CASE NO. A17A0878

IN THE COURT OF APPEALS OF THE STATE OF GEORGIA

_____

DEBBIE ANN CASH,
INDIVIDUALLY AND AS PERSONAL REPRESENTATIVE
OF THE ESTATE OF LESLIE LEE CASH, DECEASED,
AS PERSONAL REPRESENTATIVE OF THE ESTATE
OF MICHAEL DAVID CASH, DECEASED, AND AS NEXT FRIEND OF
KATHERINE ANN CASH, A MINOR,
Appellants

vs.

LG ELECTRONICS, INC.,
Appellee

_____

On appeal from the
SUPERIOR COURT OF GWINNETT COUNTY

BRIEF OF APPELLEE LG ELECTRONICS, INC.

Ayesha N. Khan
Admitted Pro Hac Vice
John Moss
Admitted Pro Hac Vice
Potomac Law Group, PLLC
1300 Pennsylvania Ave., NW, Suite 1300
Washington, DC 20004
(202) 204-3005
akhan@potomaclaw.com
jmoss@potomaclaw.com

Edward C. Bresee, Jr.
Ga. Bar No. 004820
Arthur J. Park
Ga. Bar No. 227992
Mozley, Finlayson & Loggins, LLP
5605 Glenridge Dr., Suite 900
Atlanta, GA 30342
(404) 256-0700
mbresee@mfllaw.com
apark@mfllaw.com

Counsel for Appellee LG Electronics, Inc.

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Cases **Page Number(s)**

Cases (cont'd) **Page Number(s)**

Statute

Other Authority

INTRODUCTION

This case grows out of a tragic house fire that killed two people. Nothing can undo the horror of that incident or diminish its toll. But the dimensions of the tragedy should not be compounded by placing blame where it does not belong.

LG Electronics was prepared to assume responsibility for the fire's toll if its television had caused the fire, but all reliable evidence points the other way. None of the other 100,000+ specimens of this model television has been alleged—let alone shown—to be the source of a fire. The local fire department conducted an extensive investigation, and did not identify the television as the fire's source. And LG's causation expert concluded that the television could not have caused the fire.

Cash's expert Judd Clayton's opinion to the contrary rested on a posited ignition sequence that was repudiated by his own testing. Furthermore, Clayton failed to address evidence presented by LG's experts showing that Clayton's elimination of other possible causes of the fire had been based on an inaccurate understanding of the facts.

In excluding Clayton's testimony, the trial judge was simply fulfilling her role as a gate-keeper charged under *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 589 (1993), with ensuring that expert testimony is relevant and reliable. And because Cash could not prove her case without Clayton's testimony, the trial court properly granted summary judgment to LG.

PART ONE: APPELLEE'S STATEMENT OF MATERIAL FACTS

Leslie Cash, the husband of Plaintiff-Appellant Debbie Cash (hereinafter "Cash"), and the Cashes' son Michael died in a house fire on July 6, 2011. (1st Am. Compl., R-2150-72.) Cash's causation expert Judd Clayton (*see* Pls.' Desig., R-2932-40), LG's experts, and investigators from the Gwinnett County Fire Department agreed that the fire originated in a portion of the Cashes' living room that included an "entertainment center" containing, among other things, an LG television, a DirecTV cable box, and a DVD/VCR player. (Clayton, MT-102-03, 112, June 2, 2017; Bryson Dep., R-1814-15; *see also* Smith Aff., R-3458; Schulz Dep., R-10830-31).

Cash, on behalf of herself, her surviving daughter, and the estates of her deceased husband and son, filed suit against LG, which manufactured the television; DirecTV, LLC, which provided the cable box; Phillips Electronics, which manufactured the DVD/VCR player; and Wal-Mart Stores, from which the Cashes purchased the DVD/VCR player and a lamp that had been in the living room. (Compl., R-7-47.) The other defendants were subsequently dismissed or granted summary judgment, leaving the following claims remaining against LG: strict liability, negligence, breach of warranty, and unjust enrichment and restitution. (1st Am. Compl., R-2150-72.)

A. The LG Television

Cash's expert Judd Clayton sought to testify that the LG television was the source of the fire. (*See* Appellants' Br.9 (citing record).) The ignition sequence that he posited had six discrete steps, but we will focus here on steps three and four because they provided the predicate for the trial court's conclusion that Clayton's theory was unreliable. (Order, R-4-6.)

