

No. 13-461

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**In The  
Supreme Court of the United States**

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AMERICAN BROADCASTING COMPANIES, *et al.*,  
*Petitioners,*

v.

AEREO, INC., F/K/A/ BABOOM LABS, INC.,  
*Respondent.*

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On Writ Of Certiorari To The United States Court Of  
Appeals For The Second Circuit

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**BRIEF *AMICI CURIAE* OF CENTER FOR  
DEMOCRACY & TECHNOLOGY,  
CTIA-THE WIRELESS ASSOCIATION, UNITED  
STATES TELECOM ASSOCIATION, INTERNET  
INFRASTRUCTURE COALITION, DIGITAL MEDIA  
ASSOCIATION, AND INFORMATION  
TECHNOLOGY INDUSTRY COUNCIL  
IN SUPPORT OF NEITHER PARTY**

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## INTEREST OF *AMICI*<sup>1</sup>

The Center for Democracy & Technology (“CDT”) is a nonprofit public interest group that seeks to promote free expression, privacy, individual liberty, and technological innovation on the open, decentralized Internet. CDT advocates balanced copyright policies that provide appropriate protections to creators without curtailing the unique ability of the Internet to empower users, speakers, and innovators. CDT has an interest in cloud computing services because they play an increasingly central role in facilitating online speech and innovation.

CTIA-The Wireless Association is an international nonprofit membership organization that has represented the wireless communications industry since 1984. Membership in the association includes wireless carriers and their suppliers, as well as providers and manufacturers of wireless data services and products. The association advocates on behalf of its members at all levels of government. CTIA also coordinates the industry's voluntary efforts to provide consumers with a variety of choices and information regarding their wireless products and services.

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<sup>1</sup> Petitioners’ and Respondent’s letters granting blanket consent to the filing of amicus briefs have been filed with the Clerk. No counsel for a party authored this brief in whole or in part, and no person other than amici curiae or their counsel made a monetary contribution to the preparation or submission of this brief.

The United States Telecom Association (“USTelecom”) is the premier trade association representing service providers and suppliers for the telecommunications industry. USTelecom’s member companies offer a wide range of services across communications platforms, including voice, video and data over local exchange, long distance, wireless, Internet, and cable. These companies range from large, publicly traded companies to small rural cooperatives. USTelecom advocates on behalf of its members before Congress, regulators, and the courts for policies that will enhance the economy and facilitate a robust telecommunications industry.

The Internet Infrastructure Coalition (“i2Coalition”) is a trade association of companies from the Internet infrastructure industry with key demographics in web hosting, data centers and cloud infrastructure providers, formed to undertake the following key initiatives: represent the interests of the industry on Capitol Hill and relevant regulatory agencies; educate members of Congress and other key legislative and regulatory stakeholders on the complexities and workings of the Internet; develop and share best business practices with fellow members; educate the media about the industry; and promote the industry’s messages to internal and external constituencies.

The Digital Media Association (“DiMA”) represents companies that work to develop innovative platforms for the online distribution and consumption of various forms of media, including digital music, movies and books. The innovative products and services that DiMA member companies



regularly bring to market have changed – and will continue to change – commerce and daily life, as well as how Americans obtain and enjoy news, literature and entertainment. As a result of the tremendous ingenuity of DiMA members, online consumers are consistently provided with legitimate access to a wide variety of digital content on a growing number of devices, both at home and on the go.

The Information Technology Industry Council (“ITI”) is the premier advocacy and policy organization for the world's leading innovation companies. ITI represents 54 of the world's leading information and communications technology companies, including computer hardware and software, internet services, and wireless networking companies. Its members pioneer cutting-edge products and services that improve people's daily lives. ITI navigates the constantly changing relationship between policymakers, companies, and non-governmental organizations.

