intersection: A Reappraisal</i> , 97 Harv. L. Rev. 1813 (1984)	25
Jonathan Krim, <i>High-Tech Tension Over Illegal Uses</i> , Wash. Post, Feb. 22, 2005, at E1, available at http://www.washingtonpost.com/wp-dyn/articles/A42401-2005Feb21.html?sub=AR	23
William M. Landes & Richard A. Posner, <i>The Economic Structure of Intellectual Property Law</i> (2003)	20

Mark A. Lemley & R. Anthony Reese, <i>Reducing Digital Copyright Infringement Without Restricting Innovation</i> , 56 Stan. L. Rev. 1345 (2004)	17, 20
Joseph P. Liu, <i>The DMCA and the Regulation of Scientific Research</i> , 18 Berkeley Tech. L.J. 501 (2003)	17
R. Kinsey Lowe, <i>2004: The Bottom Line</i> , L.A. Times, Jan. 3, 2005, at E1	14
Michael S. Mensik & Jeffrey C. Groulx, <i>From the Lightweight "Rio" Flows Heavyweight Battle</i> , Nat'l L.J., Dec. 14, 1998, at B5	11
Joel Mokyr, <i>The Lever of Riches: Technological Creativity and Economic Progress</i> (1990)	6
<i>Music Industry Sues 83-Year-Old Dead Woman</i> , Assoc. Press, (Feb. 4, 2005), available at http://www.boston.com/news/odd/articles/2005/02/04/music_industry_sues_83_year_old_dead_woman	15
Felix Oberholzer & Koleman Strumpf, <i>The Effect of File Sharing on Record Sales: An Empirical Analysis</i> (Mar. 2004), available at http://www.unc.edu/~cigar/papers/FileSharing_March2004.pdf	11
<i>Recording Industry Sues Fayetteville Woman</i> , Assoc. Press State & Local Wire (May 5, 2004).....	15
RIAA, <i>Issues: Frequently Asked Questions — Downloading and Uploading</i> , available at http://www.riaa.com/issues/music/downup_faq.asp	21

RIAA Press Release, <i>Record Industry Announces Mid-Year 2004 Shipment Numbers</i> (Oct. 20, 2004)	14
Dennis Sellers, <i>Jobs: iTunes Is New, Free Jukebox Software</i> (Jan. 9, 2001), available at http://www.macworld.com/news/2001/01/09/itunes/index.php	22
Ithiel de Sola Pool, <i>Technologies of Freedom: On Free Speech in an Electronic Age</i> (Harvard Univ. Press 1983)	8
John Philip Sousa, <i>The Menace of Mechanical Music, originally published in Appleton's Magazine, Vol. 8 (1906), pp. 278-284, reprinted at http://www27.brinkster.com/phonozoic/menace.htm</i>	11
Clive Thompson, <i>The BitTorrent Effect</i> , <i>Wired</i> magazine, Jan. 2005, available at http://www.wired.com/wired/archive/13.01/bittorrent.html	9
Robert Welkos, <i>2 Producers of 'Batman' Sue Warner Entertainment</i> , <i>L.A. Times</i> , Mar. 27, 1992, at D1	21
Rick Whiting, <i>The Sector That Produces Most of Today's Software Probably Will Look Dramatically Different in Just a Few Years — Industry in Flux</i> , <i>InformationWeek</i> (Dec. 6, 2004), available at http://www.informationweek.com/showArticle.jhtml?articleID=5480019	29

INTEREST OF THE *AMICUS CURIAE*¹

Amicus The National Venture Capital Association (“NVCA”) represents the interests of more than 450 venture capital firms in the United States, which together account for more than 85% of venture funding. As the only national trade group for the venture community, the NVCA’s mission is to foster public awareness of the vital role that venture funding plays in driving the United States economy and to advocate public policies that stimulate entrepreneurship and innovation.

While the importance of venture capital firms and the companies they fund to the United States economy is difficult to quantify, recent studies estimate that, in 2003, venture-backed businesses were responsible for more than 10.1 million American jobs and accounted for more than \$1.8 trillion of the United States Gross Domestic Product (“GDP”). See Global Insight, *Venture Impact 2004: Venture Capital Benefits to the U.S. Economy* 1 (2004). Such economic mainstays as Intel, Federal Express, Home Depot, Genentech, Google, and Starbucks were incubated with venture funding. Each year, venture firms invest more than \$18 billion in start-up companies across the country, which accounts for an estimated 72% of all venture investment worldwide. A decidedly American phenomenon, venture capital funds and the companies they back provide a key differentiator animating American economic growth.

The NVCA’s members collectively invest \$15 billion each year, with a particular emphasis on emerging companies in the information technology, communications, and life sciences industries. In addition to providing early funding to young businesses unable to secure capital from

¹ Pursuant to Supreme Court Rule 37.6, counsel for *amicus* represents that they authored this brief and that no entity other than *amicus*, its counsel, or its members made a monetary contribution to its preparation or submission. All parties have consented to the filing of this *amicus* brief, and letters reflecting their blanket consent for the filing of *amicus* briefs in this case are on file with the Clerk.

more traditional sources, NVCA's member firms take an active role in guiding nascent businesses through their start-up phases. They work hand-in-hand with the entrepreneurs and management, lending their experience and expertise while developing long-term partnerships.

NVCA's member firms accordingly have a unique perspective on the hurdles that nascent businesses confront and the background conditions that promote or stifle growth and innovation. NVCA's member firms are deeply concerned that any erosion of the bright-line protection provided by this Court in *Sony Corporation of America v. Universal City Studios, Inc.*, 464 U.S. 417, 442 (1984), for products that are "capable of substantial noninfringing uses" would have a chilling effect on innovation and product design by developers of multiple-use technologies and services. NVCA's members are particularly concerned that the new standards for contributory infringement proposed by petitioners and the United States would be virtually impossible for venture capital firms to accommodate in making their initial investment decisions, when the potential commercial applications of a promising concept are still far in the future. Such malleable standards — vague in their formulation and unpredictable in their application — would invite courts to second-guess design decisions and expose venture firms to potentially ruinous litigation.

INTRODUCTION AND SUMMARY OF ARGUMENT

Any technology or service that makes it possible to copy or distribute information can be used for copyright infringement. The list of such technologies — which today includes computers, the Internet, and e-mail, as well as CD burners, iPods, and peer-to-peer file sharing — is extensive, as is the range of their legitimate uses. Modern life would be impossible to envision without such "dual use" technologies. Indeed, these "technologies of freedom" — which allow the rapid spread of information free of decentralized control — are critical to our modern democ-

racy, as well as to our productivity and economic well-being.

Freedom, however, is sometimes abused. There are, and always have been, those who would abuse the power afforded them by new technologies to copy and distribute works that belong to others. Existing copyright laws provide severe penalties for such direct infringement, recognizing that the few who are caught must provide an example and deterrent for others.