In the first step, Clayton contended that one of the television's capacitors,[1] "C612," failed. (Clayton Dep., R-10430, 10470; Clayton, MT-124-26.)[2] In the second step, Clayton surmised that capacitor C612 overheated, ruptured, and released vapors. (Clayton, MT-149; Clayton Dep., R-10430-31, 10438-39.) In step three, Clayton posited that the capacitor's vent (which is located on one end of the capacitor) blew open, causing vent "wings" to touch an adjacent metal "heat sink."[3] (Clayton, MT-151; Clayton Dep., R-10430-31, 10475, 10439.) It was critical to

[1] A capacitor is a metal cylinder in a television's power board that stores an electrical charge. (Echols Aff., R-4007-08.)

[2] Clayton said that he did not know how or why the capacitor failed (*see* Clayton Dep., R-10441-42, 10663) and that he had not inspected its interior (Clayton Dep., R-10638). LG's expert Martin Hudis subsequently opened up capacitor C612 and found that it lacked signs of an internal failure. (LG's Desig., R-6006; Hudis Aff., R-3616-17.) Clayton did not submit an affidavit to rebut Hudis's findings and the trial court excluded Clayton's attempts to respond to the Hudis affidavit for the first time at the *Daubert* hearing. (*See* MT-122-24.)

[3] A heat sink absorbs and dissipates excess heat. (Echols Aff., R-4007.)

Clayton's theory that these vent wings "actually come in physical contact with the [] heat sink." (Clayton Dep., R-10474.)

It was undisputed that, for a capacitor of the size in question, manufacturers' specifications and industry standards recommended a minimum of a 3-millimeter gap between the capacitor and any adjacent component. (Clayton, MT-159-60 (industry suggestion), 164 (mfrs.' specifications); Mfrs.' Application Guidelines, R-6341, 6412.) Clayton testified that he measured the gaps in several exemplar televisions and that they ranged from 0.15 to 0.188 inches (Clayton Dep., R-10473-74), which is the equivalent of 3.81 to 4.77 millimeters. Accordingly, as he acknowledged, the smallest gap on the exemplars exceeded the 3-millimeter minimum requirement. (Clayton, MT-165.)

To determine whether the vent could touch a heat sink 3+ millimeters away, Clayton caused several exemplar capacitors to electrically rupture. (Clayton, MT-144-50; Clayton Dep., R-10521-22 (indicating that he conducted ten such tests).) But Clayton never achieved an extension greater than *1.5 millimeters*:

> Q: . . . what's the longest extension of the wings that you achieved?
> A: Probably a millimeter, a millimeter and a half.
> Q: Would that be sufficient to bridge a three millimeter gap?
> A: That would not, no.

(Clayton, MT-165-66.) Nor was he aware of "any tests anybody has done anywhere in the world" showing that a ruptured capacitor's vent extended 3 millimeters or more. (Clayton, MT-167.)

Thus, although contact between these two metal components was critical to his ignition hypothesis, in none of Clayton's experiments did the capacitor make contact with the heat sink:

> Q: In all of your capacitor testing, when the capacitor blew, did the wings from the capacitor ever come in physical contact with the heat sink based on the failure alone?
> A: We never made actual contact between the outer housing of the capacitor and the heat sink . . . we simulated it electrically.

(Clayton Dep. R-10483.) Clayton further testified that he was unaware of any testing by others in which such contact was made. (Clayton Dep., R-10646-47.) In addition, LG's causation expert artificially ruptured thirty-five capacitors in the same way that Clayton had, and found that the vent ends "hardly extend whatsoever" and never came close to the nearby heat sink. (Smith Aff., R-3464; Notes of Demonstrations, attached to Smith Aff., R-3472-73.)

Nonetheless, Clayton concluded that the 3-millimeter+ gap he observed in the exemplar televisions was insufficient to prevent the capacitor's vent from touching the heat sink. (Clayton Dep., R-10558,10642.) Clayton opined that the gap needed to be "a quarter of an inch . . . half inch would be ideal" (Clayton Dep., R-10564), or 6.35 to 12.7 millimeters—more than double the industry standard and manufacturers' specifications (*see* Hamilton Aff., R-3605).

