

**The CARTOON NETWORK LP, LLLP and Cable News Network L.P., L.L.L.P., Plaintiffs-Counter-Claimants-Defendants-Appellees,
Twentieth Century Fox Film Corporation, Universal City Studios Productions LLLP, Paramount Pictures Corporation, Disney Enterprises Inc., CBS Broadcasting Inc., American Broadcasting Companies, Inc., NBC Studios, Inc., Plaintiffs-Counter-Defendants-Appellees,**

v.

CSC HOLDINGS, INC. and Cablevision Systems Corporation, Defendants-Counterclaim-Plaintiffs-Third-Party Plaintiffs-Appellants,

v.

Turner Broadcasting System, Inc., Cable News Network LP, LLP, Turner Network Sales, Inc., Turner Classic Movies, L.P., LLLP, Turner Network Television LP, LLLP, Third-Party-Defendants-Appellees.

Docket No. 07-1480-cv(L).

Docket No. 07-1511-cv(CON).

United States Court of Appeals, Second Circuit.

Argued: October 24, 2007.

Decided: August 4, 2008.

[...]

Before: WALKER, SACK, and LIVINGSTON, Circuit Judges.

JOHN M. WALKER, JR., Circuit Judge:

Defendant-Appellant Cablevision Systems Corporation ("Cablevision") wants to market a new "Remote Storage" Digital Video Recorder system ("RS-DVR"), using a technology akin to both traditional, set-top digital video recorders, like TiVo ("DVRs"), and the video-on-demand ("VOD") services provided by many cable companies. Plaintiffs-Appellees produce copyrighted movies and television programs that they provide to Cablevision pursuant to numerous licensing agreements. They contend that Cablevision, through the operation of its RS-DVR system as proposed, would directly infringe their copyrights both by making unauthorized reproductions, and by engaging in public performances, of their copyrighted works. The material facts are not in dispute. Because we conclude that Cablevision would not directly infringe plaintiffs' rights under the Copyright Act by offering its RS-DVR system to consumers, we reverse the district court's award of summary judgment to plaintiffs, and we vacate its injunction against Cablevision.

BACKGROUND

Today's television viewers increasingly use digital video recorders ("DVRs") instead of video cassette recorders ("VCRs") to record television programs and play them back later at their convenience. DVRs generally store recorded programming on an internal hard drive rather than a cassette. But, as this case demonstrates, the generic term "DVR" actually refers to a growing number of different devices and systems. Companies like TiVo sell a stand-alone DVR device that is typically connected to a user's cable box and television much like a VCR. Many cable companies also lease to their subscribers "set-top storage DVRs," which combine many of the functions of a standard cable box and a stand-alone DVR in a single device.

[124] In March 2006, Cablevision, an operator of cable television systems, announced the advent of its new "Remote Storage DVR System." As designed, the RS-DVR allows Cablevision customers who do not have a stand-alone DVR to record cable programming on central hard drives housed and maintained by Cablevision at a "remote" location. RS-

DVR customers may then receive playback of those programs through their home television sets, using only a remote control and a standard cable box equipped with the RS-DVR software. Cablevision notified its content providers, including plaintiffs, of its plans to offer RS-DVR, but it did not seek any license from them to operate or sell the RS-DVR.

Plaintiffs, which hold the copyrights to numerous movies and television programs, sued Cablevision for declaratory and injunctive relief. They alleged that Cablevision's proposed operation of the RS-DVR would directly infringe their exclusive rights to both reproduce and publicly perform their copyrighted works. Critically for our analysis here, plaintiffs alleged theories only of direct infringement, not contributory infringement, and defendants waived any defense based on fair use.

Ultimately, the United States District Court for the Southern District of New York (Denny Chin, *Judge*), awarded summary judgment to the plaintiffs and enjoined Cablevision from operating the RS-DVR system without licenses from its content providers. See *Twentieth Century Fox Film Corp. v. Cablevision Sys. Corp.* (*Cablevision I*), 478 F.Supp.2d 607 (S.D.N.Y.2007). At the outset, we think it helpful to an understanding of our decision to describe, in greater detail, both the RS-DVR and the district court's opinion.

I. Operation of the RS-DVR System

Cable companies like Cablevision aggregate television programming from a wide variety of "content providers"—the various broadcast and cable channels that produce or provide individual programs—and transmit those programs into the homes of their subscribers via coaxial cable. At the outset of the transmission process, Cablevision gathers the content of the various television channels into a single stream of data. Generally, this stream is processed and transmitted to Cablevision's customers in real time. Thus, if a Cartoon Network program is scheduled to air Monday night at 8pm, Cartoon Network transmits that program's data to Cablevision and other cable companies nationwide at that time, and the cable companies immediately re-transmit the data to customers who subscribe to that channel.

Under the new RS-DVR, this single stream of data is split into two streams. The first is routed immediately to customers as before. The second stream flows into a device called the Broadband Media Router ("BMR"), *id.* at 613, which buffers the data stream, reformats it, and sends it to the "Arroyo Server," which consists, in relevant part, of two data buffers and a number of high-capacity hard disks. The entire stream of data moves to the first buffer (the "primary ingest buffer"), at which point the server automatically inquires as to whether any customers want to record any of that programming. If a customer has requested a particular program, the data for that program move from the primary buffer into a secondary buffer, and then onto a portion of one of the hard disks allocated to that customer. As new data flow into the primary buffer, they overwrite a corresponding quantity of data already on the buffer. The primary ingest buffer holds no more than 0.1 seconds of each channel's programming at any moment. Thus, every tenth of a second, the data residing on this buffer are automatically erased and replaced. The [125] data buffer in the BMR holds no more than 1.2 seconds of programming at any time. While buffering occurs at other points in the operation of the RS-DVR, only the BMR buffer and the primary ingest buffer are utilized absent any request from an individual subscriber.

