

No. _____

In the
Supreme Court of the United States

INNOVATION SCIENCES, LLC,
Petitioner,

v.

AMAZON.COM, INC.,
AMAZON WEB SERVICES, INC.,
Respondents.

ON PETITION FOR WRIT OF CERTIORARI TO
THE UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

APPENDIX TO
PETITION FOR WRIT OF CERTIORARI

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[FILED JULY 20, 2022]

NOTE: This disposition is nonprecedential.

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

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

2021-2111

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. Mazzant, III.

Decided: July 20, 2022

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.

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 Commc'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 9:48–10:09.¹ We conclude that it does.

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 smarthome 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

¹ Available at https://oralarguments.cafc.uscourts.gov/default.aspx?fl=21-2111_07052022.mp3.

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.²

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 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,

² 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.

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.

[FILED SEPTEMBER 21, 2022]

NOTE: This order is nonprecedential.

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

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

2021-2111

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. Mazzant, III.

**ON PETITION FOR PANEL REHEARING AND
REHEARING EN BANC**

Before MOORE, *Chief Judge*, NEWMAN, LOURIE,
DYK, PROST, REYNA, TARANTO, CHEN,
HUGHES, STOLL, and STARK, *Circuit Judges*.¹

PER CURIAM.

O R D E R

Innovation Sciences, LLC filed a combined petition for panel rehearing and rehearing en banc. The petition was referred to the panel that heard the appeal, and thereafter the petition for rehearing en banc was referred to the circuit judges who are in regular active service.

IT IS ORDERED THAT:

The petition for panel rehearing is denied.

The petition for rehearing en banc is denied.

The mandate of the court will issue September 28, 2022.

FOR THE COURT

/s/ Peter R. Marksteiner

Peter R. Marksteiner

Clerk of Court

September 21, 2022

Date

¹ Circuit Judge Cunningham did not participate.

[FILED JULY 22, 2020]

**United States District Court
EASTERN DISTRICT OF TEXAS
SHERMAN DIVISION**

INNOVATION SCIENCES, LLC

v.

AMAZON.COM, INC., et al

Civil Action No. 4:18-cv-474

Judge Mazzant

CONSOLIDATED LEAD CASE

INNOVATION SCIENCES, LLC

v.

RESIDEO TECHNOLOGIES, INC.

Civil Action No. 4:18-cv-475

Judge Mazzant

Member case

MEMORANDUM OPINION AND ORDER

Pending before the Court is Plaintiff Innovation Sciences, LLC's Motion to Exclude Opinions of David B. Johnson, Ph.D. Regarding "HAL System" (Dkt. #459). Having reviewed the motion and the relevant pleadings, the Court finds that the motion should be denied.

BACKGROUND

This is a patent infringement suit brought by Plaintiff Innovation Sciences, LLC against Defendants Amazon.com, Inc., Amazon Digital Services, Inc., Amazon Digital Services, LLC, Amazon Web Services, LLC, Amazon Web Services, Inc., and Amazon Fulfillment Services, Inc. (collectively, "Defendants") (Dkt. #79 at p. 1). The patent

infringement allegations include U.S. Patent No. 9,723,443 (“the ’443 Patent”) and the ’798 Patent Family, including U.S. Patent Nos. 9,942,798 (“the ’798 Patent”), 9,912,983 (“the ’983 Patent”), and U.S. Patent No. 9,729,918 (“the ’918 Patent”) (Dkt. #79).

On February 28, 2020, Plaintiff filed its Motion to Exclude Opinions of David B. Johnson, Ph.D. Regarding “HAL System” (Dkt. #459). Defendants responded on March 10, 2020 (Dkt. #488). Plaintiff filed its reply on March 18, 2020; Defendants filed their sur-reply on April 2, 2020 (Dkt. #533; Dkt. #582).

