

No. 12-57048

**IN THE UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT**

FOX BROADCASTING CO. INC., *et al.*,
Plaintiffs-Appellants

v.

DISH NETWORK L.L.C., *et al.*,
Defendants-Appellees.

On Appeal from the United States District Court
For the Central District of California
The Honorable Dolly M. Gee, District Judge
Case No. 12-cv-04529

BRIEF *AMICUS CURIAE* OF
COMPUTER & COMMUNICATIONS INDUSTRY ASSOCIATION,
CONSUMER ELECTRONICS ASSOCIATION, AND
THE INTERNET ASSOCIATION
IN SUPPORT OF DEFENDANTS-APPELLEES

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CORPORATE DISCLOSURE STATEMENT
(Federal Rule of Appellate Procedure 26.1)

The undersigned counsel for Computer & Communications Association (CCIA), Consumer Electronics Association (CEA), and The Internet Association (IA) states that none of these associations has any parent corporation, and no publicly held corporation owns stock in the associations.

DATE: January 24, 2013 CONSTANTINE CANNON LLP

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TABLE OF CONTENTS

CORPORATE DISCLOSURE STATEMENT	i
TABLE OF AUTHORITIES	iv
INTEREST OF THE <i>AMICI</i>	1
ARGUMENT	4
I. The Court Should Affirm that Direct Infringement Requires Volitional Action.....	4
A. The volitional action requirement recognizes the essential role of automated processes for digital technologies and services and modern commerce.	6
B. Every court to consider the question, from Netcom to this case, requires a showing of volitional action for direct infringement.	10
II. Copying of Copyrighted Works to Acquire Non-Copyrightable Information is a Noninfringing Use	18
A. The District Court erred by narrowly interpreting cases addressing intermediate copying.	18
1. Interoperability of computer game consoles	19
2. Interoperability of printers and printer cartridges.....	20
3. Comparative advertising.....	20
4. Copying information from a database	20
5. Comparing copyrightable text against other copyrightable text	21
B. Making copies for technological purposes such as quality assurance justifies a finding of fair use.....	22

III	The District Court Correctly Applied <i>Sony</i> 's Principles to Protect Innovation.....	24
	CONCLUSION.....	30

TABLE OF AUTHORITIES

Cases

<i>A&M Records, Inc. v. Napster, Inc.</i> , 239 F.3d 1004 (9th Cir. 2001)	17
<i>Arista Records LLC v. Lime Grp. LLC</i> , 784 F. Supp. 2d 313 (S.D.N.Y. 2011)	6
<i>Arista Records LLC v. Usenet.com, Inc.</i> , 633 F. Supp. 2d 124 (S.D.N.Y. 2009)	12
<i>Assessment Techs. of WI, LLC v. WIREdata, Inc.</i> , 350 F.3d 640 (7th Cir. 2003)	21
<i>Atari Games Corp. v. Nintendo of Am. Inc.</i> , 975 F.2d 832 (Fed. Cir. 1992)	20
<i>AV ex rel. Vanderhye v. iParadigms, LLC</i> , 562 F.3d 630 (4th Cir. 2009)	21
<i>Cartoon Network LP, LLLP v. CSC Holdings, Inc.</i> , 536 F.3d 121 (2d Cir. 2008)	8, 9, 11, 17
<i>CoStar Grp., Inc. v. LoopNet, Inc.</i> , 373 F.3d 544 (4th Cir. 2004)	11, 17
<i>Disney Enters., Inc. v. Hotfile Corp.</i> , 798 F. Supp. 2d 1303 (S.D. Fl. 2011)	12
<i>Eldred v. Ashcroft</i> , 537 U.S. 186 (2003)	19
<i>Feist Publ'ns, Inc. v. Rural Tel. Serv. Co.</i> , 499 U.S. 340 (1991)	21
<i>Field v. Google Inc.</i> , 412 F. Supp. 2d 1106 (D. Nev. 2006)	10
<i>Flava Works, Inc. v. Gunter</i> , No. 10 C 6517 (N.D. Ill. May 10, 2011)	12

<i>Flava Works, Inc. v. Gunter</i> , 689 F.3d 754 (7th Cir. 2012).....	12
<i>Fox Broad. Co. v. Dish Network, L.L.C.</i> , No. CV 12-04529 DMG, 2012 WL 5938563 (C.D. Cal. Nov. 7, 2012)	13, 15, 16, 22, 26
<i>Harper & Row, Publishers, Inc. v. Nation Enters.</i> , 471 U.S. 539 (1985)	19
<i>Huntsman v. Soderbergh</i> , No. Civ. A02CV01662RPMMJW, 2005 WL 1993421 (D. Colo. Aug. 17, 2005).....	28
<i>Lexmark Int’l, Inc. v. Static Control Components, Inc.</i> , 387 F.3d 522 (6th Cir. 2004).....	20
<i>Marobie-FL, Inc. v. Nat’l Ass’n of Fire Equip. Distribs. & Nw. Nexus, Inc.</i> , 983 F. Supp. 1167 (N.D. Ill. 1997).....	12
<i>Matthew Bender & Co., Inc. v. West Publ’g Co.</i> , 158 F.3d 693 (2d Cir. 1998)	21
<i>Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.</i> , 545 U.S. 913 (2005)	2, 16, 17, 28
<i>Parker v. Google, Inc.</i> , 422 F. Supp. 2d 492 (E.D. Pa. 2006), <i>aff’d</i> , 242 Fed. App’x 833 (3d Cir. 2007) (non-precedential), <i>cert. denied</i> , 552 U.S. 1156 (2008)	12
<i>Perfect 10, Inc. v. Visa Int’l Serv. Ass’n</i> , 494 F.2d 788 (9th Cir. 2007).....	17
<i>Playboy Enters., Inc. v. Russ Hardenburgh, Inc.</i> , 982 F. Supp. 503 (N.D. Ohio 1997)	13
<i>Recording Industry Assn. of Am. v. Diamond Multimedia Sys., Inc.</i> , 180 F. 3d 1072 (9th Cir. 1999).....	24, 27
<i>Religious Tech. Ctr. v. Netcom On-Line Commc’n Servs., Inc.</i> , 907 F.Supp. 1361 (N.D. Cal. 1995).....	passim