But the entertainment industry has never been satisfied with attacking direct instances of infringement. For more than a century, when it first claimed that the player piano spelled the death of American music, the industry has attacked in turn each new development that facilitates copying and distribution, from phonographs to mimeographs, from audiotape players to VCRs, from compact disks to mp3 players. As each new technology has developed, the industry has sought to destroy or control it, often extending their attacks to the inventors who created and the investors who funded the product or service.

Fortunately, these attacks have been largely unsuccessful. (And their failure, ironically, has been good for the entertainment industry itself, which has in the long run benefited hugely from the new methods of distribution.) Under the bright-line rule established by this Court in *Sony*, technologies and services that are “capable of substantial noninfringing uses” are protected from secondary copyright liability, regardless of whether (or how many) others use those technologies and services for direct infringement of copyrights. Responsibility for copyright infringement rests where it belongs: on the shoulders of those who abuse products to infringe copyrights, not on those who create products capable of substantial noninfringing uses.

This bright-line protection has been critical to technological progress. Entrepreneurs have been able to develop novel products without worrying that illegitimate uses

could impose ruinous liability. Because markets take time to develop, and because the future uses to which a product may one day be put (both legitimate and illegitimate) are not necessarily evident in its early phases, *Sony* allows an innovation to incubate without fear that third-party infringement (present or future) will invite litigation.

Petitioners and their *amici* now ask the Court to overrule *Sony* (either directly or in the guise of interpretation) and to depart from that bright-line rule. But none of their reasons for doing so withstands scrutiny.

First, it is not true that the *Sony* test is meaningless because every product that could be used to infringe is also capable of non-infringing uses. Some products (such as descramblers) might have only infringing uses and would not be protected. *Sony* protects only dual-use products that are capable of substantial non-infringing uses.

Second, the fact that illicit copying is today easier than ever, due to digital technologies, does not spell the death of the entertainment industry any more than the player piano spelled the death of American music. The industry has been crying wolf for a century, while profits have steadily increased. Indeed, products the industry originally attacked, such as the VCR and CD players, are themselves responsible for much of that increase. In any event, any fundamental changes in the law of copyright in light of technological changes should be made, where they have always been made, in Congress, not the courts.

Third, the claim that attacking individual acts of direct infringement is ineffectual is not, and never has been, an excuse for re-directing the industry's fire against the creators of new technologies that are capable of substantial non-infringing uses and, hence, have substantial public-interest benefits. The mandatory mechanism of statutory damages for copyright infringement has crushing implications for multi-purpose technologies, where illicit use by third parties could quickly mount into millions or even

billions of dollars of liability. It would be difficult to imagine a more chilling environment for innovation.

Finally, the fact that a safe harbor for dual-use products might sometimes shelter those with bad intent is not a reason to depart from a bright-line rule. If a company materially assists or encourages specific acts of infringement, secondary liability is appropriate. But the standard activities of investing in, creating, developing, and marketing products capable of substantial non-infringing uses should be protected, without a fact-specific, inherently amorphous (and hence litigation-inviting) inquiry into the motivations or incentives of the inventor.

Even aside from the weakness of their attack on *Sony*, the malleable standards with which petitioners and their *amici* would replace it would have a devastating impact on product innovation. The “predominance” standard proposed by the United States, and supported by petitioners, would necessarily require a fact-intensive, quantitative inquiry into the proportional amount of infringing and non-infringing uses. It would be an open invitation to costly and time-consuming litigation launched by entrenched businesses to quash start-up ventures. And, because the focus of such litigation would necessarily be on a snapshot in time, it would ignore the dynamic processes by which technological innovations move from the laboratory into the marketplace and develop unforeseen beneficial uses.

The product-modification standards proposed by petitioners — whereby courts would decide whether products should be re-designed to incorporate features that would thwart copyright infringement — are even worse. Aside from issues of judicial competence in judging the utility and viability of alternative product designs — which, again, is a dynamic not a static inquiry — such standards would place the entire information technology industry at risk: copyright-protecting devices could potentially be incorporated (at a high cost in re-engineering) at any point in the hardware, software, and distribution networks that

constitute our information infrastructure. The scope of what the entertainment industry is requesting — the potential stranglehold that it seeks over the most vital portion of our information economy — is truly breathtaking and should be rejected.

ARGUMENT

Petitioners and their *amici* ask this Court to overrule *Sony*. In some cases, they ask directly; in others, they purport to seek only a clarification or refinement of the status quo. But the bottom-line result is the same. They seek to move away from the bright-line safe harbor created by the Court, and relied upon by inventors and product developers for the past two decades, in favor of an amorphous test that would invite litigation and uncertainty while suppressing innovation — all without doing anything actually to protect copyrighted materials from direct infringement. The case they make against *Sony* is unconvincing and should in any event be made to Congress, not the Court. More importantly, the tests with which they propose to replace *Sony* would have a devastating impact on the development of legitimate and valuable new products and services for consumers.

I. SONY ESTABLISHED A BRIGHT-LINE RULE THAT PERMITS CAPITAL INVESTMENT AGAINST A BACKDROP OF LEGAL CERTAINTY

1. “[E]very invention is born into an uncongenial society, has few friends and many enemies.”² In *Sony*, this Court fashioned a margin of protection for such nascent technologies. The Court articulated a bright-line rule for determining liability under the doctrine of contributory infringement that armed inventors and product developers — and those who fund them — with the knowledge that a technology or service with legitimate uses would not be driven out of the market because some or even

² Joel Mokyr, *The Lever of Riches: Technological Creativity and Economic Progress* 183 (1990) (internal quotation marks omitted).

most customers may use the product to infringe copyrights.

Borrowing from closely related concepts in patent law, the Court noted that “contributory infringement is confined to the knowing sale of a component *especially made* for use in connection with a particular patent” such that “a finding of contributory infringement is normally the functional equivalent of holding that the disputed article is within the monopoly granted to the patentee.” 464 U.S. at 440-41 (emphasis added). Translating these principles into copyright, the Court held that the sale of an “article[] 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.” *Id.* at 442; *see also id.* at 491 (Blackmun, J., dissenting) (liability only appropriate when “virtually all of the product’s use . . . is to infringe”).

The Court’s bright-line rule in *Sony* has been the midwife for the technological revolution of the past two decades. It is not by chance that the *Sony* decision coincided with a period of unprecedented innovation and technological progress. By establishing a bright-line rule that protects new products and services provided they are “capable of substantial noninfringing uses,” *Sony* has provided critical assurance to entrepreneurs that they could develop novel ideas and products without worrying that some unforeseen future use could impose ruinous liability.

Entrepreneurs frequently invent new products without any clear picture of their potential uses, secure in the belief that a good idea will eventually find a market. That others could use the invention for copyright infringement is and should be irrelevant to the question whether the product or process can be placed in service of alternative, legitimate ends. One cannot even begin to count the staples of modern life — radios, typewriters, tape recorders, cameras, photocopiers, computers, fax machines, cassette

players, cell phones, CD burners, DVD players, e-mail, cable modems and DSL for high-speed Internet access, Internet search engines such as Google and Yahoo, TiVos, and mp3 players such as the iPod — that can be used to infringe copyrights and yet have perfectly legitimate uses that we increasingly could not do without. Peer-to-peer networks are another such innovation, whether used to share photos among family and friends, to promote the music of a new band, or to share research among scholars.