*Amici* are trade associations and public interest organizations with a broad range of interests and expertise in the technology and communications sectors. The proper interpretation of the Copyright Act's public performance right is critical to the future of those sectors. Communicating information and content from one physical place to another is at the heart of what Internet-based technologies do. Key legal principles, especially those reflected in the Second Circuit's interpretation of the Copyright Act's Transmit Clause (17 U.S.C. § 101) and the public performance right (17 U.S.C. § 106(4)) in the *Cablevision* decision, have allowed businesses represented by *amici* CTIA, USTelecom, DiMA, ITI,

and i2Coalition to invest significant resources in the development and operation of a wide variety of innovative and important services with transmission functions, including cloud computing. *Cartoon Network LP v. CSC Holdings, Inc.*, 536 F.3d 121 (2d Cir. 2008) (hereinafter “*Cablevision*”). Millions of users, from businesses to individual consumers, rely on ubiquitous access to these services. Accordingly, *amici* are increasingly concerned that an overly broad interpretation of the Transmit Clause will result in substantial business uncertainty on questions of major importance to cloud computing and related services.

### SUMMARY OF ARGUMENT

The issue presented in this dispute extends far beyond the television, implicating the entire Internet economy. *Amici* do not in this brief offer an overall opinion on the outcome of this case or urge that any particular side prevail. Rather, this brief stresses several basic and straightforward principles regarding the public performance right that are essential to the ongoing growth and development of “cloud computing.”<sup>2</sup> Whatever this Court’s ultimate

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<sup>2</sup> “Cloud computing is 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.” See Peter Mell & Timothy Grance, Recommendations of the Nat’l Inst. of Standards & Tech., U.S. Dep’t of Commerce, *NIST Special Publication 800-145: The NIST Definition of Cloud Computing* (2011), at 2, available at

decision here, it should at a minimum approach this case in a way that respects and reflects these principles.

The Internet comprises computers that “transmit or otherwise communicate” information, and the Copyright Act provides that “to transmit or otherwise communicate” a copyrighted work “*to the public*” may intrude on the exclusive rights granted to copyright owners. 17 U.S.C. § 101 (clause (2) of the definition of “publicly”; “the Transmit Clause”). Accordingly, the boundary between public and private performances establishes which Internet functions may be regulated by the Copyright Act and which may not.

The Second Circuit’s *Cablevision* decision provided essential guidance in drawing this line correctly. Above all, it established that the transmission of a user’s lawful copy of a work *to that same user in a manner not capable of being received by others* is a private performance that infringes no exclusive right of the rights holder in the underlying work. *Cablevision*, 536 F.3d at 133-34. Innovators and investors alike have relied on this in bringing new Internet products and services to market. For example, several companies (including Google and Amazon) have launched personal music locker services, allowing individuals to upload their personal music collections “to the cloud” and enabling them to transmit that music back to their

own computers, phones, and tablets when, where, and how they find most convenient.

Certain approaches to this case, however, could overturn or subvert this and related principles upon which cloud computing relies. In particular, Petitioners' position is that the *Cablevision* court was wrong to conclude that separate transmissions can constitute separate performances. Petitioners appear to argue instead that separate transmissions of the same work over the same technological system should automatically be aggregated and treated as a single act of public performance. Taken to its logical conclusion, this interpretation could suggest that a public performance would occur if fifty of the fifty thousand subscribers to a music locker service recorded a performance of a song, uploaded the recording to their locker, and then directed the service to play the song back to themselves.

Adopting such an overly broad approach to the public performance right would call into question a variety of established and mainstream services. It could impair technological progress by establishing an irrational legal preference for local technologies over networked ones. And it could threaten the great promise of cloud computing for individual users, businesses, and economic growth. Congress intended no such results. In addressing the public performance questions raised in this case, the Court should avoid interpretations that would cast a pall over wide swaths of the modern technological landscape, including the burgeoning cloud computing industry.

## ARGUMENT

### I. CLOUD COMPUTING IS INCREASINGLY CENTRAL TO MODERN TECHNOLOGY AND IS BROADLY BENEFICIAL TO CONSUMERS, BUSINESSES, AND THE ECONOMY.