Clayton further testified that he measured the vent end of the capacitor found at the scene to be 0.165 inches, or 4.191 millimeters. (Clayton Dep., R-10477.) But

it was undisputed that the subject capacitor was stepped on and deformed during fire-suppression efforts. As Clayton testified, "[i]t's not just flattened as a consequence of there being a melting effect, per se. But it appears as though there was some mechanical force applied to it as well." (Clayton Dep., R-10616.) He explained that the damage "would be consistent with most any type of force applied to it, be it a foot, be it a tool, be it a piece of furniture that was sufficient to deform it in the manner we see." (Clayton Dep., R-10617.)

At the *Daubert* hearing, Clayton stated that his deposition testimony on this point had gotten "blown out of proportion" and that whatever damage the capacitor had suffered "did not affect whatsoever the end of the capacitor that vented" because there was "no compression or distortion of the vent on this end" (Clayton, MT-158-59; *see also* Appellants' Br.16.)

In step four of his causal chain, Clayton surmised that the purported contact between the capacitor's vent and heat sink caused a spark that ignited the capacitor's vapors and plastic sleeve. (Clayton Dep., R-10439.) To demonstrate this phenomenon, Clayton conducted "short circuit" "reverse polarity" testing by connecting one wire from the interior of the capacitor to the capacitor's outside casing and another wire from the capacitor's casing to the heat sink. (Clayton Dep., R-10653-54, 10656-57.) These wires allowed the current to take a shortcut from its normal path, causing a fault. (Clayton Dep., R-10653; Echols Aff., R-4010.) Clayton

testified that one could create a similar short circuit (with the same results) in numerous other places on the television power board, or on any other appliance's power board. (Clayton Dep., R-10654-55, 10713-14.)

To conduct his test, Clayton also removed a critical fuse that would have otherwise activated when the capacitor failed and would have thereby deprived the system of the current necessary to create the ignition that Clayton sought to demonstrate. (Clayton Dep., R-10526-27,10550,10662.) As Clayton explained:

> Q. What happens when the fuse blows?
> A. Current is terminated.
> Q. What's the purpose [of] the fuse?
> A. It's an over-current safety device.
> Q. It's a safety device?
> A. It is.
> Q. Okay. So you took the safety device out to run your test?
> A. We did. . . .

(Clayton Dep., R-10527.)

It was undisputed that this testing regime did not follow any published protocol or test standards from the scientific community. (Clayton Dep., R-10489-90; *accord* R-10553-54.) It was also undisputed that the set-up did not replicate what could have caused the fire because the circumstances Clayton created did not exist in the Cashes' television. (Clayton Dep., R-10503, 10527-28, 10666-67; Pls.' Resp. to Mot. to Excl., R-5461.)

Clayton testified that a failure caused by reverse-polarity wiring "is approaching worst case scenario" and that he could not say whether this alteration

created conditions more or less severe than the circumstances that would have arisen from a capacitor's internal failure. (Clayton Dep., R-10666-67.) He also testified that having the fuse in place (as it was on the day of the fire) would have cut off the electrical current "quicker" than when the fuse was removed. (Clayton Dep., R-10527-28.)

Even after making these modifications to the television's electrical circuits, Clayton produced a spark in only two of his ten experiments. (Clayton Dep., R-10521.) He agreed at his deposition that the sparks lasted less than one-fiftieth of a second (Clayton Dep., R-10487); at the *Daubert* hearing, he testified that they lasted three-thirtieths of a second (Clayton, MT-154). Either way, the sparks were "essentially instantaneous," "a mere instant" (Clayton Dep., R-10487, 10676), and "very short-lived." (Clayton, MT-154).

Although it was critical to Clayton's theory that a flame result (Clayton Dep., R-10473), the spark did not cause the capacitor's sleeve or vapors to ignite in any of his experiments (Clayton Dep., R-10521, 10710-11). So Clayton held a butane gas-filled lighter at the capacitors' vent as the vapors were being expelled and, at *some* point in *some* tests, those vapors ignited when exposed to Clayton's flame. (Clayton Dep., R-10518.) Ignition occurred, however, only when the flame was maintained for longer than any spark would have lasted. (Clayton Dep., R-10668-69.) And in at least one instance of ignition, Clayton had manipulated the capacitor by cutting and

pulling its casing over the vent end, making it easier for the casing to ignite. (Clayton Dep., R-10512-15.)