<i>Sega Enters. Ltd. v. Accolade, Inc.</i> , 977 F.2d 1510 (9th Cir. 1993).....	19, 21
<i>Sega Enters. Ltd. v. Maphia</i> , 948 F. Supp. 923 (N.D. Cal. 1996).....	10
<i>Sony Computer Entm't Am., Inc. v. Bleem, LLC</i> , 214 F.3d 1022 (9th Cir. 2000).....	20
<i>Sony Computer Entm't v. Connectix Corp.</i> , 203 F.3d 596 (9th Cir. 2000).....	19, 22
<i>Sony Corp. of Am. v. Universal City Studios, Inc.</i> , 464 U.S. 417 (1984)	passim

Statutes

17 U.S.C. § 102(b).....	18
17 U.S.C. § 110(11).....	29
17 U.S.C. § 504(c).....	5
17 U.S.C. § 512.....	5

Other Authorities

Family Entertainment and Copyright Act of 2005, Pub. L. No. 109-9, 119 Stat. 218 (2005).....	29
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Brian Stelter, <i>On Sundays, the DVR Runneth Over</i> , N.Y. Times, Apr. 19, 2012	27
Fred von Lohmann, <i>Fair Use as Innovation Policy</i> , 23 Berkeley Tech. L. J. 829 (2008).....	25

INTEREST OF THE *AMICI*¹

Computer & Communications Industry Association (CCIA) represents more than twenty large, medium-sized, and small companies in the high technology products and services sectors, including computer hardware and software, electronic commerce, telecommunications, and Internet products and services – companies that collectively generate more than \$250 billion in annual revenues.²

Consumer Electronics Association (CEA) is the preeminent trade association promoting growth in the U.S. consumer electronics industry. CEA members lead the consumer electronics industry in the development, manufacturing and distribution of audio, video, mobile electronics, communications, information technology, multimedia, and accessory products, as well as related services, that are sold to consumers. Its more

¹ No counsel for any party authored this brief in whole or part; no party or counsel made a monetary contribution intended to fund its preparation or submission; and no person other than *amici* made such a contribution. (Dish Network (Dish) is a member of both CCIA and CEA but did not participate in any way in the preparation of this brief.) Counsel for both parties consented to the filing of this brief.

² A complete list of CCIA members is available at <http://www.ccianet.org/members>.

than 2,000 corporate members contribute over \$125 billion to the U.S. economy.³

The Internet Association (IA) serves as the public policy voice for some of the world's most innovative Internet companies on legislative and administrative proposals affecting the online realm. The Internet Association's members include Amazon.com, eBay, Facebook, Google, IAC, and Yahoo!⁴

Copyright law is not solely about protecting the rights of copyright owners; it is a central part of our Nation's innovation policy. "The more artistic protection is favored, the more technological innovation may be discouraged; the administration of copyright law is an exercise in managing the tradeoff." *Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.*, 545 U.S. 913, 928 (2005) ("MGM") citing *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 442 (1984) ("Sony").

Accordingly, this case is not just about the future of digital video recording, just as *Sony* was not just about magnetic tape and broadcast television. Today, questions of copyright law touch virtually every digital technology innovator, since these technologies necessarily manipulate and

³ A complete list of CEA members is available at <http://ce.org/Membership/Membership-Directory.aspx>.

⁴ A complete list of The Internet Association members is available at <http://www.internetassociation.org>.

reproduce copyrighted materials, whether in the form of emails, photographs, tweets, or video clips uploaded by Internet users. All of these works are protected by copyright law immediately upon fixation for the lifetime of the author plus 70 years. Consequently, innovators who have no interest in recording “primetime” programming must nonetheless pay close attention to the copyright doctrines before the Court in this case.

Resolution of the doctrinal questions posed here will have a substantial impact on whether copyright policy will afford sufficient breathing room to those who invest in developing and marketing new technologies. The *amici* therefore submit this brief to support three key principles necessary to future technological innovation:

First, direct infringement requires a volitional act. A defendant directly infringes only if it “does” the infringing act, not if it merely supplies the means used by others to infringe. The district court correctly found no direct infringement by Dish.

Second, it is not infringement to make an “intermediate copy” of a copyrighted work to access noncopyrightable information, even where such information is used to compete with the copyright owner. The district court should have held the “quality assurance” (QA) copies noninfringing.

Third, recording for personal, private viewing does not infringe; nor does declining to watch commercials. The district court properly rejected appellants' attempt to confine *Sony* to its facts and relegate consumers to the analog technologies of 1984.

ARGUMENT

I. The Court Should Affirm that Direct Infringement Requires Volitional Action.

The district court correctly held that direct infringement requires proof that a defendant “does” an infringing act. For more than fifteen years the case law has trended toward uniform acceptance of this volitional element, and *amici* urge the Court to affirmatively adopt the volitional requirement for this Circuit.

Today, many activities previously left to individual computers are moving “into the cloud.” For example, office workers can store, share, and edit documents using Google Drive—activities once the province of software running on desktop computers. Similarly, families use Facebook or Flickr to store, share, and edit photographs, where once they might have relied on software on their home computers. The benefits to consumers are manifest—they can now access their material from any connected device,

collaborate with others in real-time, and leave behind the tedium and expense of updating their personal computers.

The volitional act doctrine is critical to a level legal playing field for these next-generation “cloud services.” For vendors of retail software for desktop computers, the divide between direct and secondary infringement is clear—no one would think to hold Adobe strictly liable as a direct infringer for every infringement committed using its Photoshop software. It cannot be that the outcome should be different for an online service provider that offers consumers the same functionality over the Internet.⁵ There cannot be one rule for pushing physical buttons and another for clicking virtual ones. The key to creating a level playing field is recognition in the law that direct infringement liability, with its attendant strict liability and mandatory statutory damages,⁶ is reserved for those who “do” the infringing act, rather than those who simply provide the means that enable a user to “do” the act.