Cloud computing refers to the practice of remotely accessing a network of remote computer servers on the Internet to store, manage, and process data.<sup>3</sup> Cloud computing unlocks enormous new value for businesses, consumers, and the economy as a whole. At a high level, it makes computing resources available in a more efficient, secure, flexible, and scalable manner. It makes powerful computer resources once available only to large entities now broadly available via shared platforms. And it gives people the ability to access their own documents, emails, music collections, and other data across multiple wired and wireless devices, remotely and seamlessly, without having to worry about their own computer malfunctioning and losing their files, and without having to worry about frequent updates to client-side software. For example, a busy lawyer might begin the day drafting a brief on her office desktop computer, continue revising it on a laptop while aboard the commuter train in the evening, and then edit the same document at night from home, via a tablet computer.

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<sup>3</sup> See *supra* n.2.

Cloud computing is also becoming an increasingly important sector of the U.S. economy. In 2011, 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.<sup>4</sup> A recent study projected that revenue growth at cloud computing companies will exceed \$20 billion per year for each of the next five years.<sup>5</sup> It also found that cloud computing services present a potential cost savings of more than \$625 billion over the next five years for businesses that invest in cloud computing.<sup>6</sup> Additionally, the study found that cloud computing investments will create 213,000 new jobs in the United States and abroad over the next five years.<sup>7</sup>

As the marketplace trends toward cloud computing, any legal decision casting doubt on this technological development would undermine innovation and cast a pall over wide swaths of the modern technological landscape. For the reasons set forth below, that is a serious risk in this case.

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<sup>4</sup> John F. Gantz, *et al.*, *Cloud Computing’s Role in Job Creation*, IDC White Paper (2012), at 1, available at <http://people.uwec.edu/HiltonTS/ITConf2012/NetApp2012Paper.pdf>.

<sup>5</sup> Sand Hill Group, *Job Growth in the Forecast: How Cloud Computing is Generating New Business Opportunities and Fueling Job Growth in the United States* (2012), available at <http://www.news-sap.com/files/Job-Growth-in-the-Forecast-012712.pdf> (also available at <http://sandhill.com/article/sandhill-group-study-finds-massive-job-creation-potential-through-cloud-computing/>).

<sup>6</sup> *Id.* at 11, 14.

<sup>7</sup> *Id.* at 8, 13.

## II. CLOUD COMPUTING DEPENDS UPON BASIC PRINCIPLES REGARDING THE PUBLIC PERFORMANCE RIGHT.

Cloud computing, by its nature, empowers users to store content remotely and then transmit it back to themselves on demand. In offering such capabilities, cloud computing services depend heavily on the legal understanding that such transmissions are not “public performances” under copyright law.

If that understanding were thrown into doubt, cloud computing services would face a serious predicament: their core functions would become susceptible to copyright claims from a virtually limitless class of possible claimants, with the potential for ruinous statutory damages.

In the court below and in the other cases involving Aereo and FilmOn X, various *amici* have repeatedly expressed concern about the implications of these cases for cloud computing. Petitioners respond directly to this concern in their merits brief to this Court, stating that reversal of the Second Circuit “need not threaten the future of ‘cloud computing’ technology....” Petitioners’ Br. at 45-46. Petitioners further state that “[t]here is an obvious difference between a service that merely stores and provides an individual user access to copies of copyrighted content that the user already has legally obtained, and a service that offers copyrighted content itself to the public at large.” *Id.*

This is a significant concession, and *amici* certainly welcome the recognition that services that enable users to store and access legally acquired content should not be treated as public performers. But Petitioners fail to grapple with the tension between this conclusion and Petitioners' own insistence that it is "patently incorrect," Petitioners Br. at 37 n.5, even on the facts of the *Cablevision* case, to assess the potential audience for individual transmissions individually. For this reason, it is far from clear that Petitioners' interpretation of the Transmit Clause would not expose cloud computing to new legal risk.

For cloud computing to thrive, providers need to be able to continue to depend on several basic principles regarding the public performance right. Those principles are set forth below. The apparent agreement between Petitioners and *amici* on the inappropriateness of exposing cloud computing services to public performance liability may matter little to future courts if a decision in the present case endorses legal theories that would cast doubt on the continued vitality of these principles.