While Clayton found that a flame sometimes resulted when the lighter was introduced, he did not assert that the flame remained when the lighter was removed. (*Cf.* Clayton Dep., R-10511-13, 10521.) LG's expert conducted the same flammability testing on ten capacitors and found that no flame persisted when the external ignition source was withdrawn. (Smith Aff., R-3465; Ex. B to Smith Aff., R-3478-79.)

In steps five and six, Clayton posited that the flame that purportedly arose from the preceding steps dropped down several inches and ignited the television's right speaker assembly and then exited the bottom of the television and spread to the rest of the home. (Clayton Dep., R-10431, 10471.)[4]

It was undisputed that LG has sold 135,251 units of the television model that the Cashes owned and that this is the only instance in which the product is alleged to have caught fire. (Kim Aff., R-3612-13.)

[4] Clayton testified that, under his theory, the television's right speaker assembly would have been consumed. (*See* Clayton Dep., R-10469; *see also* Appellants' Br.10 (citing MT-129).) After Clayton's deposition, however, LG's expert evaluated the assembly and found "much of the foam, paper cone and rubber material from right speaker assembly remaining"—an assertion backed up with photographs. (Smith Aff., R-3466-67.) Clayton never submitted an affidavit to rebut that finding.

B. Other Plausible Causes of the Fire

Fire Department investigators did not pinpoint the television as the cause of the fire; instead, they ruled the cause "undetermined" because there were numerous possible sources, all substantially destroyed by the fire. (Bryson Dep., R-1815, 1830-31, 1867-68.) LG's causation expert David Smith conducted his own investigation; he concluded that the LG television, the DVD/VCR player, and various other items could not have caused the fire, but that lightning and other items—the cable box and its power cord, a lamp and its power cord, an extension cord attached to a fan, and missing electrical components—could not be ruled out as causes. (Smith Aff., R-3458-3460.) Clayton, in contrast, ruled out all non-television sources as plausible sources of the fire. (*See* Clayton, MT-102-15).

It was undisputed that there had been "lots of . . . lightning activity in the area" on the night before the fire (Schulz Dep., R-10872), but Clayton excluded that as a potential cause because he found no visible lightning damage at the scene (Clayton, MT-103-04; *see also* Appellants' Br.6). He cited records indicating that there had been no lightning strikes within one-tenth mile of the home (Clayton, MT-104) and found no indication of lightning in the television or in other items that would have shown evidence of a strike (Clayton, MT-105-06; *see also* Appellants' Br.7).

Clayton acknowledged, however, that a lightning strike can cause latent damage that results in a fire sometime later (Clayton Dep., R-10703) and the

Gwinnett County investigators were unable to exclude lightning as a plausible cause (Bryson Dep., R-1832-33). The storm had included over 1,400 lightning strikes within a five-mile radius, one of which struck 0.1 miles from the center of the Cashes' home. (STRIKEnet Lightning Report, R-11762). During the storm, Cash heard "a pop and crackle outside" the entertainment center wall, which led her to spend ten minutes inspecting the exterior of the house. (Cash Dep., R-1171, 1393-1400.) And LG's expert conducted a series of tests after Clayton's deposition and found signs consistent with an electrical strike. (LG's Desig., R-6005; Dydo Aff., R-3588-89.)

At his deposition, Clayton had testified that he ruled out the DirecTV cable box because he found that it did not have a blown fuse (which one would expect it to have if it had overheated), that it lacked combustible material to sustain a flame, and that it did not reflect the kind of damage one would expect if it were the cause. (Clayton Dep., R-10444, 10585; *see also* Clayton, MT-108; Appellants' Br.8.) After Clayton's deposition, however, LG's expert examined the cable box and found that a fuse *was* electrically blown before it was damaged by the fire and that a component called a "diode" also revealed evidence of an electrical fault that preceded the fire (LG's Desig., R-6005; Dydo Aff., R-3589)—findings to which Clayton never responded. The evidence also showed that the cable box was over twelve years old

and that, prior to the fire, the box "would get hot" to the point that it "would just about burn your hand." (Cash Dep., R-1164-65, 1286.)