These are technologies of freedom that allow decentralized propagation of information.³ They are critical to a modern democracy, as well as to our economic well-being, and must be protected. Admittedly, freedom is sometimes abused. But *Sony* allows entrepreneurs to innovate secure in the knowledge that a product that may be put to both proper and improper uses will not subject the inventor to ruinous liability, regardless of how the balance ultimately falls. The responsibility for copyright infringement rests squarely where it belongs, on the shoulders of those who abuse such products to engage in specific acts of unauthorized copying.

A critical feature of the *Sony* rule of law, moreover, is that it is inherently forward-looking, focusing on whether a product is capable of non-infringing use. Because markets take time to develop, and because the future uses to which a product may one day be put are not necessarily evident in its early phases, *Sony* allows an innovation to incubate without fear that a third party's present infringement will invite litigation that destroys the prospective venture.

³ Ithiel de Sola Pool, *Technologies of Freedom: On Free Speech in an Electronic Age* 226 (Harvard Univ. Press 1983) (“The technologies used for self-expression, human intercourse, and recording of knowledge are in unprecedented flux. A panoply of electronic devices puts at everyone’s hand capacities far beyond anything that the printing press could offer. Machines that think, that bring great libraries into anybody’s study, that allow discourse among persons a half-world apart, are expanders of human culture.”).

The *Sony* case itself provides the best illustration of the fact that products often arrive before their primary markets emerge. At the time that case was decided, the Betamax was used primarily for copying shows from over-the-air broadcasts, either to build a library of such shows or simply to engage in time-shifting. See 464 U.S. at 423 (surveys by both respondents and Sony “showed that the primary use of the machine for most owners was ‘time-shifting,’” although surveys also showed “that a substantial number of interviewees had accumulated libraries of tapes”). The primary dispute between the majority and the dissent concerned whether time-shifting was itself a fair use of the copyrighted material. *Id.* at 442, 447-56; *id.* at 477-86 (Blackmun, J., dissenting). But the Betamax and its ultimately more successful competitor, the VHS VCR, quickly evolved into something quite different: a means of viewing lawfully rented movies. A whole industry grew up to provide legitimate materials for a product that the entertainment industry sought to crush in its infancy. That was possible only because this Court in *Sony* provided a protected space in which these legitimate uses could grow. In that case, as in many others, the product created its own legitimate market.

In other cases, an illegitimate market might develop after the fact. For example, BitTorrent (*see* p. 23, *infra*) was initially developed to facilitate distribution of open-source software, but the technology was quickly adapted by users for infringing purposes. See Clive Thompson, *The BitTorrent Effect*, *Wired* magazine, Jan. 2005, available at <http://www.wired.com/wired/archive/13.01/bittorrent.html>. There, too, *Sony* shields the creator from liability even if the infringing use should come to predominate. *Sony* thereby places secondary liability for copyright on a par with patent law, which imposes contributory infringement on “goods that are capable only of infringing use in a patented invention.” *Dawson Chem. Co. v. Rohm & Haas Co.*, 448 U.S. 176, 213 (1980).

2. The Court's exercise in line drawing has accordingly provided the legal certainty necessary for start-up firms to mature, often with the support of venture funding. Petitioners and their *amici* offer four reasons why the Court should now depart from that bright-line rule. None withstands scrutiny.

First, petitioners and their *amici* suggest that the *Sony* test is meaningless because every product that could be used to infringe copyrights *could also* be used for non-infringing purposes. See Motion Picture Studio Pet. Br. 35-36; U.S. Br. 9; Law Prof. Br. 8-9; see also *In re Aimster Copyright Litig.*, 334 F.3d 643, 651 (7th Cir. 2003) (noting that almost any technology might be deemed "capable in principle of noninfringing uses"), *cert. denied*, 540 U.S. 1107 (2004). But that is simply not true (though the assertion does show the breathtaking scope of what petitioners hope to accomplish here). For example, a product that overrides the encryption of source code in copyrighted software would not be capable of substantial non-infringing uses. Its sole use would be specifically to permit a copyright violation to occur. See, e.g., *Cable/Home Communication Corp. v. Network Productions, Inc.*, 902 F.2d 829, 837-39 (11th Cir. 1990) (developer liable for promoting television signal descrambling chips).

By contrast, any product that simply permits general digital copying (computers, CD burners, iPods) and distribution (the Internet generally and peer-to-peer software in particular) has far more potential legitimate uses than illegitimate ones because there is much more information that is freely available than is copyright protected. While a majority of peer-to-peer software's current use may involve unauthorized file sharing, it is only a matter of time before the same software performing the same functions will be overtaken by non-infringing uses. In digital form, the roughly 30,000 new music albums released each year

in the United States⁴ take up about 15 terabytes of storage capacity. By way of comparison, more than 5 million terabytes of digital files are produced and stored annually, huge quantities of which — even if subject to copyright protection — are made available for free to anyone with access to the Internet.⁵ By suppressing technologies that ease access to this information, petitioners would have this Court throw the baby out with the bath water.

Second, petitioners and their *amici* suggest that *Sony* must be reconsidered because digital technologies have made the copying and distribution of copyrighted materials too easy. See Motion Picture Studio Pet. Br. 12; Prof. Menell Br. 15-19; Law Prof. Br. 6; *cf.* U.S. Br. 21-22. But the entertainment industry has been crying wolf for a century, ever since John Philip Sousa claimed that the player piano spelled the end of music in America.⁶ Each new technology has been attacked as a grave threat to the sanctity of copyright, yet somehow the sanctity of copyright has survived.⁷ The *Sony* case again provides the

⁴ Felix Oberholzer & Koleman Strumpf, *The Effect of File Sharing on Record Sales: An Empirical Analysis* 25 (Mar. 2004), available at http://www.unc.edu/~cigar/papers/FileSharing_March2004.pdf.

⁵ Google News Release, *Google Achieves Search Milestone With Immediate Access To More Than 6 Billion Items* (Feb. 17, 2004) (explaining that Google had indexed more than 4 billion web pages).

⁶ John Philip Sousa, *The Menace of Mechanical Music*, originally published in *Appleton's Magazine*, Vol. 8 (1906), pp. 278-284, reprinted at <http://www27.brinkster.com/phonozoic/menace.htm>.