LEGAL STANDARD

Federal Rule of Evidence 702 provides for the admission of expert testimony that assists the trier of fact to understand the evidence or to determine a fact in issue. FED. R. EVID. 702. In *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, the Supreme Court instructed courts to function as gatekeepers, and determine whether expert testimony should be presented to the jury. 509 U.S. 579, 590–93 (1993). Courts act as gatekeepers of expert testimony “to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.” *Kuhmo Tire Co. v. Carmichael*, 526 U.S. 137, 152 (1999).

The party offering the expert’s testimony has the burden to prove that: (1) the expert is qualified; (2) the testimony is relevant to an issue in the case; and (3) the testimony is reliable. *Daubert*, 509 U.S. at 590–91. A proffered expert witness is qualified to testify by virtue of his or her “knowledge, skill,

experience, training, or education.” FED. R. EVID. 702. Moreover, to be admissible, expert testimony must be “not only relevant but reliable.” *Daubert*, 509 U.S. at 589. “This gate-keeping obligation applies to all types of expert testimony, not just scientific testimony.” *Pipitone v. Biomatrix, Inc.*, 288 F.3d 239, 244 (5th Cir. 2002) (citing *Kuhmo*, 526 U.S. at 147).

In deciding whether to admit or exclude expert testimony, the Court should consider numerous factors. *Daubert*, 509 U.S. at 594. In *Daubert*, the Supreme Court offered the following, non-exclusive list of factors that courts may use when evaluating the reliability of expert testimony: (1) whether the expert’s theory or technique can be or has been tested; (2) whether the theory or technique has been subjected to peer review and publication; (3) the known or potential rate of error of the challenged method; and (4) whether the theory or technique is generally accepted in the relevant scientific community. *Id.* at 593–94; *Pipitone*, 288 F.3d at 244. When evaluating *Daubert* challenges, courts focus “on [the experts’] principles and methodology, not on the conclusions that [the experts] generate.” *Daubert*, 509 U.S. at 595.

The *Daubert* factors are not “a definitive checklist or test.” *Id.* at 593. As the Supreme Court has emphasized, the *Daubert* framework is “a flexible one.” *Id.* at 594. The test for determining reliability can adapt to the particular circumstances underlying the testimony at issue. *Kuhmo*, 526 U.S. at 152. Accordingly, the decision to allow or exclude experts from testifying under *Daubert* is committed to the sound discretion of the district court. *St. Martin v. Mobil Expl. & Producing U.S., Inc.*, 224 F.3d 402, 405 (5th Cir. 2000) (citations omitted).

ANALYSIS

Plaintiff acknowledges that Defendants “elected the ‘HAL System’ as allegedly invalidating prior art against the asserted [’]983, [’]918, and [’]798 Patents in its December 4, 2019 Final Election of Asserted Prior Art. Ex. 4, Final Election of Asserted Prior Art of Amazon” (Dkt. #459 at p. 3). But Plaintiff argues that “the 2019 HAL System is not itself reliable and does not present a reliable foundation for Johnson’s expert opinions that the HAL System is an invalidating prior art system” (Dkt. #459 at p. 7). Plaintiff then specifies several times that Defendants cannot use the “2019 HAL System” to meet the clear-and-convincing burden Defendants must establish to prove invalidity.¹

Defendants correctly identify that Plaintiff’s motion to strike is “not a proper *Daubert* challenge” (Dkt. #488 at p. 6). As Defendants astutely argue, Plaintiff’s challenge goes to the weight, not the admissibility, of Dr. Johnson’s testimony (Dkt. #488 at p. 6). And what is more, Plaintiff never controverts Defendants’ argument that whether or not the HAL system Dr. Johnson tested predates the asserted patents is a factual question to be decided by the jury.

¹ *E.g.*, (Dkt. #459 at pp. 8–11) (“Mr. Shriver’s uncorroborated testimony of events from 2006 cannot provide clear and convincing testimony required to establish § 102 prior art. . . . [Dr. Johnson’s testimony] fails to meet the clear and convincing evidence standard necessary to trigger the on-sale bar or otherwise show that the 2019 HAL System is prior art under § 102. . . . no evidence proves that the 2019 HAL System existed prior to August 2006. . . . In light of Amazon’s burden of proving invalidity by clear and convincing evidence, Johnson must cite to a single system that was publicly known prior to the critical date that in fact incorporated each and every limitation of the asserted claims. Johnson does not do so.”) (citation omitted).