⁵ Congress has enacted for online service providers in the Digital Millennium Copyright Act specific safe harbors that apply to all forms of copyright liability, whether arising from direct or secondary infringement. *See* 17 U.S.C. § 512. Those safe harbors, however, only apply to specific functions, and Congress expressly indicated that it intended these safe harbors to operate in addition to any other available defenses and that they were not intended to alter the existing doctrines of direct or secondary liability. H.R. 2281, the Digital Millennium Copyright Act, Title II, Pub. L. No. 105-304, 112 STAT 2860, 2877 (1998).

⁶ Prevailing copyright plaintiffs are entitled to statutory damages awards of no less than \$750, and as much as \$150,000, per work infringed. 17 U.S.C.

A. The volitional action requirement recognizes the essential role of automated processes for digital technologies and services and modern commerce.

A clear and sensible line between direct and secondary infringement liability is crucial to next-generation technology innovators. For companies that offer consumers new means of getting things done by harnessing computing resources “in the cloud,” a consistent copyright legal foundation has already provided the catalyst for economic growth.

According to NIST, cloud computing provides “a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction.”⁷ In jargon-free English, a company provides computing services, such as the ability to store content or use computer programs, at a remote facility that can be accessed

§504(c). Where a technology is used by millions of consumers to reproduce a wide array of material, statutory damages can quickly come to rival the size of the national debt. *See Arista Records LLC v. Lime Grp. LLC*, 784 F. Supp. 2d 313, 317 (S.D.N.Y. 2011) (noting that the billions of dollars in statutory damages sought by plaintiffs would constitute “more money than the entire music recording industry has made since Edison's invention of the phonograph in 1877.”).

⁷ Peter Mell & Timothy Grance, *The NIST Definition of Cloud Computing, Recommendations of the National Institute of Standards and Technology*, at 2 U.S. Dept. of Commerce, Special Publ'n 800-145, Sept. 2011, <http://csrc.nist.gov/publications/nistpubs/800-145/SP800-145.pdf>.

by individual consumers anywhere in the world on their own connected devices.

The first essential characteristic of cloud computing is that it is “on-demand self-service.”⁸ The consumer can unilaterally use computer time and storage from a remotely-located facility via the Internet, using an automated process—“as needed automatically without requiring human interaction with each service provider.”⁹ Consumers benefit from access to highly sophisticated services at little or no cost—the consumer essentially has the use of a bigger, better, faster computer that she controls over the Internet. Investments in software and equipment acquisition, operation, and maintenance are borne by the cloud service provider, and the consumer is able to make use of those tools remotely.

Cloud computing has emerged as an increasingly important sector of the U.S. economy. Internet-based enterprises offer free cloud services that allow consumers to remotely store their digital music, photo, video, and document collections, for convenient access from anywhere.¹⁰ In 2011,

⁸ *Id.* at 2.

⁹ *Id.*

¹⁰ *See, e.g.*, Google Play, <http://play.google.com> (last visited Jan. 22, 2013); Google Drive, <https://drive.google.com/#my-drive> (last visited Jan. 22, 2013); Google+, <https://plus.google.com/u/0/photos/instantupload> (last visited Jan. 22, 2013); iCloud, <http://www.apple.com/icloud/> (last visited Jan. 22, 2013); Amazon,

spending on public cloud information technology (“IT”) services made up an estimated \$28 billion of the \$1.7 trillion spent globally on all IT products and services.¹¹ A recent study projects that revenue growth for cloud-based services will exceed \$20 billion per year for each of the next five years, and cloud computing can save U.S. businesses more than \$625 billion over the next five years.¹² The study found that cloud computing investments will create 213,000 new jobs in the United States and abroad over the next five years. *Id.*

These and other services largely owe their existence and success to a stable legal foundation established by the Second Circuit in *Cablevision*,¹³ which confirmed two principles of law essential to cloud computing. First, the volitional conduct element of direct infringement applies to a remote storage system.¹⁴ Second, transmissions of user-stored content from a

<http://www.amazon.com/gp/feature.html?ie=UTF8&docId=1000796931>
(last visited Jan. 22, 2013).

¹¹ John F. Gantz & Stephen Minton, *Cloud Computing’s Role in Job Creation*, IDC White Paper, Mar. 2012, 1 http://www.microsoft.com/en-us/news/download/features/2012/IDC_Cloud_jobs_White_Paper.pdf.

¹² Sand Hill Group, *Job Growth in the Forecast: How Cloud Computing is Generating New Business Opportunities and Fueling Job Growth in the United States*, Mar. 2012, <http://www.news-sap.com/files/Job-Growth-in-the-Forecast-012712.pdf> (see also <http://sandhill.com/article/sand-hill-group-study-finds-massive-job-creationpotential-through-cloud-computing/>).

¹³ *Cartoon Network LP, LLLP v. CSC Holdings, Inc.*, 536 F.3d 121 (2d Cir. 2008) (“*Cablevision*”).

¹⁴ *Id.* at 130-133.

remote server to that particular user are not public performances under the Copyright Act.¹⁵

A November 2011 study by Harvard Business School Professor Josh Lerner found that after the *Cablevision* decision, the average quarterly investment in cloud computing in the United States increased by approximately 41 percent.¹⁶ Professor Lerner's study concluded that *Cablevision* led to additional incremental investment in U.S. cloud computing firms of between \$728 million and \$1.3 billion over the two-and-half years after the decision. Counting the effect on venture capital, this may equal two to five billion dollars of traditional investment in research and development.¹⁷

Innovation requires a stable legal environment. The volitional action requirement provides precisely the certainty needed to support investment in

¹⁵ *Id.* at 134-140. This portion of *Cablevision* is not at issue in this case.

