

NOTE: This disposition is nonprecedential.

**United States Court of Appeals  
for the Federal Circuit**

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**INNOVATION SCIENCES, LLC,**  
*Plaintiff-Appellant*

v.

**AMAZON.COM, INC., AMAZON WEB SERVICES,  
INC.,**  
*Defendants-Appellees*

**AMAZON DIGITAL SERVICES, INC., AMAZON  
DIGITAL SERVICES, LLC, AMAZON  
FULFILLMENT SERVICES, INC., AMAZON WEB  
SERVICES, LLC, HTC CORPORATION, RESIDEO  
TECHNOLOGIES, INC.,**  
*Defendants*

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2021-2111

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Appeal from the United States District Court for the Eastern District of Texas in Nos. 4:18-cv-00474-ALM, 4:18-cv-00475-ALM, 4:18-cv-00476-ALM, Judge Amos L. Maz-zant, III.

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Decided: July 20, 2022

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DONALD LEE JACKSON, Davidson Berquist Jackson & Gowdey, LLP, McLean, VA, argued for plaintiff-appellant. Also represented by JAMES DANIEL BERQUIST.

J. DAVID HADDEN, Fenwick & West, LLP, Mountain View, CA, argued for defendants-appellees. Also represented by RAVI RAGAVENDRA RANGANATH, SAINA S. SHAMILOV; TODD RICHARD GREGORIAN, San Francisco, CA.

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Before MOORE, *Chief Judge*, PROST and HUGHES, *Circuit Judges*.

MOORE, *Chief Judge*.

Innovation Sciences (IS) appeals two orders from the United States District Court for the Eastern District of Texas. The first order denied IS' post-trial motion for judgment as a matter of law or, alternatively, a new trial. The second order granted-in-part and denied-in-part Amazon's motion for costs. For the reasons that follow, we affirm the first order and affirm-in-part and reverse-in-part the second order.

#### BACKGROUND

IS owns U.S. Patent Nos. 9,912,983, 9,729,918, and 9,942,798, which all claim priority to U.S. Patent Application No. 11/501,747 and share a common written description. The patents generally relate to “[m]ethods and apparatus for efficiently directing communications” in a communication network. '983 patent at Abstract.

In one embodiment, the network includes a mobile terminal signal conversion module (MTSCM) configured to wirelessly receive a multimedia signal from a mobile terminal (e.g., a cell phone), convert it to a format or signal power level appropriate for an external display terminal, and provide the converted signal to the external display terminal. *Id.* at 15:52–17:18. The MTSCM may include a

decoder for decompressing multimedia signals that are in a compressed format (e.g., MPEG-4). *Id.* at 18:56-67.

In another embodiment, the network includes a task management system for delivering alerts when a task requires completion. *Id.* at 12:33-13:23. The task management system comprises, for example, a diaper condition sensing module and a central receiver. *Id.* The diaper condition sensing module monitors the condition of a diaper and wirelessly transmits a signal to the central receiver when the diaper is wet. *Id.* The central receiver then transmits an indication of the diaper's status to, e.g., a caregiver's phone. *Id.*

Claim 22 of the '983 patent is representative for this appeal and combines the above embodiments. It recites:

22. A wireless HUB system for managing information communications comprising:

an input interface configured to receive a wireless signal through a wireless communication network;

a decoder; and

a network interface configured to provide a communication through a network communication channel,

wherein the wireless HUB system is configured to perform a conversion of the wireless signal to accommodate production of a corresponding information content, the wireless signal comprising a compressed signal, the conversion comprising decompressing the compressed signal;

wherein the decoder is configured to decompress the compressed signal;

wherein the wireless HUB system is further configured to communicate, through the network communication channel, information for managing an item status of an item in connection with a short range wireless communication regarding an updated status of the item; and

wherein the network communication channel is separate from a wireless channel for the short range wireless communication.