⁷ See, e.g., Mary Holden, *Intellectual-Property Disputes Flare on the Electronic Frontier*, *Chi. Daily L. Bull.*, Apr. 22, 1995, at 1 (“Every innovation in copying technology since [the player piano] — from mimeograph machines to audio-cassette players to VCRs — has put copyright laws to a new test.”). “The [Recording Industry Association of America (“RIAA”)], among others, threatened to sue [digital audio tape] equipment manufacturers based on a theory of contributory copyright infringement. . . . In fact, music publishing companies filed an infringement class action against Sony in 1990 when it began to export DAT recorders to the United States.” Michael S. Mensik & Jeffrey C. Groulx, *From the Lightweight “Rio” Flows Heavyweight Battle*, *Nat’l L.J.*, Dec. 14, 1998, at B5. Then, in the late 1980s, the recording indus-

best illustration of this fact. The Chairman of the Motion Picture Association of America testified before Congress that the motion picture industry would suffer devastating financial losses if the VCR were not strangled at birth. *See Home Recording of Copyrighted Works: Hearings Before the Subcomm. on Courts, Civil Liberties, and the Administration of Justice of the House Comm. on the Judiciary, 97th Cong., 2d Sess. (1982)* (“[W]e are facing a very new and a very troubling assault on our fiscal security, on our very economic life and we are facing it from a thing called the video cassette recorder and its necessary companion called the blank tape. . . . I say to you that the VCR is to the American film producer and the American public as the Boston strangler is to the woman home alone.”) (testimony of Jack Valenti, President, Motion Picture Association of America, Inc.), *excerpt available at* <http://cryptome.org/hrcw-hear.htm>. In fact, however, the VCR and its successor the DVD player are today used overwhelmingly to replay legitimately rented videos, and have proved the prime generator of wealth for the movie industry. Video and DVD rentals and sales now generate substantially more revenue than movie theaters.⁸

In any event, even if petitioners are correct that digital technologies are the Armageddon of copyright, that is a point more properly directed to Congress. As this Court noted in *Sony*, as “significant changes in technology” have

try’s trade associations “declared war on recordable Compact Discs, charging they ‘represent an even greater potential threat to copyright owners than Digital Audio Tape.’ ” *Comm. Daily* (Nov. 10, 1988). In 1998, the RIAA filed suit against Diamond Multimedia Technologies to enjoin the release of the Rio mp3 player on the grounds that it facilitates music piracy. *See Jim Hu, Music Group Sues Over MP3 Device*, CNet News.com (Oct. 9, 1998), *available at* http://news.com.com/Music+group+sues+over+MP3+device/2100-1023_3-216534.html.

⁸ In 2003, consumers spent \$16.1 billion on DVDs, \$6.4 billion on VHS purchases/rentals, and \$9.2 billion on movie tickets. *See Consumer Electronics Association, Video Source Components, available at* http://www.ce.org/publications/books_references/digital_america/home_theater/video_source_components.asp.

developed in this country, “it has been the Congress that has fashioned the new rules that new technology made necessary.” 464 U.S. at 430-31 & n.11 (citing player pianos, photocopiers, cable TV, and audio tape recorders). Indeed, Congress has already sought to address issues connected with digital recordings and the Internet in the 1998 Digital Millennium Copyright Act (“DMCA”), without in any way changing the bright-line rule of statutory construction set forth in *Sony*. And Congress has been holding hearings on the specific issue of peer-to-peer file sharing for several years without as yet deciding that any change in the standards for contributory infringement is needed. One issue in particular that has bred caution is the potentially ruinous effects on inventors if copyright’s rigid and punitive statutory remedial scheme were extended to multi-use technologies. *See* pp. 16-17, *infra*.

Because Congress alone has the institutional competence to consider and balance the competing interests at stake here, and because Congress alone can adjust the existing remedial scheme to fit new circumstances, this Court has stressed “[t]he judiciary’s reluctance to expand the protections afforded by the copyright without explicit legislative guidance.” *Sony*, 464 U.S. at 431. Petitioners should address their concerns to Congress rather than ask this Court to rewrite the legal rules for contributory infringement established in *Sony* that have proven so successful. *See id.* (noting that Congress has “the institutional ability to accommodate fully the varied permutations of competing interests that are inevitably implicated by such new technology”). *See also Hilton v. South Carolina Pub. Rys. Comm’n*, 502 U.S. 197, 205 (1991) (“the doctrine of *stare decisis* is most compelling” in cases of “statutory construction”).

Third, petitioners and their *amici* suggest that because infringement is so widespread they must either attack millions of individual acts of infringement or allow the value of their copyrighted works to bleed away, suffering death by a thousand cuts. *See* Motion Picture Studio Pet.

Br. 22; Songwriter Pet. Br. 9, 15; Prof. Menell Br. 13; Law Prof. Br. 13. They want to break out of this “Hobson’s choice,” Baseball Br. 4, by focusing their attacks on the inventors, investors, and entrepreneurs who create the technologies and services that make the many acts of infringement so easy to commit. But that is like the drunk searching for his key under the street lamp because the light is better there. Even if suppressing innovation in the means of copying and distributing materials is more effective than challenging individual acts of infringement, that does not make it legitimate. Products with substantial non-infringing uses should be encouraged not suppressed. Persons who abuse those products to infringe copyrights are liable, not the inventors and designers who try to develop improved technologies.

In any event, petitioners’ argument proves too much. According to them, copyright should already be dead because digital recording and distribution technologies are so widespread and easy to use. Yet the entertainment industry is still thriving.⁹ Obviously, many people still respect copyrights. They buy CDs. They buy or rent DVDs. They download music from industry-sanctioned sources.

And, as for those who do not respect copyrights, the industry has developed means for dealing with them as

⁹ See, e.g., RIAA Press Release, *Record Industry Announces Mid-Year 2004 Shipment Numbers* (Oct. 20, 2004) (“Overall, CDs and all other audio and video music products shipped to retail increased by 8.5 percent in the first six months of 2004 . . . while the dollar value of those shipments increased 4.5 percent.”); R. Kinsey Lowe, *2004: The Bottom Line*, L.A. Times, Jan. 3, 2005, at E1 (“Fueled largely by DVDs, ‘combined consumer spending on home video [in 2004] will end up somewhere north of \$25 billion, up from a little over \$22 billion [in 2003],’ said Scott Hettrick, editor in chief of the trade publication DVD Exclusive.”); Apple Press Release, *iTunes Music Store Downloads Top a Quarter Billion Songs* (Jan. 24, 2005) (“[M]usic fans have purchased and downloaded more than 250 million songs from the iTunes® Music Store. iTunes users are now downloading one and a quarter million songs per day, which is an annual run rate of almost half a billion songs per year.”).

well, however numerous they might be. The entertainment industry has already launched successive waves of litigation in a well-publicized campaign to terrorize homeowners (most of whom couldn't burn a CD or download a song if their lives depended on it) for the sins of their Internet-savvy 13-year-olds.¹⁰ This campaign has enjoyed marked success, with illegal downloads dropping significantly.¹¹ In short, the industry has managed to shine a spotlight on actual cases of infringement and to discourage those with punitive sanctions.¹² Expanding punitive sanctions to inventors and entrepreneurs who create