¹⁶ Josh Lerner, *The Impact of Copyright Policy Changes on Venture Capital Investment in Cloud Computing Companies*, Nov. 4, 2011, at 9, http://www.analysisgroup.com/uploadedFiles/Publishing/Articles/Lerner_Fall2011_Copyright_Policy_VC_Investments.pdf. Similarly, *Sony* has been credited with stimulating tremendous growth in consumer electronics and IT products that rely on fair use recording, including iPods, MP3 players, digital video recorders, CD ripping software, and CD burners. See Pamela Samuelson, *The Generativity of Sony v. Universal: The Intellectual Property Legacy of Justice Stevens*, 74 *Fordham L. Rev.* 1831, 1850, 1875 (2006), available at <http://ir.lawnet.fordham.edu/cgi/viewcontent.cgi?article=4140&context=flr>.

¹⁷ Lerner at 24.

future technologies and services. As shown below, the district court's opinion is fully consistent with the trend among the courts to consider direct infringement liability for the individuals who "do" the volitional acts, not for the companies whose technologies merely enable them.

B. Every court to consider the question, from *Netcom* to this case, requires a showing of volitional action for direct infringement.

Two courts of appeals from sister circuits, and district court judges from across the country, accept volition as a crucial element of direct infringement. Beginning with *Netcom*,¹⁸ courts have recognized that where an end user commits and can be directly liable for the same action, "it does not make sense to adopt a rule that could lead to the liability of countless parties whose role in the infringement is nothing more than setting up and operating a system that is necessary for functioning of the Internet," even where the technology provider has knowledge of potential copyright infringement by its subscribers. *Id.*, 907 F. Supp. at 1372-73.¹⁹

¹⁸ *Religious Tech. Ctr. v. Netcom On-Line Commc'n Servs., Inc.*, 907 F. Supp. 1361 (N.D. Cal.1995).

¹⁹ Other district courts in this Circuit have followed *Netcom*. See *Field v. Google Inc.*, 412 F. Supp. 2d 1106, 1114-15 (D. Nev. 2006); *Sega Enters. Ltd. v. Maphia*, 948 F. Supp. 923 (N.D. Cal. 1996). Contrary to the assertions of appellants' amici, this Circuit's decisions concerning search engines that make and display in search results "thumbnail" copies of photographs, are not analogous to the case at bar. See, e.g., Brief for Paramount Pictures *et al.* as *Amici Curiae* 14-15 n.3. In those cases, it was

Subsequently, in *CoStar*,²⁰ the Fourth Circuit adopted the volition requirement for a website that enabled users to post real estate listings. “While the Copyright Act does not require that the infringer know that he is infringing or that his conduct amount to a willful violation of the copyright owner’s rights, it nonetheless requires *conduct* by a person who causes in some meaningful way an infringement.” 373 F.3d at 549; *see id.* at 555 (direct infringement cannot be found from “the automatic copying, storage, and transmission of copyrighted materials” in response to user requests).

The Second Circuit endorsed the *Netcom/CoStar* volition requirement in *Cablevision*, and for the first time applied it to automated processes outside the context of Internet-based services. Despite the continuing commercial relationship between Cablevision and its subscribers, and the furnishing by Cablevision of the remote DVR copying equipment, the Second Circuit emphasized the “significant difference” between volitional copying by a human being and a system that “automatically obeys commands and engages in no volitional conduct.” *Cablevision*, 536 F.3d at 132.

undisputed that the search engines made the copies; whereas the district court here found that the copies were made at the volition of the home DVR user.

²⁰ *CoStar Grp., Inc. v. LoopNet, Inc.*, 373 F.3d 544, 550-551 (4th Cir. 2004).

Federal district courts in at least four other circuits likewise have also endorsed the volition requirement. *See Disney Enters., Inc. v. Hotfile Corp.*, 798 F. Supp. 2d 1303, 1309-1310 (S.D. Fl. 2011) (granting motion to dismiss direct infringement claim; automatic copying by software does not constitute volition);²¹ *Flava Works, Inc. v. Gunter*, No. 10 C 6517 (N.D. Ill. May 10, 2011) (dismissing direct infringement claim against an online video bookmarking site; volitional copying was done by users, not defendant's automated processes);²² *Parker v. Google, Inc.*, 422 F. Supp. 2d 492 (E.D. Pa. 2006), *aff'd*, 242 Fed. App'x 833 (3d Cir. 2007) (non-precedential), *cert. denied*, 552 U.S. 1156 (2008); *Marobie-FL, Inc. v. Nat'l Ass'n of Fire Equip. Distribs. & Nw. Nexus, Inc.*, 983 F. Supp. 1167, 1178 (N.D. Ill. 1997) (volition element not met for direct infringement where defendant "only provided the means to copy, distribute or display plaintiff's works, much like

²¹ *Disney* criticized a district court case in another circuit, *Arista Records LLC v. Usenet.com, Inc.*, 633 F. Supp. 2d 124 (S.D.N.Y. 2009) which, while accepting the requirement of volition, erroneously construed conduct relevant to secondary liability as indicia of volition. *Disney*, 798 F. Supp. 2d at 1309. Thus, appellants' reliance on the *Usenet* case is misplaced; and, notably, appellants' brief omits mention of the *Disney* precedent and its criticism of *Usenet*.

²² On later appeal from a preliminary injunction, the Seventh Circuit reversed the district court finding of contributory infringement; and although the court did not explicitly adopt a volition requirement, it affirmed that the user, not the defendant online service, directly infringed. *Flava Works, Inc. v. Gunter*, 689 F.3d 754, 757, 760 (7th Cir. 2012).

the owner of a public copying machine used by a third party to copy protected material”); *Playboy Enters., Inc. v. Russ Hardenburgh, Inc.*, 982 F. Supp. 503 (N.D. Ohio 1997) (volition required for direct infringement of distribution right).²³

Consistent with these precedents, the district court here correctly held that the automated PTAT processes offered by Dish do not supply the necessary element of volition, because the Dish DVR “records the programs only if the user makes the initial decision to enable PTAT.” *Fox Broad. Co. v. Dish Network, L.L.C.*, No. CV 12-04529 DMG, 2012 WL 5938563, at *9 (C.D. Cal. Nov. 7, 2012) (“Op”).