See (Dkt. #488 at p. 6; Dkt. #582 at p. 3) (collecting cases).

“As a general rule, questions relating to the bases and sources of an expert’s opinion affect the weight to be assigned that opinion rather than its admissibility and should be left for the jury’s consideration.” *United States v. 14.38 Acres of Land, More or Less Situated in Leflore County*, 80 F.3d 1074, 1077 (5th Cir. 1996) (quoting *Viterbo v. Dow Chemical Co.*, 826 F.2d 420, 422 (5th Cir. 1987)). Indeed, cross examination is preferred because “[i]t is the role of the adversarial system, not the court, to highlight weak evidence” *Primrose Operating Co. v. Nat’l Am. Ins. Co.*, 382 F.3d 546, 562 (5th Cir. 2004); see also *Mobility Workx, LLC v. Celco P’ship*, 4:17-CV-00872, 2019 WL 5721814, at *6 (E.D. Tex. Nov. 5, 2019).

Like the plaintiff in *CardioNet, LLC v. ScottCare Corporation*, CV 12-2516, 2017 WL 4742476 (E.D. Pa. Oct. 19, 2017), Plaintiff here “essentially challenges the sufficiency of [Defendants]’ evidence in establishing the invalidity of the patent-at-issue.” 2017 WL 4742476, at *6. And just like the *CardioNet* court held, whether Defendants’ “evidence is sufficient to satisfy the clear and convincing evidence standard for proving invalidity is a question that must be answered after [Defendants have] had an opportunity to present [their] evidence.” See *id.* “It is not proper to use Rule 702 as a vehicle to usurp the fact-finding role of the jury” *Core Wireless Licensing S.a.r.l. v. LG Elecs., Inc.*, 2:14-CV-911-JRG-RSP, 2016 WL 1090351, at *1 (E.D. Tex. Mar. 19, 2016). Cross examination—not exclusion—is the proper way for Plaintiff to address its concerns with Dr. Johnson’s testimony.

CONCLUSION

It is therefore **ORDERED** that Plaintiff's Motion to Exclude Opinions of David B. Johnson, Ph.D. Regarding "HAL System" (Dkt. #459) is hereby **DENIED**.

[FILED AUGUST 28, 2020]

28

A Yep, I even did technical support. That's correct.

Q And have you remained CEO from when you established Home Automated Living to today?

A Yes.

Q And would you say that you were still wearing a lot of hats at Home Automated Living in the 2005 to 2006 timeframe?

A Yeah. Yes, sir.

Q And it would be the same sort of responsibilities that you just described?

A Right. That's correct.

Q And just to be clear, you mentioned earlier HAL2000. That's a software that Home Automated Living sells?

A It sold. It went through a name change. So, in the beginning we had three products: HAL1000, 2000, and 3000. But confusion started to set in that HAL2000 was really related to a date of -- you know, like you had Office 2000. And when 2000 came and went, people kept wondering is this an old product. So, it -- we had to change the name from 1000, 2000 to 3000, to HALbasic, ultra, pro to more aptly define what the product line was.

Q And -- and does Home Automated Living actually design the software HAL1000, 2000, 3,000, and the name change of HAL products?

A Yes.

Q All right. And it's not outsourced?

Avid Technology, and I bought a lake home at Lake Anna. And every time I'd go down there, I wished that I could remotely turn on the lights and adjust the temperature before I got there. Given my background was automated television stations, it was an easy segue, and so I started the prototype and proof concept.

Q Why did you name the first product HAL2000?

A The thought was the product really came after the company name. I was thinking about home automation and that it was a living product. It was always going to be evolving, and it had to do with how you live your life. So, the name came first and then the acronym. And then, quite by accident, the negative connotation hit us after we had already created the product of the 2001 Space Odyssey. So, you know, it's -- there's some pro and con to that name.