¹⁰ See, e.g., *Recording Industry Sues Fayetteville Woman*, Assoc. Press State & Local Wire (May 5, 2004) ("A grandmother has been sued by the recording industry for allowing her grandson to illegally download and share about 500 copyrighted songs over the Internet. . . . RIAA has offered to settle the lawsuit for \$3,500, but Johnson said she doesn't have the money."); Ted Bridis, *Music Group Files 261 Copyright Lawsuits Against Internet Users*, Assoc. Press Newswires (Sept. 9, 2003) ("Durwood Pickle, 71, of Richardson, Texas, said his teenage grandchildren downloaded music onto his computer during their visits to his home. . . . 'I didn't do it, and I don't feel like I'm responsible,' Pickle said. . . . [Pickle] said he rarely uses the computer in his home. 'I'm not a computer-type person,' Pickle said."); *Music Industry Sues 83-Year-Old Dead Woman*, Assoc. Press (Feb. 4, 2005), available at http://www.boston.com/news/odd/articles/2005/02/04/music_industry_sues_83_year_old_dead_woman (the woman's daughter explained that her mother hated computers and didn't even know how to turn one on; she added wryly: "I believe that if music companies are going to set examples they need to do it to appropriate people and not dead people[.] . . . I am pretty sure she is not going to leave Greenwood Memorial Park (where she is buried) to attend the hearing.").

¹¹ See, e.g., International Federation of the Phonographic Industry, *IFPI:05 Digital Music Report* at 23 (Jan. 2005) (showing a decline in illegal music files on the Internet from 1.1 billion in April 2003, to 870 million in January 2005, and that the number of infringing web/FTP music sites on the Internet has declined by 25% since January 2004), available at <http://www.ifpi.org/site-content/library/digital-music-report-2005.pdf>.

¹² The industry has also engaged in various forms of self-help, such as "poisoning and pollution." See Nicolas Christin, Andreas S. Weigend & John Chuang, *Content Availability, Pollution and Poisoning in File Sharing Peer-to-Peer Networks* (2005), available at <http://p2pecon.berkeley.edu/pub/CWC-EC05.pdf>.

products with substantial non-infringing uses is neither necessary nor justified.

Finally, petitioners and their *amici* suggest that the *Sony* test encourages bad behavior by inventors and product designers who hide behind its protections in order to make money off infringement. *See* Motion Picture Studio Pet. Br. 9-11, 27-29; U.S. Br. 17; Am. Tax Reform Br. 13-15. That is certainly possible, but it is not a reason to change the bright-line test established by this Court. As long as a product is capable of substantial, non-infringing uses, it is a socially useful product, whose development should be encouraged. Abuse of the product should be attacked, not the product itself, nor the inventor behind it, nor the venture capitalist who funded the venture. If a company materially assists or encourages specific acts of infringement — whether through customer support mechanisms or other communications — secondary liability might well be appropriate. *See, e.g., Cable/Home Communication*, 902 F.2d at 837-39 (active promotion of television signal descrambling chips); *Sega Enters. Ltd. v. MAPHIA*, 948 F. Supp. 923, 933 (N.D. Cal. 1996) (Internet bulletin board operator actively encouraged users to upload copyrighted games). But the mere acts of developing, advertising, marketing, upgrading, and supporting a multi-use product that is capable of substantial non-infringing uses should be protected, without necessitating a fact-specific, inherently amorphous inquiry into the motivations and incentives of the inventor.¹³

It is critical to understand that the threat of secondary liability from copyright suits is qualitatively different from most other sorts of business risk that investors can insure against or build into their risk calculations. The mandatory mechanism of statutory damages — designed to discourage *direct* infringement — has crushing implica-

¹³ *Amicus* NVCA takes no position on whether, on the record here, respondents materially assisted or encouraged specific acts of infringement.

tions for vendors of multi-purpose technologies, where damages from unforeseen users can quickly mount in the millions and even billions of dollars. And the indeterminate reach of such secondary liability means that not merely start-up capital is at risk, but also the personal wealth of start-up's officers, directors, and investors.¹⁴ The litigation risk in such circumstances is wholly one-sided: minimal attorneys' fees for the plaintiffs versus financial annihilation for the defendants. It would be impossible to create a more chilling environment for creativity and product development.¹⁵

At bottom, the problem with departing from the bright-line rule of *Sony* is tautological: the industry would then

¹⁴ The prospect of such litigation is far from theoretical. In addition to suing Napster, for example, the recording industry has brought suit against venture capital firms and other investors that provided early funding. See *In re Napster, Inc. Copyright Litig.*, Nos. C-MDL-00-1369-MHP & C-04-1166-MHP, 2005 WL 273178, at *1 (N.D. Cal. Feb. 03, 2005) (discussing suit versus venture capital firm Hummer Winblad Venture Partners); *UMG Recordings, Inc. v. Bertelsmann AG*, 222 F.R.D. 408, 413-14 (N.D. Cal. 2004) (discussing suit against investor Bertelsmann). Indeed, after driving mp3.com into bankruptcy and acquiring its assets, the studios have even brought suit against the lawyers that performed corporate work for mp3.com in its start-up phase. Jon Healey, *MP3.com Sues Former Copyright Counsel*, L.A. Times, Jan. 19, 2002, at C2. These scorched-earth litigation tactics are expressly designed to discourage the development of any product that is capable of infringing uses — a complete inversion of the *Sony* rule.

¹⁵ See Mark A. Lemley & R. Anthony Reese, *Reducing Digital Copyright Infringement Without Restricting Innovation*, 56 Stan. L. Rev. 1345, 1388 (2004) (discussing how the threat of liability has deterred innovation among computer programmers); Joseph P. Liu, *The DMCA and the Regulation of Scientific Research*, 18 Berkeley Tech. L.J. 501 (2003) (discussing ways in which threat of liability under the Digital Millennium Copyright Act deters innovation in field of encryption); Assaf Hamdani, *Who's Liable for Cyberwrongs?*, 87 Cornell L. Rev. 901 (2002) (demonstrating that threat of secondary liability has led to over-deterrence); Matthew Fagin, Frank Pasquale & Kim Weatherall, *Beyond Napster: Using Antitrust Law to Advance and Enhance Online Music Distribution*, 8 B.U. J. Sci. & Tech. L. 451, 500 (2002) (“Innovation in the technologies of distribution will decline markedly if potential new innovators are chilled by a threat of legal action”).

no longer have a bright-line rule. An unpredictable, fact-driven standard would encourage litigation, and the prospect of such ruinous litigation would inevitably inhibit investment and innovation. We would all be the losers thereby. That is most clearly seen by examining the alternative tests for secondary liability proposed by petitioners and the United States to which we now turn.

II. REPLACING THE SONY RULE WITH ANY OF THE PROPOSED STANDARDS WOULD DETER INVESTMENT AND INNOVATION

Both petitioners and the United States ask the Court to replace *Sony*'s clear rule of law with malleable legal standards that would trade certainty for legal risk. Moving from the bright-line *Sony* rule to any sort of malleable standard — with its attendant loss of certainty — would undermine investment in innovative technology. But the particular standards proposed by petitioners and by the United States would have especially disastrous consequences for the companies funded by venture firms and innovation more generally.