As the district court observed, "the RS-DVR is not a single piece of equipment," but rather "a complex system requiring numerous computers, processes, networks of cables, and facilities staffed by personnel twenty-four hours a day and seven days a week." *Id.* at 612. To the customer, however, the processes of recording and playback on the RS-DVR are similar to that of a standard set-top DVR. Using a remote control, the customer can record programming by selecting a program in advance from an on-screen guide, or by pressing the record button while viewing a given program. A customer cannot, however, record the earlier portion of a program once it has begun. To begin playback, the customer selects the show from an on-screen list of previously recorded programs. See *id.* at 614-16. The principal difference in operation is that, instead of sending signals from the remote to an on-set box, the viewer sends signals from the remote, through the cable, to the Arroyo Server at Cablevision's central facility. See *id.* In this respect, RS-

DVR more closely resembles a VOD service, whereby a cable subscriber uses his remote and cable box to request transmission of content, such as a movie, stored on computers at the cable company's facility. *Id.* at 612. But unlike a VOD service, RS-DVR users can only play content that they previously requested to be recorded.

Cablevision has some control over the content available for recording: a customer can only record programs on the channels offered by Cablevision (assuming he subscribes to them). Cablevision can also modify the system to limit the number of channels available and considered doing so during development of the RS-DVR. *Id.* at 613.

II. The District Court's Decision

In the district court, plaintiffs successfully argued that Cablevision's proposed system would directly infringe their copyrights in three ways. First, by briefly storing data in the primary ingest buffer and other data buffers integral to the function of the RS-DVR, Cablevision would make copies of protected works and thereby directly infringe plaintiffs' exclusive right of reproduction under the Copyright Act. Second, by copying programs onto the Arroyo Server hard disks (the "playback copies"), Cablevision would again directly infringe the reproduction right. And third, by transmitting the data from the Arroyo Server hard disks to its RS-DVR customers in response to a "playback" request, Cablevision would directly infringe plaintiffs' exclusive right of public performance. *See id.* at 617. Agreeing with all three arguments, the district court awarded summary declaratory judgment to plaintiffs and enjoined Cablevision from operating the RS-DVR system without obtaining licenses from the plaintiff copyright holders.

As to the buffer data, the district court rejected defendants' arguments 1) that the data were not "fixed" and therefore were not "copies" as defined in the Copyright Act, and 2) that any buffer copying was de minimis because the buffers stored only small amounts of data for very short periods of time. In rejecting the latter argument, the district court noted that the "aggregate effect of the buffering" was to reproduce the entirety of Cablevision's programming, and such copying "can hardly be called de minimis." *Id.* at 621.

[126] On the issue of whether creation of the playback copies made Cablevision liable for direct infringement, the parties and the district court agreed that the dispositive question was "who makes the copies"? *Id.* at 617. Emphasizing Cablevision's "unfettered discretion" over the content available for recording, its ownership and maintenance of the RS-DVR components, and its "continuing relationship" with its RS-DVR customers, the district court concluded that "the copying of programming to the RS-DVR's Arroyo servers ... would be done not by the customer but by Cablevision, albeit at the customer's request." *Id.* at 618, 620, 621.

Finally, as to the public performance right, Cablevision conceded that, during the playback, "the streaming of recorded programming in response to a customer's request is a performance." *Id.* at 622. Cablevision contended, however, that the work was performed not by Cablevision, but by the customer, an argument the district court rejected "for the same reasons that [it] reject[ed] the argument that the customer is 'doing' the copying involved in the RS-DVR." *Id.* Cablevision also argued that such a playback transmission was not "to the public," and therefore not a public performance as defined in the Copyright Act, because it "emanates from a distinct copy of a program uniquely associated with one customer's set-top box and intended for that customer's exclusive viewing in his or her home." *Id.* The district court disagreed, noting that "Cablevision would transmit *the same program* to members of the public, who may receive the performance at different times, depending on whether they view the program in real time or at a later time as an RS-DVR playback." *Id.* at 623 (emphasis added). The district court also relied on a case from the Northern District of California, *On Command Video Corp. v. Columbia Pictures Industries*, 777 F.Supp. 787 (N.D.Cal.1991), which held that when the relationship between the transmitter and the audience of a performance is commercial, the transmission is "to the public," *see Cablevision I*, 478 F.Supp.2d at 623 (citing *On Command*, 777 F.Supp. at 790).

Finding that the operation of the RS-DVR would infringe plaintiffs' copyrights, the district court awarded summary

judgment to plaintiffs and enjoined Cablevision from copying or publicly performing plaintiffs' copyrighted works "in connection with its proposed RS-DVR system," unless it obtained the necessary licenses. *Cablevision I*, 478 F.Supp.2d at 624. Cablevision appealed.

DISCUSSION

We review a district court's grant of summary judgment de novo. *Bill Graham Archives v. Dorling Kindersley Ltd.*, 448 F.3d 605, 607 (2d Cir.2006).

"Section 106 of the Copyright Act grants copyright holders a bundle of exclusive rights...." *Id.* at 607-08. This case implicates two of those rights: the right "to reproduce the copyrighted work in copies," and the right "to perform the copyrighted work publicly." 17 U.S.C. § 106(1), (4). As discussed above, the district court found that Cablevision infringed the first right by 1) buffering the data from its programming stream and 2) copying content onto the Arroyo Server hard disks to enable playback of a program requested by an RS-DVR customer. In addition, the district court found that Cablevision would infringe the public performance right by transmitting a program to an RS-DVR customer in response to that customer's playback request. We address each of these three allegedly infringing acts in turn.

I. The Buffer Data

[127] It is undisputed that Cablevision, not any customer or other entity, takes the content from one stream of programming, after the split, and stores it, one small piece at a time, in the BMR buffer and the primary ingest buffer. As a result, the information is buffered before any customer requests a recording, and would be buffered even if no such request were made. The question is whether, by buffering the data that make up a given work, Cablevision "reproduce[s]" that work "in copies," 17 U.S.C. § 106(1), and thereby infringes the copyright holder's reproduction right.

"Copies," as defined in the Copyright Act, "are material objects ... in which a work is fixed by any method ... and from which the work can be ... reproduced." *Id.* § 101. The Act also provides that a work is "'fixed' in a tangible medium of expression when its embodiment ... is sufficiently permanent or stable to permit it to be ... reproduced ... *for a period of more than transitory duration.*" *Id.* (emphasis added). We believe that this language plainly imposes two distinct but related requirements: the work must be embodied in a medium, i.e., placed in a medium such that it can be perceived, reproduced, etc., from that medium (the "embodiment requirement"), and it must remain thus embodied "for a period of more than transitory duration" (the "duration requirement"). *See* 2 Melville B. Nimmer & David Nimmer, *Nimmer on Copyright* § 8.02[B][3], at 8-32 (2007). Unless both requirements are met, the work is not "fixed" in the buffer, and, as a result, the buffer data is not a "copy" of the original work whose data is buffered.