In attacking the district court’s ruling, appellants urge this Court to either create a circuit split by rejecting the volitional act requirement altogether, or undermine it by substituting an “active participation” standard in its place. Either course would expose a wide array of online innovators to direct infringement liability, accompanied by ruinous statutory damages.

Rejecting the volitional act requirement altogether would imperil all online service providers, even those who appellants would characterize as

²³ In *Hardenburgh* and other cases cited by appellant, the defendants were deemed liable for specifically encouraging copyright infringement, in addition to the provision and advertising of technologies that enable storage and access. By contrast, Dish merely makes available a technology used for purposes that have been considered noninfringing for some 30 years.

“passive conduits.” The *Netcom* ruling aptly described why that would be a misguided application of copyright:

Where the infringing subscriber is clearly directly liable for the same act, it does not make sense to adopt a rule that could lead to the liability of countless parties whose role in the infringement is nothing more than setting up and operating a system that is necessary for the functioning of the Internet. Such a result is unnecessary as there is already a party directly liable for causing the copies to be made. Plaintiffs occasionally claim that they only seek to hold liable a party that refuses to delete infringing files after they have been warned. However, such liability cannot be based on a theory of direct infringement, where knowledge is irrelevant. The court does not find workable a theory of infringement that would hold the entire Internet liable for activities that cannot reasonably be deterred.

Netcom, 907 F. Supp at 1372.

Appellants themselves seem to abandon this drastically overbroad approach in favor of limiting direct infringement only to an “active participant” in the infringing act. On close inspection, however, this amounts to an argument that building better, more convenient tools for consumers constitutes “active participation” in any resulting infringement. Early VCRs coupled sophisticated analog recording technology with a user interface that proved inconvenient for many consumers (recall the flashing “12:00”). Digital Video Recorders (DVRs) combined digital recording with intuitive program guides, graphical search requests and programming, automatic clock settings, the ability to skip ahead by 30 seconds at a time, and the

ability to simultaneously record multiple programs on different channels.²⁴

The aspects of the Hopper under attack in this appeal are, by contrast, minor incremental enhancements. Instead of forcing users to select the recording of each show for an entire season, or schedule recording during primetime channel-by-channel, the Hopper lets consumers de-select individual channels and programs from the entire primetime line-up. *Op. at* *3.²⁵ And rather than requiring the consumer to press a button to skip through commercials, the Hopper provides an automatic setting that shows the first

²⁴ For example, the TiVo Premiere DVR offered by Comcast promotes the ability to “record up to 4 shows at once” with “up to 1,000 hours of recording capacity.” *See* TiVo, <http://www3.tivo.com/products/tivo-walkthrough/tv-source/cable/tivo-comcast/index.html> (last visited Jan. 22, 2013). DirecTV and Cablevision advertise that their in-home DVRs can record an entire season of shows, and record two shows while watching a third. OptimumTV, <http://www.optimum.com/digital-cable-tv/dvr/> (last visited Jan. 22, 2013). DirecTV, http://www.directv.com/technology/dvr_service (last visited Jan. 22, 2013). DirecTV’s new “Genie” DVR can “record any 5 shows you want at the same time, all in HD.” DirecTV, <http://www.directv.com/DTVAPP/content/directv/directv-vs-comcast-xfinity?lpos=Footer:3> (last visited Jan. 22, 2013).

²⁵ DirecTV offers a DVR that can “[r]ecord an entire season of your favorite shows with a click.” DirecTV, http://www.directv.com/technology/dvr_service (last visited Jan. 22, 2013). TiVo users use a single click on the information screen to set up a “Season Pass,” that automatically records the same program every week, even if the day or time changes. TiVo, http://www.tivo.com/mytivo/howto/gettivoanywhere/howto_setup_seasonpass_recording.html (last visited Jan. 22, 2013). The consumer can then select additional options, such as to not record reruns, or to keep all programs in the series. *Id.*

and last few seconds of each commercial break, while skipping the rest. Op. at *4. In sum and substance, the Hopper merely enables the consumer to perform the same actions as the old VCRs or other DVRs, just more efficiently. It is still the user who decides whether any copies get made. Dish merely provides the means.

There is no merit to appellants' argument that a volitional requirement somehow may immunize all infringing conduct whenever consumers "press the button." Courts have developed secondary liability doctrines that readily distinguish the provision of simple yet capacious technologies like the Hopper from culpable conduct. Conduct such as possessing "mere knowledge of infringing potential or of actual infringing uses," and "ordinary acts incident to product distribution, such as offering customers technical support or product updates" and publishing advertisements urging customers "to 'record favorite shows' or 'build a library of recorded programs'," would not lead to any infringement liability. *MGM*, 545 U.S. at 931, 936. But under doctrines such as contributory infringement, vicarious liability, and inducement, indirect liability attaches where a defendant takes additional actions clearly intended to promote infringement: knowledge of infringement and materially enabling it; a right to control and direct financial benefit from infringement; and purposeful, culpable expression and conduct

to foster the infringement. The courts developed these secondary liability doctrines and considerations specifically to give judges the tools and discretion to properly balance copyright and innovation. *See MGM*, 545 U.S. at 929-930; *Sony*, 464 U.S. at 442; *Perfect 10, Inc. v. Visa Int'l Serv. Ass'n*, 494 F.2d 788, 794 (9th Cir. 2007); *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004, 1020-1021, 1027 (9th Cir. 2001).

As a matter of law and policy, there is a need for a consistent national standard for copyright infringement liability. The Internet is a global technology, and its growth depends upon uniform legal rules affecting the liability of Internet-based services. Similarly, consumer electronics products sold in national retail chains must be evaluated according to consistent rules for determining potential copyright liability. Thus, this Court in this case should confirm two fundamental principles. First, to carry forward the principles of *Netcom*, *CoStar*, and *Cablevision* that direct infringement requires a showing of volitional conduct. Second, to affirm the holding of the district court, in accordance with *Cablevision*, that improving automated processes to make consumer choices more convenient does not transform a technology vendor into a direct infringer.