IS sued Amazon in the Eastern District of Texas, accusing Amazon's Echo, Fire Tablet, Fire TV, and Alexa Voice Service of directly infringing various claims of the '983, '918, and '798 patents. At trial, Amazon presented multiple independent grounds for finding the asserted claims invalid and not infringed. A jury returned general verdicts of invalidity and noninfringement. IS moved for (1) judgment as a matter of law (JMOL) that the claims are not invalid and that Amazon infringes them or (2) a new trial. Amazon moved for costs under 28 U.S.C. § 1920(4). The district court denied IS' motion and granted Amazon's motion in part. *Innovation Scis., LLC v. Amazon.com, Inc.*, No. 4:18-cv-00474-ALM, 2021 WL 2075677 (E.D. Tex. May 24, 2021); *Innovation Scis., LLC v. Amazon.com, Inc.*, No. 4:18-cv-00474-ALM, 2021 WL 2075676 (E.D. Tex. May 24, 2021) (*Costs Order*). IS appeals both orders. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

## DISCUSSION

### I

We first address IS' challenge to the district court's denial of JMOL. We review a district court's denial of JMOL under the law of the regional circuit. *Apple Inc. v. Wi-LAN Inc.*, 25 F.4th 960, 969 (Fed. Cir. 2022) (citing *Godo Kaisha IP Bridge 1 v. TCL Comm'n Tech. Holdings Ltd.*, 967 F.3d 1380, 1382 (Fed. Cir. 2020)). The Fifth Circuit reviews the

denial of JMOL de novo, applying the same standard as the district court. *Baisden v. I'm Ready Prods., Inc.*, 693 F.3d 491, 498 (5th Cir. 2012) (citing *Flowers v. S. Reg'l Physician Servs. Inc.*, 247 F.3d 229, 235 (5th Cir. 2001)). In general, a district court grants JMOL if substantial evidence does not support a fact finding that is necessary, as a matter of law, to establish a claim or defense. Fed. R. Civ. P. 50(a)(1).

When a jury returns a general verdict for which there are multiple independent factual bases, however, a lack of substantial evidence for some of those bases does not warrant JMOL. *Walther v. Lone Star Gas Co.*, 952 F.2d 119, 126 (5th Cir. 1992) (“[W]e will not reverse a verdict simply because the jury might have decided on a ground that was supported by insufficient evidence.”); *Northpoint Tech., Ltd. v. MDS Am., Inc.*, 413 F.3d 1301, 1311 (Fed. Cir. 2005) (“[E]ven if some of the proposed factual grounds for liability are not legally sufficient to support a verdict, that is not fatal, because the critical question is whether the evidence, taken as a whole, was sufficient to support the jury’s verdict.” (collecting cases)). Rather, we must uphold the verdict if substantial evidence supports *any* of the proffered factual bases.

Here, Amazon presented multiple factual bases for the jury’s general verdict of invalidity, including anticipation under 35 U.S.C. § 102. *Microsoft Corp. v. Biscotti, Inc.*, 878 F.3d 1052, 1068 (Fed. Cir. 2017) (“[A]nticipation is a question of fact . . . .” (collecting cases)). Accordingly, although IS raises a panoply of issues, it concedes that we may affirm the denial of JMOL of no invalidity if substantial evidence supports a finding of anticipation. Oral Arg. at 9:48–10:09.<sup>1</sup> We conclude that it does.

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<sup>1</sup> Available at [https://oralarguments.ca9c.uscourts.gov/default.aspx?fl=21-2111\\_07052022.mp3](https://oralarguments.ca9c.uscourts.gov/default.aspx?fl=21-2111_07052022.mp3).

To prove anticipation, Amazon relied on home automation software called HAL. HAL's creator, Tim Shriver, testified that the software was configured to operate a smart-home system comprising various devices, such as wireless cameras, thermostats, and light bulbs. J.A. 1940–49, 1961. He also testified that HAL existed before August 10, 2006, J.A. 1970–72, which the parties stipulated is the priority date of the asserted claims, J.A. 2810 ¶ 18. Corroborating Mr. Shriver's testimony, Amazon presented documentary and video evidence of HAL's existence and capabilities before the priority date, including a 2003 user manual, J.A. 3743, and a 2000 clip of The Oprah Winfrey Show in which Mr. Shriver demonstrated a HAL system, J.A. 1924, 2009–10; *see also* J.A. 3733–42, 4138, 2127–28.