**A. When a user directs a computer to store a personal copy of a work, a subsequent transmission of that copy back to that same user is a *private* performance, not a *public* one.**

The statutory language of the Transmit Clause makes it clear that not every transmission of a performance of a work constitutes an infringement. Only transmissions "to the public" are within the



exclusive rights of a copyright holder. Some performances must therefore be non-public, or private. The statute's description of the exclusive right plainly places these transmissions outside the scope of the copyright holder's exclusive rights.

It would be hard to envision a more classic example of a private performance than a one-to-one transmission of a consumer's personal copy of a work back to that same consumer. By any plain interpretation of language, such a transmission is "private" rather than "public." This was the core of *Cablevision's* public performance holding. The Second Circuit's ruling provided critical guidance regarding the Transmit Clause: "[I]t is evident that the transmit clause directs us to examine who precisely is "capable of receiving" a particular transmission of a performance." *Id.* at 135. It therefore followed that a transmission made by a user from a remote storage DVR ("RS-DVR") back to herself was a private performance, and not a public performance, even if many users made their own copies of the same work and subsequently separately viewed their own copies of that work. *Id.* at 134-37.

Applying this common-sense interpretation to the Internet context, when a user accesses her own digital files (whether music, video, text, or software) over the Internet, the resulting transmission should not be treated as a *public* performance within the meaning of the Copyright Act. Thus, when a consumer uses a cloud-based service like an online backup or storage locker for his lawful copies of copyrighted works, the later transmission of those copies back to himself, in a manner not accessible to

others, does not constitute an exercise of the public performance right.

The Court should take care not to analyze the present case in a manner that would undercut, ignore, or reject this crucial principle regarding one-to-one transmissions of personal copies. In particular, it should avoid any suggestion that the transmission to users of their own, lawfully acquired personal copies constitutes public performance.

That means that if the Aereo service in fact operates in a way that creates lawful, legally cognizable personal copies, it would necessarily follow that the subsequent transmissions of those individual copies to those same individual customers represent private performances, not public ones. To be clear, this brief takes no position on the nature of the copies associated with Aereo's service; *amici* may have independent views on how to analyze the nature, legal status, and source or authorship of those copies. But any holding that the copies are personal yet their transmissions to individual owners are public would cast into doubt the legal foundation for cloud computing.

**B. In assessing whether a performance is public or private, the physical location of the computers (or other devices) involved is irrelevant.**

The entire point of cloud computing is to enable users to access and take advantage of computing resources without regard to location. Powerful services become ubiquitously available when people

everywhere can use the Internet to tap into physically distant computers. There is no legal or policy basis for undercutting this arrangement by making public performance analysis turn on the physical location of the equipment used.

This principle, too, is reflected in the *Cablevision* decision. The RS-DVR at issue in that case was, in essence, just a regular DVR with a “long cord”—it provided consumer functionality in all respects identical to a DVR, but it stored programs in a remote computer rather than one located in a set-top box in the consumer’s home. The Second Circuit correctly took the view that moving the DVR function from a local computer to a remote one did not change a fundamentally private performance into a public one.

Any approach to this case that would make the public versus private nature of performance depend on the physical location of Aereo’s computers or antennas would likewise be misplaced.

**C. The fact that multiple users may store or transmit the same work does not transform otherwise individual private performances into a single, public one.**

Petitioners criticize the *Cablevision* decision for treating individual transmissions of a work as separate performances. Petitioners’ Br. at 34 (“Had Congress intended liability for infringement to turn on whether each distinct *transmission* of a performance is accessible to the public, it would have

been easy enough for Congress to say so.”). Petitioners contend that the Second Circuit erred by not aggregating transmissions generated from different copies of the same work. *See id.* at 36 (“the transmit clause says not a word about whether transmissions originate from a single copy or performance...”). Petitioners’ position might be termed the aggregation theory, since it calls for aggregating separate transmissions from different times and places whenever they involve the same work.

Applying the aggregation theory to users’ transmissions of their copies would result in unintended consequences for industry and users that are harmful and untenable.