Q Earlier you also referred to a product called the Digital Video Center; is that right?

A DVC or VBA?

Q DVC.

A Yes.

Q And then -- sorry, what does DVC stand for?

A Digital Video Center.

Q And why did you develop -- or strike that. Did you develop Digital Video Center?

A Yes, I did.

Q Why did you develop Digital Video Center?

A As another cog in the wheel of pieces that we automate. We did lighting, thermostat, security, infrared. Video was a necessary cog in those wheels of things that we needed to automate to be called an automation company.

Q Why did video merit a separate center? Why wasn't it just part of HAL2000?

A Because we wanted to look at other alternative ways for creating revenue. So, if we created it as an add-on, people could pay us more money. Existing customers that had already bought HAL2000, instead of it -- having it be part of an upgrade they got for free, we could go back to those existing customers and sell it.

Q Was there a time when the Digital Video Center was included with HAL's main home automation product?

A Later, when we came out with HALpro, it -- HALpro has everything in it.

Q Is HALpro at a different price point than HAL2000?

A Significantly higher.

Q Did you write the code for any part of the HAL2000 software?

A Yes, I did.

Q Which parts?

A Sporadic throughout. My fingerprints are all over the code.

Q And did they work?

A Yes.

Q Do you know if these were available prior to -- sorry. Do you know if what's shown in Exhibits 22, 23, and 24 were available prior to August 10, 2006?

A Yes, they were.

Q And how do you know that?

A Because I -- these are devices that I bought and -- bought them prior to that date.

Q And, Mr. Shriver, did you receive any subpoenas in this case?

A Yes.

Q Could you please take a look at what's been marked as Exhibits Shriver 1 through 3.

A 1 is as I recall. And this is the same, I believe, just instead of company, my name, Exhibit 2. Okay. Did you have any questions about these?

Q Sure. Do you recognize these exhibits?

A Yes, sir.

Q And what are they?

A They're the subpoenas that I received to produce different pieces of hardware and technology.

Q And what specifically were they requesting?

A Technology that related to our products at a certain

time. It had to be before a certain date, and -- and also documentation and CDs, things like that.

Q And if I could ask you to turn to Shriver Exhibit 1, the Bates -- it's not numbered, but where it begins -- if you could flip probably about three pages in where it begins, "command for production 1."

A I'm there.

Q And then it says "a HAL2000 system with the HAL Digital Video Center and/or HAL Digital Music Center add-ons as it would have existed on or before August 9, 2006." And then it goes on. Did I --

A That's correct.

Q And would that be the date that you referred to that you were to produce objects and things that were dated on or before August 9th, 2006?

A That's correct.

Q And in response to these subpoenas did you provide any devices or software?

A Yes. I compiled software and hardware.

Q And do you recall what sort of devices and software you compiled?

A Yeah. Lots of -- the computer, monitor, keyboard, mice, all that pre-2006, along with automation hardware like lamp modules, interface modules, even cables and speakers and microphones that would be needed to effect home automation

at that time.

Q And who did you provide the devices and software to?

A I shipped them via FedEx to Mary something. I can't remember Mary's last name.

Q And was there any individual to whom you invoiced?

A Stephen Gray.

Q And did you provide any customer support for the devices and software you provided?

A Extensive.

Q And after the HAL2000 system -- actually, can I refer to the devices that you provided as the HAL2000 system?

A As a system, yeah. That makes sense.

Q And after the HAL2000 system was set up, did you have the opportunity to inspect that system?

A Yes, I did.

Q How many conversations did you have with Mr. Stephen Gray?

A I'd be guessing, but I'd say four, maybe five.

Q Okay. Do you recall the subject matter of the conversation?

A It was always connectivity. He was -- and it would be joint conversation. There was always multiple people in the room trying to configure different things. So, there was never just me and Stephen Gray communicating.