IS does not dispute that HAL is prior art. Instead, it argues that Amazon's expert witness, Dr. David Johnson, improperly based his invalidity opinion on a reconstructed HAL system that is not prior art. As explained below, substantial evidence supports a finding that the HAL system on which Dr. Johnson based his opinion was representative of prior-art HAL systems. Accordingly, Dr. Johnson properly relied on the reconstructed HAL system to determine how prior-art HAL systems operated.

In response to a subpoena requesting a HAL system “as it would have existed on or before August 9, 2006,” Mr. Shriver provided a system comprising the HAL software and various pieces of hardware, including a wireless camera and lamp modules. J.A. 1963–67. IS seizes on Mr. Shriver's testimony that each customer's system was “unique,” J.A. 1967–68, and that he did not know whether a customer “would have set up a system like this on August 9th of 2006,” J.A. 1969–70. Yet he also testified that, except for some light bulbs, all the system's components predated the priority date, J.A. 1965–66, 1970, that his customers' systems had the same components, J.A. 1967–68, and that the system operated the way prior-art HAL systems did, *see, e.g.*, J.A. 1952 (testifying that an

operation of the reconstructed system “would have been performed by HAL2000 prior to August 10, 2006”), J.A. 1957 (testifying that the reconstructed system operated as a system “would have operated prior to August 10, 2006”), J.A. 1958 (testifying that a configuration of the reconstructed system “was used by users of HAL2000 prior to August 10, 2006”). IS does not identify any element of the reconstructed HAL system that was allegedly absent from prior-art HAL systems.

IS further cites Mr. Shriver’s testimony that he sold only software, not “turnkey systems.” J.A. 1968. He later clarified, however, that he did indeed sell the HAL software along with certain smart-home hardware. J.A. 1969. He also testified that customers would complete the system by “buy[ing] a computer and install[ing]” the software. *Id.* Finally, IS contends that Dr. Johnson admitted he altered Mr. Shriver’s system, but the cited testimony merely discusses modifying “simple configuration settings,” e.g., adding his email address, so he would receive the system’s email notifications. J.A. 2185–86. Considering the evidence as a whole, a reasonable juror could find that the system Mr. Shriver provided was representative of prior-art HAL systems.<sup>2</sup>

IS raises a laundry list of cursory challenges to the sufficiency of Dr. Johnson’s expert testimony. IS Br. 19–30. For example, IS argues it was improper for Dr. Johnson to rely on the videos showing HAL’s existence and capabilities before the priority date. *Id.* at 28. IS fails, however, to provide any reasoning or relevant authority supporting

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<sup>2</sup> We reject IS’ argument that the district court abused its discretion in not excluding Mr. Shriver’s testimony, Dr. Johnson’s invalidity opinion, and the videos demonstrating HAL. Mr. Shriver had personal knowledge of HAL’s existence and operation before the priority date, and Amazon presented corroborating evidence.

that conclusion. IS also argues Dr. Johnson did not identify anything in the HAL system that satisfies the “information for managing an item status” limitation. Yet his testimony included the following:

Q. So, can you explain what you’re illustrating here with respect to that X10 camera and the HAL system?

A. Sure. The camera detects the motion, and then the computer running HAL2000 communicates through the network communication channel *information for managing that item status*. The . . . updated status is the presence of motion where there was no motion. And the HAL2000 system sends [an] e-mail. . . . [T]he subject line is HAL notification, and the body of the e-mail says: Motion detected on backyard wireless X10 camera.

J.A. 2135 (emphasis added). Dr. Johnson testified at length that HAL satisfies each limitation of the asserted claims. J.A. 2128–58. IS’ scattershot arguments do not establish inadequacy in Dr. Johnson’s testimony.

In sum, substantial evidence supports the jury’s finding of anticipation. We therefore affirm the denial of JMOL and need not reach Amazon’s alternative factual bases for the general verdicts of invalidity and noninfringement.

## II

We now turn to IS’ request for a new trial. We review the district court’s denial of a new trial under regional circuit law. *Apple*, 25 F.4th at 971 (citing *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1309 (Fed. Cir. 2009)). The Fifth Circuit reviews such a denial for abuse of discretion. *Baisden*, 693 F.3d at 504 (citing *Alaniz v. Zamora–Quezada*, 591 F.3d 761, 770 (5th Cir. 2009)).