The district court mistakenly limited its analysis primarily to the embodiment requirement. As a result of this error, once it determined that the buffer data was "[c]learly ... capable of being reproduced," i.e., that the work was embodied in the buffer, the district court concluded that the work was therefore "fixed" in the buffer, and that a copy had thus been made. *Cablevision I*, 478 F.Supp.2d at 621-22. In doing so, it relied on a line of cases beginning with *MAI Systems Corp. v. Peak Computer Inc.*, 991 F.2d 511 (9th Cir.1993). It also relied on the United States Copyright Office's 2001 report on the Digital Millennium Copyright Act, which states, in essence, that an embodiment is fixed "[u]nless a reproduction manifests itself so fleetingly that *it cannot be copied.*" U.S. Copyright Office, *DMCA Section 104 Report* 111 (Aug.2001) ("*DMCA Report*") (emphasis added), available at <http://www.copyright.gov/reports/studies/dmca/sec-104-report-vol-1-1.pdf>.

The district court's reliance on cases like *MAI Systems* is misplaced. In general, those cases conclude that an alleged copy is fixed without addressing the duration requirement; it does not follow, however, that those cases assume, much less establish, that such a requirement does not exist. Indeed, the duration requirement, by itself, was not at issue in

MAI Systems and its progeny. As a result, they do not speak to the issues squarely before us here: If a work is only "embodied" in a medium for a period of transitory duration, can it be "fixed" in that medium, and thus a copy? And what constitutes a period "of more than transitory duration"?

In *MAI Systems*, defendant Peak Computer, Inc., performed maintenance and repairs on computers made and sold by MAI Systems. In order to service a customer's computer, a Peak employee had to operate the computer and run the computer's copyrighted operating system software. See *MAI Sys.*, 991 F.2d at 513. The issue in *MAI Systems* was whether, [128] by loading the software into the computer's RAM, [1] the repairman created a "copy" as defined in § 101. See *id.* at 517. The resolution of this issue turned on whether the software's embodiment in the computer's RAM was "fixed," within the meaning of the same section. The Ninth Circuit concluded that

by showing that Peak loads the software into the RAM and is then able to view the system error log and diagnose the problem with the computer, MAI has adequately shown that the representation created in the RAM is "sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration."

Id. at 518 (quoting 17 U.S.C. § 101).

The *MAI Systems* court referenced the "transitory duration" language but did not discuss or analyze it. The opinion notes that the defendants "vigorously" argued that the program's embodiment in the RAM was not a copy, but it does not specify the arguments defendants made. *Id.* at 517. This omission suggests that the parties did not litigate the significance of the "transitory duration" language, and the court therefore had no occasion to address it. This is unsurprising, because it seems fair to assume that in these cases the program was embodied in the RAM for at least several minutes.

Accordingly, we construe *MAI Systems* and its progeny as holding that loading a program into a computer's RAM *can* result in copying that program. We do not read *MAI Systems* as holding that, as a matter of law, loading a program into a form of RAM *always* results in copying. Such a holding would read the "transitory duration" language out of the definition, and we do not believe our sister circuit would dismiss this statutory language without even discussing it. It appears the parties in *MAI Systems* simply did not dispute that the duration requirement was satisfied; this line of cases simply concludes that when a program is loaded into RAM, the embodiment requirement is satisfied—an important holding in itself, and one we see no reason to quibble with here. [2]

At least one court, relying on *MAI Systems* in a highly similar factual setting, has made this point explicitly. In *Advanced Computer Services of Michigan, Inc. v. MAI Systems Corp.*, the district court expressly noted that the unlicensed user in that case ran copyrighted diagnostic software "for minutes or longer," but that the program's embodiment in the computer's RAM might be too ephemeral to be fixed if the computer had been shut down "within [129] seconds or fractions of a second" after loading the copyrighted program. 845 F.Supp. 356, 363 (E.D.Va.1994). We have no quarrel with this reasoning; it merely makes explicit the reasoning that is implicit in the other *MAI Systems* cases. Accordingly, those cases provide no support for the conclusion that the definition of "fixed" does not include a duration requirement. See *Webster v. Fall*, 266 U.S. 507, 511, 45 S.Ct. 148, 69 L.Ed. 411 (1924) ("Questions which merely lurk in the record, neither brought to the attention of the court nor ruled upon, are not to be considered as having been so decided as to constitute precedents.").

Nor does the Copyright Office's 2001 DMCA Report, also relied on by the district court in this case, explicitly suggest that the definition of "fixed" does not contain a duration requirement. However, as noted above, it does suggest that an embodiment is fixed "[u]nless a reproduction manifests itself so fleetingly that it cannot be copied, perceived or communicated." *DMCA Report, supra*, at 111. As we have stated, to determine whether a work is "fixed" in a given

medium, the statutory language directs us to ask not only 1) whether a work is "embodied" in that medium, but also 2) whether it is embodied in the medium "for a period of more than transitory duration." According to the Copyright Office, if the work is capable of being copied from that medium *for any amount of time*, the answer to both questions is "yes." The problem with this interpretation is that it reads the "transitory duration" language out of the statute.

We assume, as the parties do, that the Copyright Office's pronouncement deserves only *Skidmore* deference, deference based on its "power to persuade." *Skidmore v. Swift & Co.*, 323 U.S. 134, [...] (1944). And because the Office's interpretation does not explain why Congress would include language in a definition if it intended courts to ignore that language, we are not persuaded.

In sum, no case law or other authority dissuades us from concluding that the definition of "fixed" imposes both an embodiment requirement and a duration requirement. *Accord CoStar Group Inc. v. LoopNet, Inc.*, 373 F.3d 544, 551 (4th Cir. 2004) (while temporary reproductions "may be made in this transmission process, they would appear not to be 'fixed' in the sense that they are 'of more than transitory duration'"). We now turn to whether, in this case, those requirements are met by the buffer data.