A. The “Predominance” Standard Articulated by the United States Is Impracticable

Selectively quoting from the *Sony* decision, the United States attempts to rewrite the standard for contributory liability in a manner that threatens to sap investment in technology-driven industries. According to the United States, *Sony*'s “commercial significance” test requires a company-specific analysis of the qualitative balance between a product's legitimate and infringing uses. “[T]he primary metric for measuring whether the seller's product has commercially significant noninfringing uses,” the United States contends, consists of “the relative significance to the defendant's business of a product's infringing versus noninfringing uses.” U.S. Br. 17. Where “the viability of the defendant's business is dependent on the revenue and consumer interest generated by such infringement,” the United States would have a court find

contributory infringement. By contrast, when “non-infringing uses *predominate*,” the court could not find a copyright violation. *Id.* (emphasis added).¹⁶

Separate and apart from the absence of any requirement in *Sony* that non-infringing uses “predominate,”¹⁷ the legal test proffered by the United States is impracticable and counterproductive. *First*, a “predominance” analysis would necessarily require a fact-intensive, quantitative inquiry into the proportional amount of infringing and non-infringing uses at a particular point in time. But this type of numerical calculus — which was rejected by the majority in *Sony* — simply invites lengthy and costly litigation. By creating “questions of fact” that will require extensive discovery, it encourages entrenched businesses to file suit against prospective competitors and any other nascent business whose product threatens their monopoly interests. *See Matthew Bender & Co. v. West Publ’g Co.*, 158 F.3d 693, 707 (2d Cir. 1998) (“The Supreme Court applied [its substantial non-infringing use] test to prevent copyright holders from leveraging the copyrights in their original work to control distribution of (and obtain royalties from) products that might be used incidentally for infringement, but that had substantial noninfringing uses.”); 2 Paul Goldstein, *Copyright* § 6.1.2, at 6:11 (2d ed. 1996) (*Sony* test prevents copyright owners from “influenc[ing] the price and availability of goods that are not directly connected to its copyrighted work”). Because the

¹⁶ Petitioners invite the Court to apply an analogous standard, asking whether a product or service is “principally used” for infringing or non-infringing uses. *See* Motion Picture Studio Pet. Br. 31 (“the staple article of commerce defense should not apply when the primary or principal use of a product or service is infringing”).

¹⁷ Not even the *Sony* dissenters advocated such a test. Although the dissenters would have remanded to the district court “to make findings on the ‘percentage of legal versus illegal home-use recording,’” 464 U.S. at 492-93 (Blackmun, J., dissenting), they would have found liability only if “virtually all of the product’s use . . . is to infringe,” *id.* at 491.

particular application of any such legal standards would require a time-consuming and fact-intensive inquiry, it would necessarily be expensive to litigate and create the pervasive uncertainty that drives away investment. See Lemley & Reese, 56 Stan. L. Rev. at 1388 (“Over and above the direct restrictions on innovation, the threat of lawsuits or criminal prosecutions against innovators is likely to deter a significant amount of innovation, some of which would unquestionably have been legal.”). Precisely that result has been sought and obtained on several occasions by the entertainment industry. See notes 7, 14, *supra*; see also Brian Garrity, *Victory Eludes Legal Fight Over File Swapping*, Billboard, Apr. 13, 2002, at 86 (“Most investment in peer-to-peer technology has dried up during the past 18 months, partly as a result of the threat of litigation.”).

Judge Posner’s articulation of a related standard in his *Aimster* decision suffers from the same defect. While *Aimster* could have turned on the fact that “Aimster has failed to produce any evidence that its service has ever been used for a noninfringing use,” the appellate court repeatedly emphasized the need to examine the probability or “frequency of such uses.” 334 F.3d at 653. *But see* William M. Landes & Richard A. Posner, *The Economic Structure of Intellectual Property Law* 119 (2003) (“while many of Sony’s customers, perhaps most, were infringers, others were not”). But any such quantitative inquiry enables copyright-holding businesses to tie up their prospective competitors in court, forcing these entities to spend scarce resources on litigation instead of experimentation. It institutionalizes legal uncertainty and grants entrenched interests the ability to block or delay innovation. The only certainty that such a standard establishes — the certainty of litigation — represents the antithesis of the *Sony* regime.

Second, the gloss placed by the United States on its proposed “predominance” test is even more problematic. According to the United States, the Court must determine

whether the product is “commercial[ly] viab[le] . . . if limited to noninfringing uses.” U.S. Br. 11 (citing *Sony*, 464 U.S. at 491 (Blackmun, J., dissenting)). But many products — such as file-sharing software among scholars — are used for wholly legitimate purposes, even if they have no commercial market whatsoever. It is noteworthy that neither the studios nor the recording industry petitioners — both of which have their own issues concerning what products are “profitable”¹⁸ — support such a test. Indeed, a commercial-viability test is particularly troubling in the entertainment industry for the simple reason that entities that control the existing means of distribution also control the vast majority of popular copyrights. When those entities wish to crush a new, competing distribution model, they concertedly refuse to license, and it becomes a self-fulfilling prophecy that the current proportion of uses tilts towards infringement. But, if they lose in their efforts to ban the new technology, they license and the proportion changes. Exactly that happened with the VCR and the iPod, among others, which leads to the final point.

Third, the predominance test necessarily focuses on a snapshot in time, without regard for contemplated and even unknown future uses. Because a fact-finder could only evaluate the “relative significance to the defendant’s

¹⁸ According to the recording industry, as many as 85-90% of products lose money. See RIAA, *Issues: Frequently Asked Questions — Downloading and Uploading*, http://www.riaa.com/issues/music/downup_faq.asp. As for the film industry, creative accounting appears to eliminate “net profit” from even the highest grossing films. See, e.g., Carla Hall, *Buchwald Award Set at \$900,000; Both Sides Claim Victory in ‘Coming to America’ Dispute*, Wash. Post, Mar. 16, 1992, at B1 (although the Eddie Murphy film “Coming to America” earned gross profits for Paramount of \$145 million, the studio claimed it did not earn any net profits and hence had no need to pay the writer or producer). Writers and producers filed similar lawsuits for two of the highest grossing films ever, “Forrest Gump” and “Batman”, because studio calculations arrived at negative or vastly undervalued net profits. See Robert Welkos, *2 Producers of ‘Batman’ Sue Warner Entertainment*, L.A. Times, Mar. 27, 1992, at D1.

business” at a fixed point, the non-infringing uses of which a product is *capable* are irrelevant to the inquiry. That not only disregards the language of *Sony*, which held that products avoid contributory liability provided that they “merely be capable of substantial noninfringing uses,” 464 U.S. at 442, but also ignores the natural processes by which technological innovations move from the laboratory into the general marketplace. Once again, it would enable entrenched copyright-holders to halt the very experimentation that will uncover alternative, non-infringing, and socially and economically beneficial uses.