Clayton further ruled out the lamp and attached power cord, as well as the electrical cord attached to a fan, finding them to have been outside the area of origin. (Clayton, MT-110-12; *see also* Appellants' Br.7.) LG's expert found that these items *were* located within the area of origin and that they could not be ruled out because they showed signs of extensive electrical arcing. (Smith Aff., R-3458-62.)[5] Clayton, too, acknowledged these signs of arcing. (Clayton Dep., R-10593.)

Finally, at his deposition, Clayton resisted the notion that various portions of electrical cords were not recovered after the fire. (*See, e.g.*, Clayton Dep., R-10435-37.) LG's expert, however, subsequently opined that many power-cord segments and other components were never recovered and that the fire could have been caused by any of those missing items. (LG's Desig., R-6000; Smith Aff., R-3461-62.) Clayton did not submit an affidavit rebutting that finding or explaining how he could exclude unrecovered items as possible causes.

C. The Proceedings Below

Cash designated Judd Clayton as her causation expert on June 16, 2015. (Pls.' Desig., R-2936-40.) LG's counsel took Clayton's deposition on October 30, 2015. (*See* Clayton Dep., R-10422.) Thereafter, LG Electronics had several experts review

[5] An "arc" is a potential ignition source for a fire. (Clayton Dep., R-10591-92.)

Clayton's testimony and conduct further testing. (*See, e.g.*, Dydo Aff., R-3588-89; Smith Aff., R-3457-3501; Hudis Aff., R-3615-44.) LG Electronics designated these individuals as its experts in February 2016. (*See* LG's Desig., R-5996-6051; *see also* R-3309-10 (showing service of Designation on Feb. 1, 2016).) That Designation outlined the experts' views, described the tests they had conducted, pointed out inaccuracies in Clayton's testimony, and refuted his conclusions. (*See generally* LG's Desig., R-5996-6051.) Cash did not depose any of LG's experts; nor did she seek leave to allow Clayton to rebut their opinions.

Ultimately, LG filed a motion to exclude Clayton's testimony (R-3434-37), a supporting brief (R-3683-3724), and the transcript of Clayton's deposition and its thirty-four exhibits (R-6137-10784). LG's motion was supported by twenty-three exhibits (R-3439-3680), including expert affidavits reiterating what had been said in LG's Designation regarding the factual inaccuracies underlying Clayton's findings and conclusions (*see* Dydo Aff., R-3588-89; Smith Aff., R-3457-3501; Hudis Aff., R-3615-44).

Cash filed a response to LG's motion to exclude (R-5682-84), a supporting brief (R-5450-77), three exhibits (R-5736-5857), and a statement of facts and theories of recovery (R-5478-83). She did not seek leave to submit an affidavit rebutting the opinions expressed in LG's experts' affidavits. (*See* Pls.' Resp. to Mot. to Excl., R-5455-56 n.3 (indicating that Cash was relying on Clayton's deposition

testimony in opposing LG's motion and would present his testimony more fully at trial).)

LG also filed a motion for summary judgment (R-3324-3433, 3731-38), which Cash opposed (R-5484-5681). After LG filed reply briefs on both motions (R-5983-95, 6052-77), Judge South held a six-hour *Daubert* hearing, during which she heard arguments from counsel and testimony from Clayton (MT-3-184). Although Clayton attempted at the hearing to respond to LG's experts' findings, the trial court excluded testimony regarding opinions of which LG had not previously been apprised. *See* MT-123.

After reviewing the voluminous record and the evidence presented at the hearing, Judge South concluded that Clayton's opinions lacked sufficient indicia of reliability. (Order, R-4-6, Sept. 22, 2016.) She reasoned that Clayton failed to reliably demonstrate that a blown capacitor's vent could bridge a 3-millimeter gap. (Order, R-5.) She further explained that, even if this distance were bridged, Clayton failed to reliably show that the contact would have created a spark sufficient in length and intensity to start a fire. (Order, R-5.) In addition, she held that Clayton "failed to adequately address and rule out other potential fire sources." (Order, R-4.) Finally, because there was no evidence to show a defect in the television without Clayton's testimony, she granted LG's motion for summary judgment. (Order, R-6.)