Cablevision does not seriously dispute that copyrighted works are "embodied" in the buffer. Data in the BMR buffer can be reformatted and transmitted to the other components of the RS-DVR system. Data in the primary ingest buffer can be copied onto the Arroyo hard disks if a user has requested a recording of that data. Thus, a work's "embodiment" in either buffer "is sufficiently permanent or stable to permit it to be perceived, reproduced," (as in the case of the ingest buffer) "or otherwise communicated" (as in the BMR buffer). 17 U.S.C. § 101. The result might be different if only a single second of a much longer work was placed in the buffer in isolation. In such a situation, it might be reasonable to conclude that only a minuscule portion of a work, rather than "a work" was embodied in the buffer. Here, however, where every second of an entire work is placed, one second at a time, in the buffer, we conclude that the work is embodied in the buffer.

Does any such embodiment last "for a period of more than transitory duration"? *Id.* No bit of data remains in any buffer for more than a fleeting 1.2 seconds. And unlike the data in cases like *MAI [130] Systems*, which remained embodied in the computer's RAM memory until the user turned the computer off, each bit of data here is rapidly and automatically overwritten as soon as it is processed. While our inquiry is necessarily fact-specific, and other factors not present here may alter the duration analysis significantly, these facts strongly suggest that the works in this case are embodied in the buffer for only a "transitory" period, thus failing the duration requirement.

Against this evidence, plaintiffs argue only that the duration is not transitory because the data persist "long enough for Cablevision to make reproductions from them." *Br. of Pls.-Appellees the Cartoon Network et al.* at 51. As we have explained above, however, this reasoning impermissibly reads the duration language out of the statute, and we reject it. Given that the data reside in no buffer for more than 1.2 seconds before being automatically overwritten, and in the absence of compelling arguments to the contrary, we believe that the copyrighted works here are not "embodied" in the buffers for a period of more than transitory duration, and are therefore not "fixed" in the buffers. Accordingly, the acts of buffering in the operation of the RS-DVR do not create copies, as the Copyright Act defines that term. Our resolution of this issue renders it unnecessary for us to determine whether any copies produced by buffering data would be de minimis, and we express no opinion on that question.

II. Direct Liability for Creating the Playback Copies

In most copyright disputes, the allegedly infringing act and the identity of the infringer are never in doubt. These cases turn on whether the conduct in question does, in fact, infringe the plaintiff's copyright. In this case, however, the core of the dispute is over the authorship of the infringing conduct. After an RS-DVR subscriber selects a program to record, and that program airs, a copy of the program—a copyrighted work—resides on the hard disks of Cablevision's

Arroyo Server, its creation unauthorized by the copyright holder. The question is *who* made this copy. If it is Cablevision, plaintiffs' theory of direct infringement succeeds; if it is the customer, plaintiffs' theory fails because Cablevision would then face, at most, secondary liability, a theory of liability expressly disavowed by plaintiffs.

Few cases examine the line between direct and contributory liability. Both parties cite a line of cases beginning with *Religious Technology Center v. Netcom On-Line Communication Services*, 907 F.Supp. 1361 (N.D.Cal.1995). In *Netcom*, a third-party customer of the defendant Internet service provider ("ISP") posted a copyrighted work that was automatically reproduced by the defendant's computer. The district court refused to impose direct liability on the ISP, reasoning that "[a]lthough 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." *Id.* at 1370. Recently, the Fourth Circuit endorsed the *Netcom* decision, noting that

to establish *direct* liability under ... the Act, something more must be shown than mere ownership of a machine used by others to make illegal copies. There must be actual infringing conduct with a nexus sufficiently close and causal to the illegal copying that one could conclude that the machine owner himself trespassed on the exclusive domain of the copyright owner."

CoStar Group, Inc. v. LoopNet, Inc., 373 F.3d 544, 550 (4th Cir.2004).

[131] Here, the district court pigeon-holed the conclusions reached in *Netcom* and its progeny as "premised on the unique attributes of the Internet." *Cablevision I*, 478 F.Supp.2d at 620. While the *Netcom* court was plainly concerned with a theory of direct liability that would effectively "hold the entire Internet liable" for the conduct of a single user, 907 F.Supp. at 1372, its reasoning and conclusions, consistent with precedents of this court and the Supreme Court, and with the text of the Copyright Act, transcend the Internet. Like the Fourth Circuit, we reject the contention that "the *Netcom* decision was driven by expedience and that its holding is inconsistent with the established law of copyright," *CoStar*, 373 F.3d at 549, and we find it "a particularly rational interpretation of § 106," *id.* at 551, rather than a special-purpose rule applicable only to ISPs.

When there is a dispute as to the author of an allegedly infringing instance of reproduction, *Netcom* and its progeny direct our attention to the volitional conduct that causes the copy to be made. There are only two instances of volitional conduct in this case: Cablevision's conduct in designing, housing, and maintaining a system that exists only to produce a copy, and a customer's conduct in ordering that system to produce a copy of a specific program. In the case of a VCR, it seems clear — and we know of no case holding otherwise — that the operator of the VCR, the person who actually presses the button to make the recording, supplies the necessary element of volition, not the person who manufactures, maintains, or, if distinct from the operator, owns the machine. We do not believe that an RS-DVR customer is sufficiently distinguishable from a VCR user to impose liability as a direct infringer on a different party for copies that are made automatically upon that customer's command.

The district court emphasized the fact that copying is "instrumental" rather than "incidental" to the function of the RS-DVR system. *Cablevision I*, 478 F.Supp.2d at 620. While that may distinguish the RS-DVR from the ISPs in *Netcom* and *CoStar*, it does not distinguish the RS-DVR from a VCR, a photocopier, or even a typical copy shop. And the parties do not seem to contest that a company that merely makes photocopiers available to the public on its premises, without more, is not subject to liability for direct infringement for reproductions made by customers using those copiers. They only dispute whether Cablevision is similarly situated to such a proprietor.

The district court found Cablevision analogous to a copy shop that makes course packs for college professors. In the leading case involving such a shop, for example, "[t]he professor [gave] the copyshop the materials of which the coursepack [was] to be made up, and the copyshop [did] the rest." *Princeton Univ. Press v. Mich. Document Servs.*,

99 F.3d 1381, 1384 (6th Cir.1996) (en banc). There did not appear to be any serious dispute in that case that the shop itself was directly liable for reproducing copyrighted works. The district court here found that Cablevision, like this copy shop, would be "doing" the copying, albeit "at the customer's behest." *Cablevision I*, 478 F.Supp.2d at 620.