II. Copying of Copyrighted Works to Acquire Non-Copyrightable Information is a Noninfringing Use.

The district court erred in reasoning that the copies made by Dish for purposes of quality assurance did not constitute fair use. Dish made the QA copies in order to extract facts (i.e., the precise times that commercials began and ended) that are not protected by copyright. While the district court focused on the ultimate purpose of enabling the AutoHop function, which it viewed as a commercial use under the first fair use factor, it lost sight that the immediate purpose of the copying was to access noncopyrightable factual information embedded in the content. This kind of “intermediate copying” is vital for the advancement of digital technologies, and should be recognized as a fair use.

A. The District Court erred by narrowly interpreting cases addressing intermediate copying.

Section 102(b) of the Copyright Act clarifies that copyright protection excludes any “idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.” This “idea/expression dichotomy” preserves principles that are fundamental in American society. It acts to divide the realm of copyright from the preserve of the public domain. “[E]very idea, theory, and fact in a copyrighted work

becomes instantly available for public exploitation at the moment of publication.” *Eldred v. Ashcroft*, 537 U.S. 186, 219 (2003). Thus, “copyright does not prevent subsequent users from copying from a prior author's work those constituent elements that are not original—for example ... facts, or materials in the public domain—as long as such use does not unfairly appropriate the author's original contributions.” *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 547-548 (1985).

Courts in numerous jurisdictions and diverse contexts have held that it is not infringement to copy copyrighted works for the purpose of accessing noncopyrightable attributes and information embedded therein, or to use those works in ways that do not exploit their copyrightable expression. For example:

1. Interoperability of computer game consoles

This Court consistently has approved the disassembly and copying of computer object code for the purpose of accessing unprotected (noncopyrightable) elements, even though the purpose of the copying was to create programs that competed against the copyright owner's copyrighted works. *See Sony Computer Entm't v. Connectix Corp.*, 203 F.3d 596 (9th Cir. 2000); *Sega Enters. Ltd. v. Accolade, Inc.*, 977 F.2d 1510 (9th Cir.

1993); accord *Atari Games Corp. v. Nintendo of Am. Inc.*, 975 F.2d 832 (Fed. Cir. 1992).

2. Interoperability of printers and printer cartridges

In a case analogous to those involving game consoles, the Sixth Circuit found fair use could be established where a company copied the entirety of a short computer program to create printer cartridge products interoperable with printer software, where the printer required the code to be transmitted from the cartridge as the “key” to a cryptographic “lock.” *Lexmark Int’l, Inc. v. Static Control Components, Inc.*, 387 F.3d 522 (6th Cir. 2004).

3. Comparative advertising

Copying of screen shots from copyrightable computer games was held a fair use, when used for advertising comparing the look of the games on the copyright owner’s game console to the defendant’s computer-based emulator. *Sony Computer Entm’t Am., Inc. v. Bleem, LLC*, 214 F.3d 1022 (9th Cir. 2000).

4. Copying information from a database

The Supreme Court’s leading case on the requirement of authorship for copyright protection denied copyright protection to non-original databases (*i.e.*, rejecting copyrightability based solely on the “sweat of the

brow”). *Feist Publ’ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340 (1991). The Seventh Circuit took *Feist* a step further, and held that even if a compilation were copyrightable, under *Sega v. Accolade* it would be fair use for the defendant to make a copy of the database information as the only way to extract the noncopyrightable information. *Assessment Techs. of WI, LLC v. WIREdata, Inc.*, 350 F.3d 640, 644-645 (7th Cir. 2003).²⁶

5. Comparing copyrightable text against other copyrightable text

The Fourth Circuit held it a fair use to make copies of copyrightable student essays solely for the purpose of assessing whether those essays, or those submitted by others, were involved in plagiarism. *AV ex rel. Vanderhuy v. iParadigms, LLC*, 562 F.3d 630 (4th Cir. 2009).

Each of the above cases revolves around a single principle equally applicable to this case. In nearly all of these cases, the allegedly infringing use promoted competition between the copyright owner and the alleged infringer. Nevertheless, the courts held that copying to access noncopyrightable elements of a work is not infringement. In this case, the precise times when commercials begin and end are facts that cannot be copyrighted. The district court, consistent with these case precedents,

²⁶ Similarly, in *Matthew Bender & Co., Inc. v. West Publ’g Co.*, 158 F.3d 693 (2d Cir. 1998), the Second Circuit held it would be permissible to make copies of a copyrightable arrangement of star-paginated legal opinions in order to discern page breaks that are not protected by copyright.

should have held that the making of the QA copies to ascertain the timing of commercials was a noninfringing use.

B. Making copies for technological purposes such as quality assurance justifies a finding of fair use.

The doctrine requiring the exclusion of facts and ideas from copyright protection is particularly crucial for digital technologies. As this Court observed with respect to computer programs:

[C]omputer programs are ‘in essence, utilitarian articles – articles that accomplish tasks. As such, they contain many logical, structural, and visual display elements that are dictated by the function to be performed, by considerations of efficiency, or by external factors such as compatibility requirements and industry demands.’ ... Thus, the fair use doctrine preserves public access to the ideas and functional elements embedded in copyrighted computer software programs. This approach is consistent with the ‘ultimate aim [of the Copyright Act], to stimulate artistic creativity for the general public good.’

Sony v. Connectix, 203 F.3d at 603 (citations omitted).