Q Okay. At the time Stephen Gray was in the room in Paul

Hastings with the equipment when he called you?

A That's correct.

Q Is that true for all five of those phone calls?

A Yes.

Q Four or five phone calls?

A And, again, I can't be certain of the number of calls, but it was always when he was with hardware.

Q Okay. And during those telephone calls there were attorneys in the room with Mr. Stephen Gray?

A I believe so. There was usually a -- you could hear multiple people discussing the subject matter of okay, is that light turning on kind of thing.

Q Okay. And what sorts of problems was Mr. Stephen Gray having hooking up the equipment?

A It was the video camera. It's -- the biggest issue is going back in time with drivers, not having readily available drivers for different equipment. And, so, one of the cameras that I'd sent out, an IP camera, we didn't have the drivers for. So, that became part of the problem.

Q And that was a camera that was shipped out in the second shipment?

A That's correct.

Q Okay. Do you know if Home Automated Living has ever shipped a system with all these components and parts as -- as you have, for example, in this invoice to any other

customer?

A They're all so unique. It's not like -- it's like a snowflake. Every customer is different in terms of their configuration requirements. So, I would say the odds of it, it's probably happened. But in terms of the -- the uniqueness of how many devices are they controlling or what are the protocols that they're controlling.

So, a typical customer might only have X10 in their home or only Z-Wave, but a customer -- there are customers that have a lot of things. Like they'll have Z-Waves so they can do the door locks and the thermostats, but they're using UPB for the lighting. To have all X10, Insteon, Z-Wave, all of those things, you could be -- even -- I have them, but that's because I test all that stuff. Philips Hue, Wemo.

Q Right. So, as far as you know, you don't know if any customer has ever been shipped a system that looks like this system?

A We don't -- in that timeframe we weren't selling turnkey systems, so we wouldn't sell a turnkey system. We would sell the software and the customer would configure it. It wasn't until later that we started selling turnkey systems preconfigured.

Q Okay. So --

A So, I wouldn't always know what their end use was when

they bought our software.

Q So, in July of 2006, if you were contacted by a customer, what would you send that customer?

A We wouldn't send them a computer system. We'd send -- sell them our software and whatever modules. Like at the time, 2006, we had UPB modules and X10. So, we would sell them those components along with our voice modem, and they would buy a computer and install it or they'd use it in their own home computer.

Q Okay. So -- so, a customer could buy an X10 device from Home Automation Living and could get the HAL software from your company, but -- but beyond that you weren't selling other -- other equipment to them?

A Right. We -- we did not sell the Z-Wave interface module or the Ocelot.

Q Okay. So, once -- so, in that situation, a customer who purchases your software, you don't know how their ultimate setup looks like in their home; is that correct?

A Only when they call in for support.

Q And who at the company is handling support telephone calls?

A All of us. When you're small, everybody picks up the phone when it rings.

Q So, you wouldn't know whether a customer would have set up a system like this on August 9th of 2006?

A No.

Q You'll see on -- this is paragraph 7 of Exhibit Shriver 3. It says "Commands For Production," and then it -- beneath that it lists a number of items with bullet points on it. Do you see that?

A Yes, sir.

Q Okay. From this bullet point list, can you tell me which of these items were in your home and which were not?

A Everything, except we had to buy some things. The Jasco incandescent night lights.

Q Jasco, that's listed as bullet point 4, Jasco incandescent night lights?

A Yes.

Q You purchased those? A Right. We needed something to actually turn on and off a light, so we bought those. I think that's the only thing we went out and bought. All the other stuff we had.

Q Now I would like to mark this as Exhibit Shriver 4. I'll hand this to counsel. If you could take a moment and look at this document.

A Okay.

Q Do you recognize that document?

A Yes, sir. This is a declaration that I signed on Friday.

Q And I direct you to paragraph 18.

A Uh-huh.

Q And it states there, "I installed HAL2000 v 3.6.9 and HALpro v 3.6.1 on this Dell Dimension 3000 computer system." Did I read that correctly?