But because volitional conduct is an important element of direct liability, the district court's analogy is flawed. In determining who actually "makes" a copy, a significant difference exists between making a request to a human employee, who then volitionally operates the copying system to make the copy, and issuing a command directly to a system, which automatically obeys commands and engages in no volitional conduct. In cases like *Princeton* [132] *University Press*, the defendants operated a copying device and sold the product they made using that device. *See* 99 F.3d at 1383 ("The corporate defendant ... is a commercial copyshop that reproduced substantial segments of copyrighted works of scholarship, bound the copies into 'coursepacks,' and sold the coursepacks to students. ..."). Here, by selling access to a system that automatically produces copies on command, Cablevision more closely resembles a store proprietor who charges customers to use a photocopier on his premises, and it seems incorrect to say, without more, that such a proprietor "makes" any copies when his machines are actually operated by his customers. *See Netcom*, 907 F.Supp. at 1369. Some courts have held to the contrary, but they do not explicitly explain why, and we find them unpersuasive. *See, e.g., Elektra Records Co. v. Gem Elec. Distribs., Inc.*, 360 F.Supp. 821, 823 (E.D.N.Y.1973) (concluding that, "regardless" of whether customers or defendants' employees operated the tape-copying machines at defendants' stores, defendant had actively infringed copyrights).

The district court also emphasized Cablevision's "unfettered discretion in selecting the programming that it would make available for recording." *Cablevision I*, 478 F.Supp.2d at 620. This conduct is indeed more proximate to the creation of illegal copying than, say, operating an ISP or opening a copy shop, where all copied content was supplied by the customers themselves or other third parties. Nonetheless, we do not think it sufficiently proximate to the copying to displace the customer as the person who "makes" the copies when determining liability under the Copyright Act. Cablevision, we note, also has subscribers who use home VCRs or DVRs (like TiVo), and has significant control over the content recorded by these customers. But this control is limited to the channels of programming available to a customer and not to the programs themselves. Cablevision has no control over what programs are made available on individual channels or when those programs will air, if at all. In this respect, Cablevision possesses far less control over recordable content than it does in the VOD context, where it actively selects and makes available beforehand the individual programs available for viewing. For these reasons, we are not inclined to say that Cablevision, rather than the user, "does" the copying produced by the RS-DVR system. As a result, we find that the district court erred in concluding that Cablevision, rather than its RS-DVR customers, makes the copies carried out by the RS-DVR system.

Our refusal to find Cablevision directly liable on these facts is buttressed by the existence and contours of the Supreme Court's doctrine of contributory liability in the copyright context. After all, the purpose of any causation-based liability doctrine is to identify the actor (or actors) whose "conduct has been so significant and important a cause that [he or she] should be legally responsible." W. Page Keeton et al., *Prosser and Keeton on Torts* § 42, at 273 (5th ed.1984). But here, to the extent that we may construe the boundaries of direct liability more narrowly, the doctrine of contributory liability stands ready to provide adequate protection to copyrighted works.

Most of the facts found dispositive by the district court—e.g., Cablevision's "continuing relationship" with its RS-DVR customers, its control over recordable content, and the "instrumental[ity]" of copying to the RS-DVR system, *Cablevision I*, 478 F.Supp.2d at 618-20—seem to us more relevant to the question of contributory liability. In *Sony Corp. of America v. Universal City Studios, Inc.*, the lack of an [133] "ongoing relationship" between Sony and its VCR customers supported the Court's conclusion that it should not impose *contributory* liability on Sony for any infringing copying done by Sony VCR owners. 464 U.S. 417, 437-38, 104 S.Ct. 774, 78 L.Ed.2d 574 (1984). The *Sony* Court did deem it "just" to impose liability on a party in a "position to control" the infringing uses of another,

but as a contributory, not direct, infringer. *Id.* at 437, [...] And asking whether copying copyrighted material is only "incidental" to a given technology is akin to asking whether that technology has "commercially significant noninfringing uses," another inquiry the *Sony* Court found relevant to whether imposing *contributory* liability was just. *Id.* at 442, [...]

The Supreme Court's desire to maintain a meaningful distinction between direct and contributory copyright infringement is consistent with congressional intent. The Patent Act, unlike the Copyright Act, expressly provides that someone who "actively induces infringement of a patent" is "liable as an infringer," 35 U.S.C. § 271(b), just like someone who commits the underlying infringing act by "us[ing]" a patented invention without authorization, *id.* § 271(a). In contrast, someone who merely "sells ... a material or apparatus for use in practicing a patented process" faces only liability as a "contributory infringer." *Id.* § 271(c). If Congress had meant to assign direct liability to both the person who actually commits a copyright-infringing act and any person who actively induces that infringement, the Patent Act tells us that it knew how to draft a statute that would have this effect. Because Congress did not do so, the *Sony* Court concluded that "[t]he Copyright Act does not expressly render anyone liable for infringement committed by another." 464 U.S. at 434, [...] Furthermore, in cases like *Sony*, the Supreme Court has strongly signaled its intent to use the doctrine of contributory infringement, not direct infringement, to "identify[] the circumstances in which it is just to hold one individual accountable for the actions of another." *Id.* at 435, [...] Thus, although *Sony* warns us that "the lines between direct infringement, contributory infringement, and vicarious liability are not clearly drawn," *id.* at 435 n. 17, [...] (internal quotation marks and citation omitted), that decision does not absolve us of our duty to discern where that line falls in cases, like this one, that require us to decide the question.

The district court apparently concluded that Cablevision's operation of the RS-DVR system would contribute in such a major way to the copying done by another that it made sense to say that Cablevision was a direct infringer, and thus, in effect, was "doing" the relevant copying. There are certainly other cases, not binding on us, that follow this approach. *See, e.g., Playboy Enters. v. Russ Hardenburgh, Inc.*, 982 F.Supp. 503, 513 (N.D. Ohio 1997) (noting that defendant ISP's encouragement of its users to copy protected files was "crucial" to finding that it was a direct infringer). We need not decide today whether one's contribution to the creation of an infringing copy may be so great that it warrants holding that party directly liable for the infringement, even though another party has actually made the copy. We conclude only that on the facts of this case, copies produced by the RS-DVR system are "made" by the RS-DVR customer, and Cablevision's contribution to this reproduction by providing the system does not warrant the imposition of direct liability. Therefore, Cablevision is entitled to summary judgment on this point, and the district court erred in awarding summary judgment to plaintiffs.