The district court recognized the need to access these unprotected attributes of software. Op. *12. But the need to access noncopyrightable elements in digital content applies to more than just computer programs. Digital content delivered over the Internet is transmitted in minute packets intended to be re-assembled by the receiving device. Each packet contains embedded digital information (described generically as “metadata”) that describes the characteristics of the packet data, and such information is

necessary for transmission, reception, recording, and display.²⁷ Similarly, video recording and playback devices must access and act upon metadata describing the structure and organization of the information, including precise timing and synchronization data.²⁸ Digital technologies copy music files to extract factual characteristics (“acoustic fingerprints”)²⁹ that can enable a computer to “recognize” when the same recording is playing (this technology powers “song recognition” mobile phone apps). All of these attributes are factual in nature, and cannot be protected by copyright.

Internet services and manufacturers of digital products need to make intermediate copies or copies for a multitude of purposes, such as transmission, transcoding, platform shifting, interoperability, and quality

²⁷ A simple example of metadata is the card catalog in a library that includes information concerning the author, title, publisher, year, category of the book, classification of the book according to its subject matter, and the location of the book in the library, and perhaps a short synopsis of the subject areas. To extend the analogy to digital content, such content might also include information that instructs what language it is in, how to read it (e.g., left to right, top to bottom), the font size and typeface, how many lines per page, how many characters per line, and the precise page, line, and location for each word.

²⁸ Standards defining such metadata for audiovisual works, including standards defining timing codes used in motion picture content, are created by organizations such as the Society of Motion Picture & Television Engineers (“SMPTE”). See SMPTE, <https://www.smpete.org/about> (last visited Jan. 23, 2013). See also, Wikipedia, http://en.wikipedia.org/wiki/Metadata#Metadata_on_the_broadcast_industry (last visited Jan. 23, 2013).

²⁹ See Wikipedia, http://en.wikipedia.org/wiki/Acoustic_fingerprint (last visited Jan. 23, 2013).

control. These copies are not being made or used for their copyrighted expression. Their sole purpose is to enable and test technical processes unrelated to the copyrightable content—for example, to ensure the proper operation of services and equipment, or to troubleshoot user inquiries. Ultimately, each of these uses promotes the commercial interests of a business that in some sense may compete against the copyright owner, or make possible consumer actions that provide no compensation to the copyright owner. Yet because these uses do not in any way exploit the copyrightable expression, but instead only make copies in order to access noncopyrightable elements, they should be deemed noninfringing. To hold otherwise would stifle technological progress and lock up information that Congress expressly placed beyond the reach of copyright.

III. The District Court Correctly Applied *Sony*'s Principles to Protect Innovation.

The courts have recognized that the fair use provision of the Copyright Act makes room for personal, private, noncommercial copying. *See Sony*, 464 U.S. at 442; *Recording Industry Assn. of Am. v. Diamond Multimedia Sys., Inc.*, 180 F. 3d 1072, 1079 (9th Cir. 1999) (“RIAA”). Since the Supreme Court’s ruling in *Sony* recognizing time-shifting as a fair use, Congress has rebuffed efforts to enact legislation to prohibit private

copying.³⁰ Today, Americans take for granted that they will be able to make copies of the media they buy for personal use, and leading companies like Apple and TiVo have been built in reliance on this general principle. *See* Fred von Lohmann, *Fair Use as Innovation Policy*, 23 Berkeley Tech. L. J. 829 (2008). These words from the Supreme Court in 1984 remain true today:

One may search the Copyright Act in vain for any sign that the elected representatives of the millions of people who watch television every day have made it unlawful to copy a program for later viewing at home, or have enacted a flat prohibition against the sale of machines that make such copying possible. It may well be that Congress will take a fresh look at this new technology, just as it so often has examined other innovations in the past. But it is not our job to apply laws that have not yet been written.

Sony, 464 U.S. at 456.

Appellants, however, argue that technologies that enable private copying must not be permitted to reach too far beyond the functionality of the original Betamax VCRs. While fair use analysis certainly requires a

³⁰ S. 2048, the “Consumer Broadband and Digital Television Promotion Act,” (Mar. 21, 2002), legislation popularly known and criticized as “The Hollings Bill,” would have required every digital device of any kind to recognize a “flag” in the information it receives, and restrict copying. *See* Declan McCullagh, *What Hollings’ Bill Would Do*, *Wired*, Mar. 22, 2002, <http://www.wired.com/news/politics/0,1283,51275,00.html>. S. 506, introduced in 1987, would have required a “Copycode” chip in all Digital Audio Tape Recorders. Earlier legislation – S. 1739 (1985), S. 31 and H.R. 1030 (1983), S. 1758 and H.R. 5705 (1982) – would have imposed a “royalty” payment on every video and audio recorder.

case-by-case analysis, nothing in the *Sony* opinion suggests that its ruling in favor of private copying should be limited to its particular facts.

Appellants admit that consumers commonly time-shift more than one program at a time and commonly use “30 second skip” buttons on their remote controls.³¹ They purport not to challenge these widely accepted practices.³² Thus appellants ask this Court to craft a novel and poorly bounded rule holding that at some point, when a consumer employs more efficient tools to do something she is entitled to do, the consumer becomes an infringer. Such a cramped view of fair use would hobble not just DVR technology, but also may threaten a wide range of new private copying technologies.

The *Sony* Court applied fair use in a novel context: The ability to efficiently copy an *entire video work*, in a *private rather than commercial* context. The majority rejected the argument that in order to qualify as fair use, any local storage must be “productive” and of only a portion of the work copied. The Court focused instead on the district court’s finding that *time-shifting* by consumers is a fair use. Industry practice has followed suit. Modern DVRs, including those rented or sold by or under license from

³¹ The District Court noted that the Hopper may include brief information from the beginning or end of a commercial just as the “skip” facility on conventional remotes does. Op. *4.

³² Fox Br. 4.

content providers,³³ now commonly provide for simultaneous tuning and recording by two, four, or six video tuners.³⁴ In no court has this practice ever been successfully questioned.³⁵ Consumers' rights to local storage and management of content are now widely presumed, a presumption that has made innovations like Apple's iPod and TiVo's groundbreaking DVR products possible.