By aggregating all users’ private performances together, the status of a particular performance would be perpetually uncertain. Whether one person was an infringer would depend on the actions of other, unknown persons. All performances in the cloud would be potentially public or private, infringing or non-infringing, until discovery were conducted to inspect the relevant network traffic. Only then could it be known how many private users had streamed their copies of a work to themselves and whether some unstated threshold had been crossed. Under this legal rule, “a hapless customer who records a program in his den and later transmits the recording to a television in his bedroom would be liable for publicly performing the work simply because some other party had once transmitted the same underlying performance to the public.” *Cablevision*, 536 F.3d at 136. This is no mere

hypothetical—today, consumers have many consumer electronics devices to choose from that enable the recording and retransmission of television programming both in the home and to Internet-connected mobile phones, tablets, and computers.<sup>8</sup>

Indeed, the aggregation theory would render the status of a performance fundamentally unknowable at the time the performance occurs, even if a person somehow had visibility into the behavior of other parties on the network. A communication that appears to be a private performance today could later be rendered public if other people eventually use the same technology platform to communicate the same work. A person's direct liability under copyright law cannot turn on the actions of other parties, much less on the unknowable *future* actions of others.

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<sup>8</sup> See, e.g., David Pogue, *TiVo Goes Wandering, on the Road and at Home*, N.Y. TIMES, Mar. 13, 2013, available at <http://www.nytimes.com/2013/03/14/technology/personaltech/pogue-tivo-mini-stream-review.html?pagewanted=all> (describing new devices that allow a TiVo DVR to transmit recorded broadcast programs to mobile devices); Suzanne Kantra, *4 Ways to Take Your Shows and Movies To Go*, USA TODAY, Feb. 24, 2013, available at <http://www.usatoday.com/story/tech/2013/02/24/tv-shows-movies-on-the-go/1928795/> (describing TiVo and Slingbox devices that transmit recorded broadcast programs to mobile devices); Harry McCracken, *Top 10 Everything of 2012: Simple.TV*, TIME, Dec. 4, 2012, available at <http://techland.time.com/2012/12/04/top-10-tech-lists/slide/iphone-5/> (describing Simple.TV DVR that streams recorded broadcast programming over the Internet to mobile devices).

Petitioners attempt to minimize the *Cablevision* court's concern with the "hapless customer" by stating that "the transmit clause is not concerned whether *someone else* transmitted a performance of the work to the public before *the alleged infringer* did, but rather with whether the alleged infringer is transmitting the performance to the public." Petitioners' Br. at 37. In other words, Petitioners argue that only transmissions by the same person should be aggregated for purposes of determining whether a performance is public.

In the cloud computing context, however, this argument still begs the question of how to determine which person is doing the transmitting—the cloud service provider or its users. That highlights a major risk posed by this case, because Petitioners' theory leaves open the possibility that thousands of private transmissions could be attributed to a cloud computing service provider, resulting in those transmissions being mischaracterized as public. To be clear, *amici* believe that in most cloud computing scenarios, it is the user rather than the service provider who should be deemed to be doing the transmitting. But to the extent that courts might view service providers as the transmitting entities, cloud computing providers would have to assume that nearly every transmission of a previously published or publicly performed work would be (or would eventually become) a public performance, regardless of that transmission's potential audience—because sooner or later, some other users would likely use the service to transmit *their* own copies of the work, thus rendering all such

transmissions part of a single, public performance. This would cast serious doubt over the industry.

The Court should therefore reject Petitioners' aggregation approach to public performance analysis. There may well be factual circumstances under which multiple transmissions are sufficiently linked that they should be treated as part of the same performance. But such aggregation makes no sense as an across-the-board rule. For example, on the facts of *Cablevision*, the court was correct to hold that users' private playbacks of their own recordings constituted separate private performances—even though multiple users often play back the same underlying works. *See Cablevision*, 536 F.3d at 135-38. For many cloud computing services, users' private retrieval of their own stored content should likewise be treated as private, even if other users choose to store and retrieve their own copies of the same works.