In seeking a new trial, IS largely relies on the same slew of arguments it raised regarding the denial of JMOL.



See IS Br. 52. We reject those arguments for the reasons already explained. The only separate argument IS advances is that Amazon’s counsel made improper remarks to the jury regarding one of its other invalidity defenses. *Id.* at 52–55. IS forfeited this argument, however, by failing to object at trial. *Novo Nordisk A/S v. Becton Dickinson & Co.*, 304 F.3d 1216, 1220 (Fed. Cir. 2002) (“[C]ounsel . . . cannot as a rule remain silent, interpose no objections, and after a verdict has been returned seize for the first time on the point that the comments to the jury were prejudicial.” (quoting *United States v. Socony-Vacuum Oil Co.*, 310 U.S. 150, 238–39 (1940))). To be sure, forfeiture does not preclude us “from taking remedial action when it is apparent that prejudice or unfairness entered the trial and the interest of justice requires.” *Id.* But IS has not provided argument as to the interest of justice. Moreover, there is no prejudice given IS’ concession that Amazon’s other invalidity defenses would be moot if we conclude, as we have, that substantial evidence supported the jury’s anticipation finding. Oral Arg. at 9:48–10:09. Accordingly, we affirm the denial of a new trial.

### III

IS challenges the district court’s award of graphics and printing costs. We review an award of costs under the law of the regional circuit. *Kohus v. Toys ‘R’ Us, Inc.*, 282 F.3d 1355, 1357 (Fed. Cir. 2002). The Fifth Circuit reviews an award of costs for abuse of discretion. *Edwards v. 4JLJ, LLC*, 976 F.3d 463, 466 (5th Cir. 2020) (citing *Pacheco v. Mineta*, 448 F.3d 783, 793 (5th Cir. 2006)).

We agree that the district court abused its discretion in awarding Amazon \$126,399.19 in graphics costs. The district court relied on 28 U.S.C. § 1920(4), which allows the award of “[f]ees for exemplification and the costs of making copies of any materials where the copies are necessarily obtained for use in the case.” The district court interpreted this language to “include[] graphics support.” *Costs Order*,

2021 WL 2075676, at \*4. That was error. Graphics do not meet the definition of exemplification, i.e., “[a]n official transcript of a public record, authenticated as a true copy for use as evidence.” *Summit Tech., Inc. v. Nidek Co.*, 435 F.3d 1371, 1375 (Fed. Cir. 2006) (quoting *Kohus*, 282 F.3d at 1359); *see also id.* at 1376 (noting Fifth Circuit follows this definition). And, as Amazon concedes, “creating graphics is not copying.” Oral Arg. at 26:53–56. Because the district court erred in its construction of § 1920(4), we reverse its award of \$126,399.19 in graphics costs.

The district court did not, however, abuse its discretion in awarding Amazon \$25,698.85 for printing two sets of trial exhibits. *Costs Order*, 2021 WL 2075676, at \*3. IS argues Amazon’s exhibit list was unreasonably long and improperly included expert reports, which it asserts are inadmissible. IS’ own exhibit list, however, also included expert reports and had over 600 exhibits, only 79 of which were admitted into evidence. J.A. 3248–98; IS’ Admitted Trial Exhibit List, *Innovation Scis., LLC v. Amazon.com, Inc.*, No. 4:18-cv-00474-ALM (E.D. Tex. Sept. 2, 2020), ECF No. 888. The district court did not abuse its discretion in awarding Amazon its printing costs.

#### CONCLUSION

Because substantial evidence supports the jury’s finding that the asserted claims were anticipated, we affirm the district court’s denial of JMOL. For similar reasons, we also affirm its denial of IS’ motion for a new trial. And we affirm its award of Amazon’s printing costs. We reverse, however, the district court’s award of \$126,399.19 in graphics costs as outside the scope of 28 U.S.C. § 1920(4).

#### **AFFIRMED-IN-PART AND REVERSED-IN-PART**

#### COSTS

No Costs.