A Yes, you did.

Q Why was version 3.6.9 of HAL2000 selected for installation?

A Because it was at the point before that date and having, I guess, all the possible interfaces to demonstrate in advance of that August date. I mean, obvious -- we could have picked a version 2-point something, but that would have been years before.

Q And that August date, again, that was August 9, 2006?

A That's correct.

Q And how did you know that HAL2000 version 3.6.9 existed as of August 9, 2006?

A That's a good question. The -- we have something called Visual SourceSafe, and that's a repository that we use to check in our source code and check in compiles of the various versions we do. And we have everything from the beginning of time, so we could scroll back and pull up that history.

Q So, have you been using SourceSafe ever since you've been developing HAL?

A Not in probably the first two years when I was doing it.

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come on Slide 47, so, surely it will pop up pretty soon after the break. So, if we could have Your Honor's guidance on that.

THE COURT: Anything else on that issue?

MS. SHAMILOV: No. I'm not sure what Slide 47 is or the issue is. I don't --

MR. DAVIS: The Court --

MR. HADDEN: Yeah, and again -- yeah, so --

MS. SHAMILOV: Oh, so the videos, I actually went -- stepped out to talk to my team to make sure I'm not crazy. We did object to exhibits that they have identified that were in things considered of their expert reports but were not mentioned in the report. Counsel, on meet and confer, said, well, things that are on the things considered are part of the report. Said fine. We can live by this rule. Now they're saying that's not -- that applies to them, not to us.

THE COURT: Right. Well, yeah, so I think the video is fair game. So, I know I said I wanted to contemplate it. It's something the expert considered, and so it's being used as a demonstrative, not to be admitted. So, it seems to me to be fair, so especially considering -- we haven't dealt with it yet. But, you know, the Plaintiff has asked for the Court to allow supplementation of opinions based on -- because of the way the Court ruled on certain things and on your -- your expert -- your invalidity expert to respond to some of those issues. So -- which I'm inclined to allow. So, it's just that

I want to be -- I want to be fair to both sides, so I am going to allow that. I think that's fair game.

MR. HADDEN: Thank you, Your Honor.

MS. SHAMILOV: Thank you, Your Honor.

THE COURT: Anything else?

MR. HADDEN: No, Your Honor.

MR. DAVIS: No, Your Honor.

THE COURT: Okay. We'll see you back in 15.

(Recess, 10:09 a.m.)

(Open court. All parties present.)

(Jury present.)

THE COURT: Please be seated. Mr. Hadden, go ahead and continue.

BY MR. HADDEN:

Q Hello again, Professor Johnson.

A Hi.

Q We were just starting to discuss what was known and conventional in August of 2006; is that right?

A That's correct, yes.

Q And, so, let's start with the diaper monitoring invention. Can you explain to us sort of what was known and in use and conventional in 2006 with respect to diaper sensors?

A Sure. My conclusion from it was on the slide there, that everything is conventional and Anne Wong didn't invent

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A That's correct.

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 item is updated -- the updated status is the presence of motion where there was no motion. And the HAL2000 system sends that e-mail.

Here is a more clearly readable copy of the entire e-mail message. It's from hal@hal2000.com. It's to me at my Rice University e-mail address. And, again, the subject line is HAL notification, and the body of the e-mail says: Motion detected on backyard wireless X10 camera.

You can see the date and time of the e-mail happened to be October of last year when I was doing this testing of the HAL2000 system.

Q And, so, in addition to the HAL system talking and saying motion detected, it also sent you this e-mail after you wielded your hand in front of the camera; is that right?

A That's correct.

Q And if we look at Element G, it requires that the network communication channel is separate from a wireless channel for the short-range wireless communication. Is that true in this situation where the camera detected the motion

HAL automated living product did what these claims require before August 10th, 2006?

A Just the same as with claim 22. The HAL2000 software includes and discloses each and every one of the limitations of claim 62 and, thus, invalidates claim 62. And it was -- clearly predates the 2006 patent application.