PART TWO: ARGUMENT AND CITATION OF AUTHORITY

Summary of Argument

I. The trial court cannot reasonably be said to have abused its discretion in excluding Clayton's testimony. Step three of his sequence posited that the vent of a capacitor touched an adjacent heat sink, but neither his own testing nor scientific literature supported this hypothesis. Step four posited that the purported contact caused a spark that ignited vapors and the capacitor's plastic sleeve, but again, neither his testing—which involved changing the circuit pattern, disabling safety features, and artificially introducing a flame—nor scientific literature supported this conclusion. Furthermore, after LG's experts refuted the predicate for Clayton's elimination of other causes of the fire, Clayton failed to submit an affidavit contending with their findings.

Because Clayton's views were not supported by his own testing, there was a substantial analytical gap between the data and his opinion, his theory was not subjected to peer review and publication or shown to be accepted in the scientific community, he did not testify about the error rate of his methodology, and he did not reliably eliminate other plausible causes of the fire, the trial court committed no abuse of discretion in excluding his testimony.

II. The award of summary judgment to LG was proper because Cash acknowledged that she could not prove her case without Clayton's testimony. Indeed, summary judgment was proper even if Clayton's opinions had been admitted, because his testimony would have been insufficient to allow a reasonable jury to conclude that the television's alleged defect was the proximate cause of the fire.

Argument

I. Enumeration of Error No. 1: Exclusion of Judd Clayton's Testimony

A. Standard of Review

A trial court's decision to admit or exclude expert testimony is reviewed for an abuse of discretion, *Joiner*, 522 U.S. at 142-43, and should not be reversed unless "manifestly erroneous," *Allison v. McGhan Med. Corp.*, 184 F.3d 1300, 1306 (11th Cir. 1999) (quoting *Spring Co. v. Edgar*, 99 U.S. 645, 658 (1878)). An appeals court must affirm unless the trial court has "made a 'clear error of judgment,' or has applied an incorrect legal standard." *McClain v. Metabolife Int'l, Inc.*, 401 F.3d 1233, 1238 (11th Cir. 2005) (quoting *Piamba Cortes v. Am. Airlines, Inc.*, 177 F.3d 1272, 1306 (11th Cir. 1999)). That is so even when the exclusion of testimony is outcome-determinative, *Joiner*, 522 U.S. at 142-43, or the appeals court would have ruled the other way, *United States v. Frazier*, 387 F.3d 1244, 1259 (11th Cir. 2004).

B. O.C.G.A. §24-7-702(b) and *Daubert v. Merrell Dow Pharmaceuticals, Inc.*

Under O.C.G.A. §24-7-702(b), expert testimony must be "based upon sufficient facts or data"; it must be "the product of reliable principles and methods"; and the witness must apply the principles and methods reliably to the facts of the case. These guidelines effectuate the holding in *Daubert* that a trial judge acts as a gatekeeper charged with ensuring that expert testimony is both relevant and reliable. 509 U.S. at 589, 597.[6] The "importance of *Daubert*'s gatekeeping requirement cannot be overstated" because "the expert's opinion can be both powerful and quite misleading." *Frazier*, 387 F.3d at 1260. Furthermore, in fulfilling its gatekeeper role, a court must bear in mind that "[t]he burden of establishing . . . reliability[] and helpfulness rests on the proponent of the expert opinion." *Id.*

With respect to the reliability prong, a key question is whether the expert's theory "can be (and has been) tested." *Daubert*, 509 U.S. at 593. Other considerations include whether the theory or technique has been subject to peer review and publication, the known and potential error rate of the methodology, and whether the technique is generally accepted in the relevant scientific community. *Id.* at 593-94. These four factors are not exhaustive, but they are a starting point for a court's analysis. *Allison*, 184 F.3d at 1312.

[6] Georgia courts regularly rely on *Daubert* and other federal case law in this area. *See, e.g., HNTB Georgia, Inc. v. Hamilton-King*, 287 Ga. 641, 642-43 (2010).