The evolution of the business model for the VCR at issue in *Sony* demonstrates the danger of predicting a future pattern of use. While the studios predicted on the basis of early experience that the VCR would destroy the movie business, video and DVD rentals and sales currently generate substantially more revenue than movie theaters. *See* note 8, *supra*. When industry executives cannot accurately predict the direction of the market, a legal standard that asks the federal courts to engage in such predictions has little to recommend itself.

The iPod, which has been responsible for the resurgence of Apple, has a similar story line. Apple first invited customers to “rip, mix, and burn” their favorite music when releasing its iTunes software in January 2001 and then embedding it on the latest version of the iMac personal computer.¹⁹ The iPod followed later that year, with an initial 5 gigabit version that could hold up to 1,000 songs. Apple was immediately attacked by the major studios and

¹⁹ *See* Dennis Sellers, *Jobs: iTunes Is New, Free Jukebox Software* (Jan. 9, 2001), available at <http://www.macworld.com/news/2001/01/09/itunes/index.php>. The first mp3 commercial players were developed several years earlier, and the music industry immediately filed suit to enjoin their sale. *See Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., Inc.*, 180 F.3d 1072 (9th Cir. 1999) (suit against Rio portable mp3 music player). It is only because of the legal protection afforded by this Court's *Sony* decision that the iPod could be developed, marketed, and released.

accused of inciting theft.²⁰ But it was not until April 2003 that Apple launched its iTunes online music store, after reaching agreements with all of the major studios to sell the ability to download individual songs or entire CDs. In the first quarter of 2005 alone, Apple reported licensed online music sales of roughly \$275 million, and it is now selling 1.25 million songs *per day*. Just as licensed video sales and rentals have eclipsed movie theaters in revenues, it appears clear that licensed online downloads will eclipse CDs. But neither could do so without the protection afforded by *Sony* for mixed-use technologies.

Peer-to-peer sharing is likely to provide yet another example if permitted to develop. Thanks to a file-sharing technology called BitTorrent, millions of users were able to quickly download and view “lengthy amateur videos documenting the devastation of the December tsunami in the Indian Ocean, helping to spur an outpouring of charitable aid.” Jonathan Krim, *High-Tech Tension Over Illegal Uses*, Wash. Post, Feb. 22, 2005, at E1, *available at* <http://www.washingtonpost.com/wp-dyn/articles/A42401-2005Feb21.html?sub=AR>. BitTorrent’s main use, however, appears to be among those who want to trade Hollywood movies and TV shows, thus “putting it in the cross hairs of the entertainment industry.” *Id.* The technology obviously is capable of substantial non-infringing uses; subjecting the inventor to ruinous liability would deprive the marketplace and consumers of the opportunity to develop a legitimate market for those uses.²¹

²⁰ See Brooks Boliek, *Mouse Grouse: Dis Boss Lays Into Computer Biz*, The Reporter.com, Mar. 1, 2002, *available at* http://www.larta.org/pl/NewsArticles/02Marc01_HR_Eisner.htm.

²¹ While the United States and petitioners contend that it would be more efficient for users seeking publicly available material to go directly to the website that houses it than to use peer-to-peer file-sharing software, neither has offered any evidence to support this factual assertion. The Ninth Circuit, by contrast, found that peer-to-peer arrangements “significantly reduc[ed] the distribution costs of public domain and permissively shared art and speech.” Pet. App. 16a.

B. Economic Efficiency and Product Modification Standards Are Similarly Flawed

The subsidiary analysis that the United States would have the courts conduct in “closer cases” is equally flawed. According to the United States, when the qualitative analysis uncovers a rough balance between infringing and non-infringing uses, “it will often be appropriate for the court to look to subsidiary indicia,” including such factors as “(a) how the defendant markets the product; (b) the efficiency of the product for noninfringing uses; and (c) what steps the seller has taken to eliminate or discourage infringing uses.” U.S. Br. 17. Petitioners propose a comparable list of factors. *See* Motion Picture Studio Pet. Br. 23, 26, 27, 30-38, 40-44.

Any such wide-open inquiry would inject the federal courts into the business of evaluating the efficacy of product design, substituting judicial second-guessing for the discipline of the marketplace. That is a task for which they are uniquely ill-suited.

1. *Efficiency.* Both petitioners and the United States contend that the courts must analyze the extent to which a product can be altered such that infringing uses “can be readily blocked without significantly affecting lawful uses.” Motion Picture Studio Pet. Br. 33. Petitioners and the United States would thus have the federal courts evaluate economic viability of specific business models and the utility of alternative product designs.

Not only do the federal courts lack institutional competence for performing such a delicate task, but the mere prospect of such fact-intensive litigation will invariably thwart investment and innovation. *See* Einer Elhauge,

While legitimate arguments may support these competing conclusions, the prior question that the United States fails to address is whether the federal courts have the institutional capabilities to weigh the competing evidence in such complex areas as computer software and the life sciences. The marketplace performs this same function automatically.

Defining Better Monopolization Standards, 56 Stan. L. Rev. 253, 301 (2003) (rejecting analogous patent law proposal by Professor Louis Kaplow that “each restrictive practice imposed by a patentee” be evaluated by balancing “‘the reward the patentee receives’ from the practice against ‘the monopoly loss that results’” on grounds that such case-by-case analysis “seems beyond the ken of anti-trust judges and juries, and having it resolved through antitrust litigation is bound to produce great uncertainty and highly inconsistent results, which would make business planning impossible”) (quoting Louis Kaplow, *The Patent-Antitrust Intersection: A Reappraisal*, 97 Harv. L. Rev. 1813, 1816 (1984)). The virtual certainty of costly and time-consuming litigation, in which the judiciary, rather than the market, determines the economic viability of products, will have a chilling effect on venture funding. While venture capitalists are trained to evaluate the viability of business ideas, they have no confidence in their ability to predict the outcome of litigation over alleged infringement. Because established business interests like the Motion Picture Studios and the Recording Companies have shown no hesitation to use the courts to lay siege to potential competitors, lawsuits are a virtual certainty. See notes 7, 14, *supra*.

While the oligopolies that own the copyright interests in an array of audio and visual recordings may benefit from such legal uncertainty, the American economy will suffer significant harms.²² Innovation will inevitably occur, irrespective of the hurdles imposed by the courts, but litigation risk will drive that innovation and investment overseas. Millions of jobs and billions of dollars and revenue will be lost, as the epicenter of technology shifts from the United States to Europe and Asia.

²² See William W. Fisher III, *Promises to Keep: Technology, Law, and the Future of Entertainment* 83-85 (2004) (discussing the multi-year delay in bringing digital audiotape technology to the U.S. market because of threatened, and later actual, litigation).