Q So, if we look now at the additional limitation that is required in dependent claim 24, can you explain how this was also shown and done by the HAL2000 software before 2006?

A Sure. The e-mail message is the notification. And in the video I walked through how I did the configuration setting up the rule says when you -- the camera detects motion, not only to announce audio "motion detected" which we heard but also to send this e-mail message. The configuration is the e-mail message that included the configuration of how the e-mail message was sent and the fact that it was sent in response to the motion being detected. That's the when send.

Q Okay. So, what is your conclusion with respect to whether or not HAL2000 did what claim 24 requires before these patents?

A It clearly did. So, it invalidates the claim there.

Q Now, claim 39 is another one of these dependent claims that requires the wireless channel is a ZigBee channel.

A Yes.

message. It's in association with the short-range wireless communication regarding the updated status coming from the wireless X10 camera. All of the limitations are the same as we've seen before.

Q Okay.

A And there is the e-mail message.

Q So, what is your conclusion with respect to 108 and the HAL system?

A For the same reasons we've already talked about, 108 is invalid. HAL2000 disclosed all of this well before the 2006 application.

Q So, to summarize with respect to the '983 patent, what did you find in between whether those claims came -- described something that happened or was -- did those claims survive, given the existence and use of the HAL2000 software before 2006?

A Because the HAL2000 software included all of the limitations that are present in each one of these asserted claims, and did so well before the 2006 filing date for that 2006 patent application, all of those claims are invalidated by the HAL2000 system.

Q Thank you, Professor Johnson. Let's move on to the '918 patent, which only has one claim that is being asserted, and that's claim 28. So, if we look again at the first chunk of these

So, what's your conclusion with respect to claim 28?

A Like the others we've discussed, the HAL2000 system did it prior to the 2006 application and, thus, invalidates claim 28.

Q Okay. So, let's go to the last patent, that one claim 5. A lot of this we've already covered before, I think.

A Yeah.

Q If you could just explain how these elements were in the HAL system.

A Sure. The management system comprises the centralized hub system. Again, that's the computer running HAL2000 software.

It comprises an encoder and a decoder. We've talked about those elements already as well.

It --

Q This is what the decoder has to do?

A Sorry. So, in B the centralized HUB system is associated with a unique hub identifier stored in a mapping table, which we've talked about. That's the DHCP Dynamic Host Configuration table in the wireless router.

Receives through the communication network information content requested by a user. That's the HomeNet software we talked about.

Perform a conversion of the compressed digital video

detection was reported, to send that e-mail message. So, it is configured in the HAL2000 software as required by the claim.

Q So, what's your conclusion with respect to dependent claim 52 of the '798 patent?

A Like the others, the HAL2000 system disclosed all of that before the patents were applied for and this invalidates claim 52.

Q So, what's your final conclusion with respect to the '798 patent and the HAL system?

A That each of the asserted claims is invalid because the HAL2000 disclosure -- HAL2000 system disclosed all of the elements of each of those claims well before the patents here were applied for, so the claims are all clearly invalid.

Q Did the Patent Office consider the HAL2000 when it allowed these three patents-in-suit?

A No, it did not.

Q And can you tell that from the face of the patent?

A Yes. The patents disclose or record all of the references that were considered by the Examiner in considering whether to allow or not allow the patent. And if you look at the references cited, it includes a section on US Patent documents. Well, HAL2000 is not one of those, and it doesn't appear in that list.

were from the right timeframe, and he plugged cables together, for example, as intended by the documentation and certainly as well-known by the inventor and CEO of the company who knew how the system would have been used and was used at the relevant time.

Q All right. So, he assembled that system in 2019, correct?

A He took those pieces out of storage and plugged them together in 2019.

Q Okay. And he did that in response to requests from attorneys to look for pieces and parts and put together a system, right?

A He, as I understand it, was asked to assemble a system consisting of HAL2000 and the parts that it was typically used with that he had available that would all have been prior to the 2006 date.