The relevance (or helpfulness) prong asks whether the expert testimony is sufficiently tied to the facts of the case that it will aid the jury in resolving a factual dispute. *Daubert*, 509 U.S. at 591. This consideration requires an appropriate "fit" between the offered opinion and the facts of the case. *Id.*

While a court's primary focus should be on principles and methodology, rather than on an expert's conclusions, *Daubert*, 509 U.S. at 595, a court is "not precluded from looking at conclusions," *Allison*, 184 F.3d at 1315-16. When "there is simply too great an analytical gap between the data and the opinion proffered," the testimony should be excluded. *Joiner*, 522 U.S. at 146.

C. The trial court did not abuse its discretion in excluding Clayton's testimony.

Cash contends that the trial judge excluded Clayton's testimony because she took issue with his "results, not his methodology." (Appellants' Br.23.) But the judge explained that she was excluding Clayton's testimony not out of disagreement with his conclusions, but because he "failed to demonstrate in a scientifically reliable manner how the fire at issue . . . could have originated in the TV" and "failed to reliably apply scientific principles and methods to the facts of this case." (Order, R-4-5.) Given the evidence that was presented below, these conclusions were hardly an abuse of discretion.

1. The trial court did not abuse its discretion in concluding that Clayton's step-three testimony was unreliable.

As *Daubert* held, "a key question" in assessing reliability is whether a theory or technique "can be (and has been) tested," 509 U.S. at 593. Under step three of his theory, Clayton surmised that the vent of capacitor C612 extended far enough to touch a heat sink over 3 millimeters away. (Clayton, MT-151; Clayton Dep., R-10430-31, 10439.) But testing demonstrated that a capacitor's vent does *not* extend 3 millimeters (let alone more) when subjected to an electrical rupture. (Order, R-5; *see supra* at 4-5.) Indeed, Clayton testified that he was not aware of any testing by anyone anywhere showing an extension of that length. (Clayton, MT-167.)

Courts routinely exclude testimony when, as here, an expert's theory is inconsistent with the evidence. *See, e.g., Davidov v. Louisville Ladder Grp., LLC*, No. 02 Civ. 6652(LLS), 2005 WL 486734, at *2 (S.D.N.Y. March 1, 2005) (expert excluded where essential element of theory contradicted by evidence); *McAndrew v. Garlock Equip. Co.*, 537 F. Supp. 2d 731, 737-38 (M.D. Pa. 2008) (expert excluded where he ignored contrary facts and relied upon unfounded assumptions); *Donnelly v. Ford Motor Co.*, 80 F. Supp. 2d 45, 50-51 (E.D.N.Y. 1999) (expert excluded when opinion premised on assumptions contrary to facts of case).

Cash simply ignores that Clayton's testing refuted his own theory. Instead, she emphasizes that the 3-millimeter figure was a *minimum* amount suggested by industry standards and that the gap in the television should have been 4.5 millimeters

or greater. (Appellants' Br.35-36.) But these assertions are beside the point: If the capacitor's vent could not touch a heat sink that was 3 millimeters away, *there's no reliability or relevance to the assertion that the gap should have been even larger*.

Cash is equally off-base in arguing that, by basing her exclusion on Clayton's contention that the vent touched the heat sink, the trial court was unduly focused on his conclusions rather than on his methodology. (Appellants' Br.25-26.) But a trial court is "*not* precluded from looking at conclusions"; indeed, testimony is rightly excluded when an expert's "proffered conclusions . . . [a]re out of sync" with the data. *Allison*, 184 F.3d at 1315-16 (emphasis added).

> [C]onclusions and methodology are not entirely distinct from one another. Trained experts commonly extrapolate from existing data. But nothing in . . . *Daubert* . . . requires a district court to admit opinion evidence that is connected to existing data only by the *ipse dixit* of the expert. A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered.

Joiner, 522 U.S. at 146. Here, the gap between the data and Clayton's theory couldn't have been more pronounced: the data supported a conclusion that was the precise opposite of the one Clayton sought to present.

The other *Daubert* considerations—whether the theory or technique has been subject to peer review and publication, the known and potential error rate of the methodology, and whether the technique has been generally accepted in the relevant scientific community, 509 U.S. at 593-94—likewise point in the direction of excluding Clayton's testimony. In *HNTB Georgia, Inc. v. Hamilton-King*, 287 Ga.