III. Transmission of RS-DVR Playback

[134] Plaintiffs' final theory is that Cablevision will violate the Copyright Act by engaging in unauthorized public performances of their works through the playback of the RS-DVR copies. The Act grants a copyright owner the exclusive right, "in the case of ... motion pictures and other audiovisual works, to perform the copyrighted work publicly." 17 U.S.C. § 106(4). Section 101, the definitional section of the Act, explains that

[t]o perform or display a work "publicly" means (1) to perform or display it at a place open to the public or at any place where a substantial number of persons outside of a normal circle of a family and its social acquaintances is gathered; or (2) to transmit or otherwise communicate a performance or display of the work to a place specified by clause (1) or to the public, by means of any device or process, whether the members of the public capable of receiving the performance or display receive it in the same place or in separate places and at the same time or at different times.

Id. § 101.

The parties agree that this case does not implicate clause (1). Accordingly, we ask whether these facts satisfy the second, "transmit clause" of the public performance definition: Does Cablevision "transmit ... a performance ... of the work ... to the public"? *Id.* No one disputes that the RS-DVR playback results in the transmission of a performance of a work—the transmission from the Arroyo Server to the customer's television set. Cablevision contends that (1) the RS-DVR customer, rather than Cablevision, does the transmitting and thus the performing and (2) the transmission is not "to the public" under the transmit clause.

As to Cablevision's first argument, we note that our conclusion in Part II that the customer, not Cablevision, "does" the copying does not dictate a parallel conclusion that the customer, and not Cablevision, "performs" the copyrighted work. The definitions that delineate the contours of the reproduction and public performance rights vary in significant ways. For example, the statute defines the verb "perform" and the noun "copies," but not the verbs "reproduce" or "copy." *Id.* We need not address Cablevision's first argument further because, even if we assume that Cablevision makes the transmission when an RS-DVR playback occurs, we find that the RS-DVR playback, as described here, does not involve the transmission of a performance "to the public."

The statute itself does not expressly define the term "performance" or the phrase "to the public." It does explain that a transmission may be "to the public ... whether the members of the public capable of receiving the performance ... receive it in the same place or in separate places and at the same time or at different times." *Id.* This plain language instructs us that, in determining whether a transmission is "to the public," it is of no moment that the potential recipients of the transmission are in different places, or that they may receive the transmission at different times. The implication from this same language, however, is that it is relevant, in determining whether a transmission is made to the public, to discern who is "capable of receiving" the performance being transmitted. The fact that the statute says "capable of receiving the performance," instead of "capable of receiving the transmission," underscores the fact that a transmission of a performance is itself a performance. *Cf. Buck v. Jewell-La Salle Realty Co.*, 283 U.S. 191, 197-98, 51 S.Ct. 410, 75 L.Ed. 971 (1931). [135] The legislative history of the transmit clause supports this interpretation. The House Report on the 1976 Copyright Act states that

[u]nder the bill, as under the present law, a performance made available *by transmission to the public at large* is "public" even though the recipients are not gathered in a single place, and even if there is no proof that any of the *potential recipients* was operating his receiving apparatus at the time of the transmission. The same principles apply whenever the *potential recipients of the transmission* represent a limited segment of the public, such as the occupants of hotel rooms or the subscribers of a cable television service.

H.R.Rep. No. 94-1476, at 64-65 (1976), *reprinted in* 1976 U.S.C.C.A.N. 5659, 5678 (emphases added).

Plaintiffs also reference a 1967 House Report, issued nearly a decade before the Act we are interpreting, stating that the same principles apply where the transmission is " *capable of reaching* different recipients at different times, as in the case of sounds or images stored in an information system and *capable of being performed or displayed* at the initiative of individual members of the public." H.R.Rep. No. 90-83, at 29 (1967) (emphases added). We question how much deference this report deserves. But we need not belabor the point here, as the 1967 report is consistent with both legislative history contemporaneous with the Act's passage and our own interpretation of the statute's plain meaning.

From the foregoing, it is evident that the transmit clause directs us to examine who precisely is "capable of receiving" a particular transmission of a performance. Cablevision argues that, because each RS-DVR transmission is made using a single unique copy of a work, made by an individual subscriber, one that can be decoded exclusively by that subscriber's cable box, only one subscriber is capable of receiving any given RS-DVR transmission. This argument accords with the language of the transmit clause, which, as described above, directs us to consider the potential

audience of a given transmission. We are unpersuaded by the district court's reasoning and the plaintiffs' arguments that we should consider a larger potential audience in determining whether a transmission is "to the public."

The district court, in deciding whether the RS-DVR playback of a program to a particular customer is "to the public," apparently considered all of Cablevision's customers who subscribe to the channel airing that program and all of Cablevision's RS-DVR subscribers who request a copy of that program. Thus, it concluded that the RS-DVR playbacks constituted public performances because "Cablevision would transmit the *same program* to members of the public, who may receive the performance at different times, depending on whether they view the program in real time or at a later time as an RS-DVR playback." *Cablevision I*, 478 F.Supp.2d at 623 (emphasis added). In essence, the district court suggested that, in considering whether a transmission is "to the public," we consider not the potential audience of a particular transmission, but the potential audience of the underlying work (i.e., "the program") whose content is being transmitted.

We cannot reconcile the district court's approach with the language of the transmit clause. That clause speaks of people capable of receiving a particular "transmission" or "performance," and not of the potential audience of a particular "work." Indeed, such an approach would render the "to the public" language surplusage. Doubtless the *potential* audience for every [136] copyrighted audiovisual work is the general public. As a result, any transmission of the content of a copyrighted work would constitute a public performance under the district court's interpretation. But the transmit clause obviously contemplates the existence of non-public transmissions; if it did not, Congress would have stopped drafting that clause after "performance."