Moreover, even if the federal courts did have the ability to perform this product development function effectively, the economic viability of a product or service is not static. While a majority of peer-to-peer software's current use may involve unauthorized file sharing, it is only a matter of time before the same software performing the same functions will be overtaken by non-infringing uses. As noted above, the amount of lawfully shared information available over the Internet dwarfs the amount of information subject to copyright protection. *See* pp. 10-11, *supra*. Because today's economics say little about a product's viability over time, the costs of relying upon such an imperfect standard far outweigh any prospective benefits. It is virtually certain that the federal courts would err in predicting the future viability of a product's non-infringing uses, and that they would improperly drive products or services from the marketplace. It is equally certain that such an unpredictable legal standard will spur litigation, and that transaction costs associated with a time-consuming judicial inquiry would discourage the investment needed to bring nascent technologies to market. The burden of showing that a company or product is "commercially successful in the marketplace on the basis of 'wide use for legitimate, unobjectionable purposes,'" *Motion Picture Studio Pet. Br. 35* (brackets omitted), as petitioners propose, would be prohibitive. Faced with pervasive legal uncertainty that cannot be managed, venture funding will shift to other industries or overseas.

2. *Infringement Deterrence.* Disavowing petitioners' argument that companies have an affirmative legal duty to modify their products to prevent infringing conduct, the United States properly recognizes that imposing any such obligation "would have the undesirable effect of chilling technological innovation and constraining the product development options of developers of software and other digital technologies." *U.S. Br. 20 n.3*. In the same breath, however, the United States contends that the failure to engage in this exact same conduct is somehow "probative

of the true nature of the defendant’s business.” *Id.* at 19. The law does not, and should not, so provide. *See Sony*, 464 U.S. at 427 (noting that plaintiffs sought injunction “requiring that the machines be rendered incapable of recording copyrighted works”); *id.* at 494 (dissent noting that “Sony may be able, for example, to build a VTR that enables broadcasters to scramble the signal of individual programs and ‘jam’ the unauthorized recording of them”); *see also Aimster*, 334 F.3d at 648 (“Sony could have engineered its video recorder in a way that would have reduced the likelihood of infringement”).²³

The United States again invites the federal courts to second-guess design decisions and to create a federal common-law analog to design-defect inquiry in products liability law. But the United States does not identify the source of this second-order obligation to modify a product to minimize certain potential uses. Nor does the United States confront the question whether the federal courts possess the institutional competence to evaluate product alterations in the industries that will be most affected by any revision of *Sony*’s holding on contributory liability — computer software, information technology, and the life sciences. They do not.

Because the incumbent businesses will invariably be able to identify some modification that would hinder the use of a product for infringement, the facially simple standard articulated by the United States — whether a company “has taken reasonably available steps to deter in-

²³ Notwithstanding this recognition that the *Sony* Court had rejected the argument that the VCR could have been modified to prevent infringement, the Seventh Circuit nevertheless held that “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*, 334 F.3d at 653. The *Aimster* court cites no authority for this proposition and makes no attempt to reconcile it with *Sony*. Petitioners, who advocate a similar standard, rely solely on *Aimster*. *See* Motion Picture Studio Pet. Br. 32-33.

fringing uses and focus users on legitimate uses,” U.S. Br. 20 — rapidly descends into a morass of legal uncertainty. It would place the courts in the business of judging the efficacy of competing technological designs, divorced from the information and feedback that the market automatically provides. It is this prospect, rather than the proper application of the *Sony* rule, that is “antithetical to ‘innovation driven by quality competition in a well-functioning . . . product market.’ ” Motion Picture Studio Pet. Br. 42 (quoting Andrew Chin, *Antitrust Analysis in Software Product Markets: A First Principles Approach*, 18 Harv. J.L. & Tech. 1, 82 (2004)) (ellipsis in original). Faced with unquantifiable litigation risk, venture funding will seek out alternative investment opportunities, and the public, again, will bear the costs.

The United States additionally ignores the potential spillover effect of its novel rule of contributory liability. For just as respondents may be able to take reasonable steps to prevent unauthorized file sharing, similar filtering devices could easily be written directly into the hardware and software that together constitute the average personal computer. Indeed, there are numerous technologies and services that could bear the potential brunt of a design obligation to prevent copyright infringement: including the browser software, the broadband connection (be it cable modem or DSL), the Internet Service Provider, and the backbone provider. Grokster and StreamCast software ride on top of the Windows operating system, which could also be modified to filter infringing uses. Indeed, any filtering device that could be implemented in Grokster or StreamCast software could just as easily be implemented in Windows or in the Intel or AMD microprocessors that run nearly all personal computers.²⁴

²⁴ Testifying at a Senate Commerce Committee hearing on February 28, 2002, the CEO of the Walt Disney Company attacked Apple, Dell Computers, Microsoft, and Intel, among others, for failing to develop digital rights management functions and accused them of promoting

Grokster and StreamCast are bit players, small operations using very simple code to permit file sharing.²⁵ They will come or go without any real impact on copyright infringement. Grokster and StreamCast are just stalking horses for the real targets of the Motion Picture Studios and the Recording Companies. They want to force fundamental, and hugely expensive, changes in the software and hardware that constitutes the Internet, by imposing an obligation on providers to design and engineer their systems to block unauthorized file sharing. Such an open-ended standard of liability would be a proverbial Pandora's box.

The clear rule of law that this Court articulated in *Sony* has provided the backdrop for an unprecedented period of technological growth and innovation. That revolution in informational technology, in turn, has been responsible for the creation of millions of jobs in the United States, directly and indirectly contributing billions of dollars to the GDP. Replacing the *Sony* rule with a more amorphous, fact-specific standard, as petitioners and the United States have advocated, would place these industries, and the nascent businesses that are their life blood, at risk. By substituting the prospect of expensive litigation against entrenched copyright-holders for the legal certainty provided by a bright-line rule, any substantive revisiting of *Sony* threatens, at a minimum, to impose sig-

piracy. See note 20, *supra*. Eisner urged Congress to “mandate that device manufacturers build the necessary hardware and/or software” to protect against copyright piracy “in all digital media devices.” Testimony of Michael D. Eisner, Chairman & CEO, The Walt Disney Company, Before the Committee on Commerce, Science, and Transportation, United States Senate, at 2-3 (Feb. 28, 2002), available at <http://commerce.senate.gov/hearings/022802eisner.pdf>.

²⁵ A simple file-sharing program requires as little as 15 lines of code. Windows, by contrast, contains about 50 million lines of code. See Rick Whiting, *The Sector That Produces Most of Today's Software Probably Will Look Dramatically Different in Just a Few Years — Industry in Flux*, InformationWeek at 34 (Dec. 6, 2004), available at <http://www.informationweek.com/showArticle.jhtml?articleID=5480019>.

nificant delays on the dissemination and market acceptance of new products and innovations. For venture capital firms, the additional layer of legal uncertainty — a risk that can be neither measured nor managed — will discourage investment in critical information technologies. The market, rather than the federal courts, should drive such investment decisions.

CONCLUSION

This Court should re-affirm the bright-line rule in *Sony*, which creates a safe harbor for products that are capable of substantial non-infringing uses.

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