**D. Volitional conduct is a necessary element of direct liability.**

When a computer system is used to reproduce or perform a work in a way that may infringe, direct liability is reserved for parties whose volitional conduct is sufficiently proximate to the infringement. Where the key volitional conduct lies with the computer system's users, the legal responsibility of the computer system is analyzed under principles of *secondary* liability. *CoStar Group, Inc. v. LoopNet, Inc.*, 373 F.3d 544, 549 (4th Cir. 2004) ("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. Were this not so, the Supreme Court could not have held, as it did in *Sony...*"); *Religious Tech. Ctr. v. Netcom Online Comm. Servs. Inc.*, 907 F. Supp. 1361, 1370 (N.D. Cal. 1995) ("Although copyright is a strict liability statute, there should still be some element of volition or causation which is lacking where a defendant's system is merely used to create a copy by a third party.").

The *Cablevision* case applied the volitional conduct test to the act of copying. On the facts of that case, the court held that the user engages in the volitional conduct that causes a specific program to be recorded. Users therefore were deemed to be the ones who "do" the copying. *See Cablevision*, 536 F.3d at 131-32. The Second Circuit expressly declined to reach the question of whose volitional conduct triggers the subsequent playback, because it held the resulting performances to be private in any event. *See id.* at 135-38. That made the volitional conduct question moot. But as a general matter, volitional conduct is an important additional element of public performance analysis.<sup>9</sup>

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<sup>9</sup> Following *Cablevision*, the court below did not consider the issue of volitional conduct: who here is performing the broadcasts, the users or Aereo? Petitioners simply assume that Aereo is the volitional actor. But if the users are the volitional actors, the Petitioners have effectively conceded in the context of their discussion of the "hapless customer" that no public performance would occur. Petitioners' Br. at 37.



For cloud computing systems, there will often be a strong argument that users' volitional conduct is the proximate cause of particular copyright-relevant actions such as copying and transmitting, while the cloud computing provider is more accurately seen as the supplier of the tools or mechanisms the user employs. In such circumstances, cloud providers are akin to the manufacturers of photocopiers or copy shops offering photocopiers for use by the public. Accordingly, their liability should be analyzed under principles of *secondary* rather than direct liability. Erroneously subjecting such technology providers to claims of *direct* infringement—a strict liability offense—would imperil a wide array of technologies (whether photocopiers or cloud computing) that are used primarily for noninfringing purposes. Congress did not intend for providers of online services to be strictly liable for the actions of their users; indeed, it has enacted safe harbor provisions to make this clear. 47 U.S.C. § 230(c)(1) (protecting online services from being treated as the publisher or speaker of information provided by users); 17 U.S.C. § 512(a)-(d) (protecting specified categories of online service providers from monetary liability for infringing material transmitted or posted by users, subject to certain conditions).

In short, the volitional conduct requirement draws the line between (a) volitional actors whose overt acts incur direct responsibility for infringement and (b) providers of tools or instrumentalities, who may be secondarily liable for the acts of others, in appropriate circumstances. Here, the Court should not assume, without

analyzing the volitional conduct question, that the copyright exposure of a service like Aereo is properly analyzed under principles of direct liability rather than secondary liability. Determining who is the volitional actor often involves careful analysis of how a service operates. It is important to cloud-based services that legal doctrine in this area recognizes the volitional conduct test and the distinction between direct and secondary liability.

**E. A performance can be private without a licensing relationship.**

Petitioners stress the fact that the defendant in *Cablevision* had a license to rebroadcast programming, in an attempt to suggest that the Transmit Clause may apply differently to parties who have secured such a license. Petitioners' Br. at 37 n. 5. There is no basis for restricting private performances to licensing in this way.

The *Cablevision* court concluded that the transmissions at issue in that case were private performances, not licensed public performances. *Cablevision*, 536 F.3d at 137-39. The Second Circuit nowhere suggested that this holding was based on the fact that *Cablevision* had a license to retransmit programming or that the remote DVR service was somehow tied to a licensed cable service.<sup>10</sup> *Id.* Nor

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<sup>10</sup> In an *amicus* brief in the Second Circuit appeal of *Aereo*, *Cablevision* itself emphasized that its remote DVR service was “[i]n addition to and separate from” its licensed cable system. Brief for *Amicus Curiae* *Cablevision Systems Corp.* in Support of Reversal at 16, *American Broadcasting Cos. v. Aereo*, Nos.

did the Second Circuit rely on an implied license theory—in fact, the Fox parties specifically and vehemently rejected the argument that Cablevision’s original license for retransmission in any way, shape, or form justified the RS-DVR service. *See* Brief of Plaintiffs-Counter-Defendants-Appellees Twentieth Century Fox Film Corp., *et al.* at 5, *Cablevision*, No. 07-1480, 2007 WL 6101619 (2d Cir. June 20, 2007) (“None of Cablevision’s negotiated licenses, nor any statutory licenses, authorizes Cablevision to transmit or to reproduce copyrighted programming through RS-DVR.”).