On appeal, plaintiffs offer a slight variation of this interpretation. They argue that both in its real-time cablecast and via the RS-DVR playback, Cablevision is in fact transmitting the "same performance" of a given work: the performance of the work that occurs when the programming service supplying Cablevision's content transmits that content to Cablevision and the service's other licensees. *See* Br. of Pls.-Appellees Twentieth Century Fox Film Corp. et al. at 27 ("Fox Br.") ("The critical factor ... is that the same *performance* is transmitted to different subscribers at different times more specifically, the *performance* of that program *by HBO or another programming service*." (third emphasis added)).

Thus, according to plaintiffs, when Congress says that to perform a work publicly means to transmit ... a performance ... to the public, they really meant "transmit ... the 'original performance' ... to the public." The implication of this theory is that to determine whether a given transmission of a performance is "to the public," we would consider not only the potential audience of that transmission, but also the potential audience of any transmission of the same underlying "original" performance.

Like the district court's interpretation, this view obviates any possibility of a purely private transmission. Furthermore, it makes Cablevision's liability depend, in part, on the actions of legal strangers. Assume that HBO transmits a copyrighted work to both Cablevision and Comcast. Cablevision merely retransmits the work from one Cablevision facility to another, while Comcast retransmits the program to its subscribers. Under plaintiffs' interpretation, Cablevision would still be transmitting the performance to the public, solely because Comcast has transmitted the same underlying performance to the public. Similarly, 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.

We do not believe Congress intended such odd results. Although the transmit clause is not a model of clarity, we believe that when Congress speaks of transmitting a performance to the public, it refers to the performance created by the act of transmission. Thus, HBO transmits its own performance of a work when it transmits to Cablevision, and Cablevision transmits its own performance of the same work when it retransmits the feed from HBO.

Furthermore, we believe it would be inconsistent with our own transmit clause jurisprudence to consider the potential audience of an upstream transmission by a third party when determining whether a defendant's own subsequent transmission of a performance is "to the public." In *National Football League v. PrimeTime 24 Joint Venture* (NFL), 211 F.3d 10 (2000), we examined the transmit clause in the context of satellite television provider PrimeTime, which captured protected content in the United States from the NFL, transmitted it from the United States to a satellite ("the uplink"), and then transmitted it from the satellite to subscribers in both the United States and Canada ("the downlink"). PrimeTime had a license to [137] transmit to its U.S. customers, but not its Canadian customers. It argued that although the downlink transmission to its Canadian subscribers was a public performance, it could not be held liable for that act because it occurred entirely outside of the United States and therefore was not subject to the strictures of the Copyright Act. It also argued that the uplink transmission was not a public performance because it was a transmission to a single satellite. *See id.* at 12.

The *NFL* court did not question the first assumption, but it flatly rejected the second on a specific and germane ground:

We believe the most logical interpretation of the Copyright Act is to hold that a public performance or display includes each step in the process by which a protected work wends its way to its audience. Under that analysis, it is clear that PrimeTime's uplink transmission of signals captured in the United States is a step in the process by which NFL's protected work wends its way to a public audience.

Id. at 13 (emphasis added) (internal quotation and citation omitted). Thus, while the uplink transmission that took place in the United States was not, in itself, "to the public," the *NFL* court deemed it so because it ultimately resulted in an undisputed public performance. Notably, the *NFL* court did not base its decision on the fact that an upstream transmission by another party (the NFL) might have been to the public. Nor did the court base its decision on the fact that Primetime simultaneously transmitted a performance of the work to the public in the United States. Because *NFL* directs us to look downstream, rather than upstream or laterally, to determine whether any link in a chain of transmissions made by a party constitutes a public performance, we reject plaintiffs' contention that we examine the potential recipients of the content provider's initial transmission to determine who is capable of receiving the RS-DVR playback transmission.

Plaintiffs also rely on *NFL* for the proposition that Cablevision publicly performs a work when it splits its programming stream and transmits the second stream to the RS-DVR system. Because *NFL* only supports that conclusion if we determine that the final transmission in the chain (i.e., the RS-DVR playback transmission) is "to the public," plaintiffs' reliance on *NFL* is misplaced. *NFL* dealt with a chain of transmissions whose final link was undisputedly a public performance. It therefore does not guide our current inquiry.

In sum, none of the arguments advanced by plaintiffs or the district court alters our conclusion that, under the transmit clause, we must examine the potential audience of a given transmission by an alleged infringer to determine whether that transmission is "to the public." And because the RS-DVR system, as designed, only makes transmissions to one subscriber using a copy made by that subscriber, we believe that the universe of people capable of receiving an RS-DVR transmission is the single subscriber whose self-made copy is used to create that transmission.

Plaintiffs contend that it is "wholly irrelevant, in determining the existence of a public performance, whether 'unique' copies of the same work are used to make the transmissions." Fox Br. at 27. But plaintiffs cite no authority for this contention. And our analysis of the transmit clause suggests that, in general, any factor that limits the *potential* audience of a transmission is relevant.

Furthermore, no transmission of an audiovisual work can be made, we assume, without using a copy of that work: to

transmit a performance of a movie, for [138] example, the transmitter generally must obtain a copy of that movie. As a result, in the context of movies, television programs, and other audiovisual works, the right of reproduction can reinforce and protect the right of public performance. If the owner of a copyright believes he is injured by a particular transmission of a performance of his work, he may be able to seek redress not only for the infringing transmission, but also for the underlying copying that facilitated the transmission. Given this interplay between the various rights in this context, it seems quite consistent with the Act to treat a transmission made using Copy A as distinct from one made using Copy B, just as we would treat a transmission made by Cablevision as distinct from an otherwise identical transmission made by Comcast. Both factors—the identity of the transmitter and the source material of the transmission—limit the potential audience of a transmission in this case and are therefore germane in determining whether that transmission is made "to the public."

Indeed, we believe that *Columbia Pictures Industries, Inc. v. Redd Horne, Inc.*, 749 F.2d 154 (3d Cir.1984), relied on by both plaintiffs and the district court, supports our decision to accord significance to the existence and use of distinct copies in our transmit clause analysis. In that case, defendant operated a video rental store, Maxwell's, which also housed a number of small private booths containing seats and a television. Patrons would select a film, enter the booth, and close the door. An employee would then load a copy of the requested movie into a bank of VCRs at the front of the store and push play, thereby transmitting the content of the tape to the television in the viewing booth. *See id.* at 156-57.