In 1999, a Ninth Circuit panel read *Sony* to imply not only a consumer right to time-shifting, but also one to *place-shifting*. In *RIAA*, 180 F.3d at 1079, this Court rejected the district court conclusion that a narrow reading

³³ See Richard Lawler, *Comcast's next generation Xfinity Spectrum DVR shows off quad tuners, new menu and apps*, engadget, May 20th, 2011, www.engadget.com/2011/05/20/comcasts-next-generation-xfinity-spectrum-dvr-shows-off-quad-tu/; Ben Drawbaugh, *Ceton previews multi-room DVR and Echo extender (hands-on) HD*, engadget, Jan. 10th, 2012, <http://www.engadget.com/2012/01/10/cton-announces-multi-room-dvr-and-echo-extender-hands-on/>.

³⁴ While the appellants apparently believe that recording too many programs at once constitutes infringement, the popular press observes that network programming practices make multiple DVR recordings, and even multiple DVRs, a necessity. See Brian Stelter, *On Sundays, the DVR Runneth Over*, N.Y. Times, Apr. 19, 2012; Daniel Fienberg, *DVR Gridlock 2012-13*, The Fien Print, May 27-June 1, 2012, www.hitfix.com/the-fien-print/30, www.hitfix.com/the-fien-print/31. And competing cable and satellite services offer their customers DVRs capable of the same features as the AutoHop, by pressing a few more buttons. *Supra* at 13-14 & nn.22-23.

³⁵ As noted by Fox, the DVR manufacturer Replay TV was sued in 2001 and ultimately entered bankruptcy due to lack of resources to defend the several complaints against it, which covered various attributes and capabilities, including capacities for storage and indexing that are far exceeded by today's DVRs.

of the Audio Home Recording Act would “eviscerate” its royalty coverage. Citing *Sony’s* “holding that ‘time-shifting’ of copyrighted television shows with VCR’s constitutes fair use under the Copyright Act, and thus is not an infringement,” the Court observed: “Such copying is paradigmatic noncommercial personal use entirely consistent with the purposes of the Act.”³⁶ There is simply *no* precedent for finding consumer copyright liability where, as here, recordings stay in the home, are made portable, or otherwise remain under the control of the consumer who made them.

Nor has any case held that a consumer may become liable by *declining to view* a part of a program or a commercial. Motion picture directors did sue a software provider for selling a product that empowered consumers to skip or mute certain objectionable DVD scenes.³⁷ Congress promptly amended the Copyright Act to exempt both the user and the distributor of such software from any such potential claim, and the case was

³⁶ Six years later, in the *MGM* oral argument, counsel for the motion picture and recording industry plaintiffs conceded that copies kept within personal control should not occasion liability: “The record companies, my clients, have said, for some time now, that it’s perfectly lawful to take a CD that you’ve purchased, upload it onto your computer, put it onto your iPod. There is very, very significant lawful commercial use for that device, going forward.” Tr. of Oral Argument at 11-12, *MGM*, 545 U.S. 913 (2005) (No. 04-480).

³⁷ *Huntsman v. Soderbergh*, No. Civ.A02CV01662RPM MJW, 2005 WL 1993421 (D. Colo. Aug. 17, 2005).

withdrawn.³⁸ Consumers may also find certain advertisements, as well as program material, objectionable for personal or family viewing, and it is difficult to imagine copyright law imposing a legal duty on viewers to watch commercials that offend them or their children.³⁹

In the final analysis, what appellants here object to is a technology that is an improved version of the VCR approved by the Supreme Court in *Sony*. It is more convenient to use, and has more storage capacity, but serves essentially the same function as the original Betamax—it allows those who have been invited to watch over the air broadcasts to time-shift those broadcasts for viewing at a more convenient time. Any reading of *Sony* that holds every Hopper DVR owner liable for copyright infringement would constitute a threat to private, noncommercial copying technologies. These technologies include not just existing product categories, such as the iPod and many DVR products, but also new technologies, such as online backup services and personal music lockers. These nascent-but-growing cloud

³⁸ Family Entertainment and Copyright Act of 2005, Pub. L. No. 109-9, 119 Stat. 218 (2005), 17 U.S.C. § 110(11).

³⁹ See Amy Norton, *Commercials Can Expose Kids to Violence*, Reuters, Dec. 8, 2004, http://www.frankwbaker.com/sports_ad_study.htm; Robert Mackey, *Green Party Ad Featuring Bleeped Obscenity Challenges TV Indecency Rules*, N.Y. Times, Sept. 4, 2012; KARE11, *TV stations powerless to block objectionable political ads* (Aug. 8, 2012), http://www.kare11.com/news/news_article.aspx?storyid=986021 (last visited Jan. 22, 2013).

services are premised on the presumption that a computer user may make a personal copy of what resides on her desktop computer in the cloud. This may include purchased music and television programs, as well as software programs. It may include articles copied and saved for personal research. Other new technologies doubtless are just over the horizon—assuming that *Sony* is not cabined to the technologies of analog tape.

CONCLUSION

The decision of the district court should be affirmed as to PTAT and AutoHop, and should be reversed as to the QA copies.

Respectfully submitted,

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**CERTIFICATE OF COMPLIANCE PURSUANT TO
FED. R. APP. P. 32(a)(7)(C) AND NINTH CIRCUIT RULE 32-1**

Pursuant to Fed. R. App. P. 32(a)(7)(C) and Ninth Circuit Rule 32-1, I certify that this brief *amicus curiae* is proportionately spaced, has a typeface of 14 points and contains 6764 words.

DATED: January 24, 2013

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CERTIFICATE OF SERVICE

I hereby certify that on January 24, 2013, I electronically filed the foregoing Brief Amicus Curiae of Computer & Communications Industry Association, Consumer Electronics Association, and The Internet Association in Support of Defendants-Appellees, with the Clerk of the Court for the United States Court of Appeals for the Ninth Circuit by using the appellate CM/ECF system. I certify that all participants in the case are registered CM/ECF users and that service will be accomplished by the appellate CM/ECF system.

Dated : January 24, 2013

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