Q And he did that at the request of attorneys, right?

A Yes.

Q And the attorneys made that request for the purpose of trying to show invalidity of the patents that we're dealing with here in this case, right?

A I can't really put myself in the mind of the attorney. Certainly that's something that attorneys do is try to show patents invalid if they truly are invalid. Some of the language from the subpoena was read, I believe, this

morning, and he was asked to provide stuff that predated the 2006 date. He wasn't asked to provide things that invalidate claims.

Q That was the goal, right?

A Excuse me?

Q That was the -- the attorneys' goal?

A What was? I'm sorry.

Q To show -- come up with a system to show invalidity of these patents, right?

A I can't speak on behalf of the attorney. I would assume that the goal was to evaluate whether or not the claims were valid or not.

Q And you read Mr. Shriver's deposition testimony as part of your preparation for this case, right?

A That's correct.

Q And Mr. Shriver was paid about \$24,000 for coming up with that system and putting it together, correct?

A I don't remember the number.

Q You don't remember that?

A I mean, I remember there's a number, but I couldn't have quoted the number to you.

Q Let me -- let me back -- let me back up and just show you at the top. This is a -- this is a page from Mr. Shriver's October 28, 2019 deposition.

A Yes.

message.

In simple kind of configuration changes, that would have been, you know, garden-variety, commonplace things to have done to computers in 2006.

I didn't change any of the functionality of the system other than to, for example, set my e-mail address in there rather than some other e-mail address, for example.

Q Okay. And did you make any other changes, whether they be configuration settings or anything else, to the system that you were initially shown, based on what Mr. Shriver had done?

A I'm trying to remember almost a year ago. I don't remember any other, no.

Q Okay. Let me go back -- I want to go back to the hardware components. I'd asked you to identify those. Did you verify for yourself that every component of that HAL system was, in fact, made and sold prior to August of 2006?

A Yes.

Q Okay. And how did you go about that? Did you do Internet research or how did you do that?

A Take the brand name, model number, Google and track down the history of that model, that device.

Q Okay. But in terms of the particular unit being sold, the unit that you were using -- there are different versions, right? There could be a camera that comes out in

A Coming back to a point that IS has made repeatedly throughout this case, the claims don't require the system to be used. The claims require a system configured to be able to do certain things. I confirmed that the configuration to be able to do those things actually functioned correctly by testing those things, as well as reading the documentation, the videos, the deposition, as I've said.

I don't know whether a customer ever actually did those things. The claims say a system configured to be able to do those things.

Q Well, sir, you're aware that when you rely on a product as prior art, that that product had to be actually in existence during the prior art time period, correct?

A Yes.

Q And what -- what we've just heard from Mr. Shriver when we looked at his testimony is he didn't know, and you just confirmed that you don't know whether any such system existed?

A That -- that's not the meaning that either -- not the meaning that I intended and not the meaning that I took from what Tim Shriver said.

Q Well, can you tell me any customer that actually had that system in use in any time -- 2006, 2007, or any time earlier than that?

A No.

[FILED SEPTEMBER 1, 2020]

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THE COURT: Additional questions?

MR. HADDEN: Yes, Your Honor.

REDIRECT EXAMINATION

BY MR. HADDEN:

Q Good morning, Professor Johnson.

A Good morning.

Q Just to end on that last point, you -- you were not the person who selected the components of the HAL system that you investigated in California, were you?

A No.

Q That was Mr. Shriver, wasn't it?

A That's correct.

Q Mr. Shriver didn't use the claims to select those components, did he, Dr. Johnson?

A I assume so.

Q I'm sorry. You assume so?

A I believe he did, yes. I mean, he wasn't -- he wasn't blind of what was the reason he was assembling the system.

Q Well, didn't the subpoena to Mr. Shriver ask for a system that was representative of the HAL system before the 2006 date?

A That's correct, yes.

Q Okay. And isn't that what Mr. Shriver provided?

A Yes.

Q Okay. And when you came in this morning, you wanted to