The Third Circuit found that defendants' conduct constituted a public performance under both clauses of the statutory definition. In concluding that Maxwell's violated the transmit clause, that court explicitly relied on the fact that defendants showed the same copy of a work seriatim to its clientele, and it quoted a treatise emphasizing the same fact:

Professor Nimmer's examination of this definition is particularly pertinent: " *if the same copy ... of a given work is repeatedly played (i.e., 'performed') by different members of the public, albeit at different times, this constitutes a 'public' performance.*" 2 M. Nimmer, § 8.14[C][3], at 8-142 (emphasis in original). ... Although Maxwell's has only one copy of each film, it shows each copy repeatedly to different members of the public. This constitutes a public performance.

Id. at 159 (first omission in original).

Unfortunately, neither the *Redd Horne* court nor Prof. Nimmer explicitly explains *why* the use of a distinct copy affects the transmit clause inquiry. But our independent analysis confirms the soundness of their intuition: the use of a unique copy may limit the potential audience of a transmission and is therefore relevant to whether that transmission is made "to the public." Plaintiffs' unsupported arguments to the contrary are unavailing.

Given that each RS-DVR transmission is made to a given subscriber using a copy made by that subscriber, we conclude that such a transmission is not "to the public," without analyzing the contours of that phrase in great detail. No authority cited by the parties or the district court persuades us to the contrary.

In addition to *Redd Horne*, the district court also cited and analyzed *On Command Video Corp. v. Columbia Pictures Industries*, 777 F.Supp. 787 (N.D.Cal. 1991), in its transmit clause analysis. In that case, defendant On Command developed [139] and sold "a system for the electronic delivery of movie video tapes," which it sold to hotels. *Id.* at 788. The hub of the system was a bank of video cassette players, each containing a copy of a particular movie. From his room, a hotel guest could select a movie via remote control from a list on his television. The corresponding cassette player would start, and its output would be transmitted to that guest's room. During this playback, the movie selected was unavailable to other guests. *See id.* The court concluded that the transmissions made by this system were made to the public "because the relationship between the transmitter of the performance, On Command, and the

audience, hotel guests, is a commercial, 'public' one regardless of where the viewing takes place." *Id.* at 790.

Thus, according to the *On Command* court, any commercial transmission is a transmission "to the public." We find this interpretation untenable, as it completely rewrites the language of the statutory definition. If Congress had wished to make all commercial transmissions public performances, the transmit clause would read: "to perform a work publicly means ... to transmit a performance for commercial purposes." In addition, this interpretation overlooks, as Congress did not, the possibility that even non-commercial transmissions to the public may diminish the value of a copyright. Finally, like *Redd Horne*, *On Command* is factually distinguishable, as successive transmissions to different viewers in that case could be made using a single copy of a given work. Thus, at the moment of transmission, any of the hotel's guests was capable of receiving a transmission made using a single copy of a given movie. As a result, the district court in this case erred in relying on *On Command*.

Plaintiffs also rely on *Ford Motor Co. v. Summit Motor Products, Inc.*, 930 F.2d 277 (3d Cir.1991), in which the Third Circuit interpreted § 106(3) of the Copyright Act, which gives the copyright holder the exclusive right "to distribute copies ... of the copyrighted work *to the public*," 17 U.S.C. § 106(3) (emphasis added). The court concluded that "even one person can be the public *for the purposes of section 106(3)*." *Ford*, 930 F.2d at 299 (emphasis added). Commentators have criticized the *Ford* court for divesting the phrase "to the public" of "all meaning whatsoever," 2 Nimmer & Nimmer, *supra*, § 8.11[A], at 8-149, and the decision does appear to have that result. Whether this result was justified in the context of the distribution right is not for us to decide in this case. We merely note that we find no compelling reason, in the context of the transmit clause and the public performance right, to interpret the phrase "to the public" out of existence.

In sum, we find that the transmit clause directs us to identify the potential audience of a given transmission, i.e., the persons "capable of receiving" it, to determine whether that transmission is made "to the public." Because each RS-DVR playback transmission is made to a single subscriber using a single unique copy produced by that subscriber, we conclude that such transmissions are not performances "to the public," and therefore do not infringe any exclusive right of public performance. We base this decision on the application of undisputed facts; thus, Cablevision is entitled to summary judgment on this point.

This holding, we must emphasize, does not generally permit content delivery networks to avoid all copyright liability by making copies of each item of content and associating one unique copy with each subscriber to the network, or by giving their subscribers the capacity to make their own individual copies. We do not address whether such a network operator would be [140] able to escape any other form of copyright liability, such as liability for unauthorized reproductions or liability for contributory infringement.

In sum, because we find, on undisputed facts, that Cablevision's proposed RS-DVR system would not directly infringe plaintiffs' exclusive rights to reproduce and publicly perform their copyrighted works, we grant summary judgment in favor of Cablevision with respect to both rights.

CONCLUSION

For the foregoing reasons, the district court's award of summary judgment to the plaintiffs is REVERSED and the district court's injunction against Cablevision is VACATED. The case is REMANDED for further proceedings consistent with this opinion.

Notes:

[1] To run a computer program, the data representing that program must be transferred from a data storage medium

(such as a floppy disk or a hard drive) to a form of Random Access Memory ("RAM") where the data can be processed. The data buffers at issue here are also a form of RAM.

[2] The same reasoning also distinguishes this court's opinion in *Matthew Bender & Co. v. West Publishing Co.*, 158 F.3d 693 (2d Cir. 1998). Language in that opinion, taken out of context, suggests that the definition of "fixed" imposes only an embodiment requirement: "Under § 101's definition of `copies,' a work satisfies the fixation requirement when it is fixed in a material object from which it can be perceived or communicated directly or with the aid of a machine." *Id.* at 702. Like the *MAI Systems* cases, *Matthew Bender* only addresses the embodiment requirement: specifically, whether West's copyrighted arrangement of judicial opinions was "embedded" in a CD-ROM compilation of opinions when the cases were normally arranged differently but could be manipulated by the user to replicate West's copyrighted arrangement. *Id.* at 703. The opinion merely quotes the duration language without discussing it, *see id.* at 702; that case therefore does not compel us to conclude that the definition of "fixed" does not impose a duration requirement.