From the perspective of businesses involved in cloud computing, limiting *Cablevision*’s application to entities that possess rebroadcast licenses would be tantamount to holding that all performances are public. The statutory language defining the public performance right does not pick out “broadcast programming” for special treatment. Thus, if transmissions of broadcast programming were held to require a license to qualify for private performance status, it would raise the specter of licenses being required for transmissions of other types of content as well—including personal transmissions of music, computer software, text, or video files. There would be no practical way for cloud

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12-2786, 12-2807 (2d Cir. brief filed Sept. 21, 2012). It explained that “the recordings that subscribers make with the RS-DVR perform a function that is both operationally meaningful and independent from Cablevision’s real-time, licensed transmission of cable content.” *Id.* In short, the remote DVR service was separate and independent from the licensed service.

computing services to navigate such a regime. Cloud computing services cannot possibly enter licensing relationships with each and every rights holder in each and every piece of content users choose to store or transmit. Nothing in Title 17 would guide cloud computing providers or investors in how to satisfy this unexpected and unspecified licensing requirement, which would more closely resemble an artifact of prior business models than a principle of copyright law. Such a cramped interpretation of the Transmit Clause must be avoided.

The lack of a licensing relationship between Aereo and broadcasters does not preclude a finding that the performances associated with Aereo's service are private. However the Court resolves the question of public versus private performance in this case, we urge the Court not to establish a rule that makes licensing a prerequisite for performances to be treated as private.

### **III. UNDERMINING THESE PRINCIPLES WOULD ESTABLISH A HARMFUL LEGAL BIAS AGAINST REMOTELY- PROVIDED SERVICES.**

The principles set forth above establish a level, technologically neutral playing field for the remotely-provided computer functions that are at the heart of the trend towards cloud computing. Given this kind of unbiased legal environment, cloud computing thrives.

This can be seen clearly in the reaction of innovators and investors to the *Cablevision* decision,

which reflected and confirmed key elements of the legal framework. A November 2011 study by Harvard Business School Professor Josh Lerner found that after the decision, the average quarterly investment in cloud computing in the United States increased by approximately 41 percent.<sup>11</sup> That study also 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. When coupled with the study's findings regarding enhanced effects of venture capital investment in this space, the author concluded that such sums may be the equivalent of two to five billion dollars in traditional investment in research and development.<sup>12</sup>

By contrast, any decision subverting the legal principles on which cloud computing relies would undermine innovation and investment in the technology sector. In particular, embracing any legal doctrine that would convert the routine functions of cloud computing services into public performances under copyright law would effectively establish an irrational, across-the-board legal bias against technologies that store content remotely and in favor of technologies that store content locally and hence minimize the need for transmission.

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<sup>11</sup> Josh Lerner, *The Impact of Copyright Policy Changes on Venture Capital Investment in Cloud Computing Companies*, Nov. 1, 2011, at 9, at [http://www.analysisgroup.com/uploadedFiles/Publishing/Articles/Lerner\\_Fall2011\\_Copyright\\_Policy\\_VC\\_Investments.pdf](http://www.analysisgroup.com/uploadedFiles/Publishing/Articles/Lerner_Fall2011_Copyright_Policy_VC_Investments.pdf).

<sup>12</sup> *Id.* at 24.

Congress intended no such bias against remotely-provided services. Moreover, such a bias would run directly contrary to the direction the technology marketplace is moving. The ability of many services to continue operating in their current form would be thrown into question, and the industry's growth would be curtailed.

### CONCLUSION

We urge the Court not to interpret the Transmit Clause in a manner that would undermine cloud computing and broadly chill the progress and promise of networked technologies.

Respectfully submitted,

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