641 (2010), the plaintiff claimed that companies overseeing a bridge-widening project were responsible for an accident that led to a motorist's death. The Court upheld the exclusion of an expert who cited no authority supporting his opinion that the project's design was substandard, pointed to no evidence of similar accidents on interstate highways, and failed to ascertain the error rates of his hypothesis. *Id.* at 643-44. Similarly, in *McClain*, 401 F.3d at 1251, the Eleventh Circuit affirmed the exclusion of opinion testimony that a drug had caused the plaintiff's medical condition because the expert offered no testing that supported his theory, did not demonstrate that his theory was generally accepted by the scientific community, failed to present evidence of any peer review of his opinions, submitted no publication linking the drug to medical conditions like the plaintiff's, and did not testify about the known or expected error rate of his theories.

These deficiencies are equally present with respect to Clayton's step-three testimony. He cited no literature to support his belief that an internally ruptured capacitor's vent can extend 3 millimeters or more; indeed, he testified that he was unaware of any testing to support this possibility. (Clayton, MT-167.) He acknowledged that he did not publish his test results (Pls.' Resp. to Mot. to Excl., R-5462 (citing Clayton Dep.)), and he did not testify about the error rates of his hypothesis. In sum, "although he has provided unsupported testimony about the general acceptance within the relevant scientific community of his 'broad

principles,'[7]. . . , he has offered no testimony about the acceptance of his specific opinions." *McClain* 401 F.3d at 1251. Accordingly, Clayton's opinion that the capacitor's vent extended more than 3 millimeters was nothing more than "subjective belief or unsupported speculation." *Daubert*, 509 U.S. at 590.

To be sure, Clayton asserted that capacitor C612's vent extended 4.191 mm. (Clayton Dep., R-10477.) Judge South did not discuss this testimony in her order but there was no abuse of discretion in her having disregarded it. In *Allison*, 184 F.3d 1300, the court upheld the exclusion of expert testimony based on several animal studies. Although the expert "explain[ed] the linkage between the rat studies and Ms. Allison's disease, . . . it was within [the district court's] discretion to simply find [the explanation] inadequate." *Id.* at 1314. Here, Clayton stated at the *Daubert* hearing that he found no deformation of C612's vent end (an assertion that Cash repeats on appeal, *see* Appellants' Br.16), but he had squarely testified at his deposition that the capacitor showed substantial signs of deformation. *See supra* at 5-6. Furthermore, the evidence showed that the experimentally ruptured capacitors, which were *not*

[7] Clayton testified, for example, that the scientific literature demonstrates that capacitors can "blow up" and "catch fire" (Pls.' Resp. to Mot. to Excl., R-5462 (citing Clayton Dep.)), that it is dangerous for capacitors to be too close to heat sinks (Clayton Dep., R-10575), and that capacitor failure can lead to sleeve damage (Clayton, MT-149-50.) But he was unable to point to any testing—on any appliance, let alone on a television—regarding bursting capacitors making contact with a nearby electric component such as a heat sink. (Clayton Dep., R-10646-47; Clayton Dep., R-10554-55.)

subject to flattening, did not reflect an extension anywhere near the extension found on the flattened specimen. *See supra* at 4-5. Under these circumstances, the trial court would have been well within its discretion to conclude that Clayton failed to reliably demonstrate that the elongation of C612's vent end was caused by an initial rupture rather than by subsequent deformation during the fire's suppression.

Finally, Cash argues that Clayton's failure to replicate a 3-millimeter+ extension does not render his testimony inadmissible because both National Fire Protection Association (NFPA) 921, which is the accepted benchmark for investigation of fires,[8] and court decisions, allow an investigator to base his opinion on deductive reasoning and circumstantial evidence, rather than on testing or replication. (Appellants' Br.23, 29, 37-38 (citing NFPA 921 standards and court decisions.) While that is undoubtedly true, it is irrelevant where the expert *has* conducted testing and that testing disproves the conclusion that he has drawn. Clayton's testimony was excluded not because he relied on deductive reasoning or cognitive analysis, but because testing disproved his own theory and there was no scientific literature to back it up either.

[8] *See United Fire & Cas. Co. v. Whirlpool Corp.*, 704 F.3d 1338, 1341 (11th Cir. 2013); *Truck Ins. Exch. v. MagneTek, Inc.*, 360 F.3d 1206, 1215 n.11 (10th Cir. 2004).

2. The trial court did not abuse its discretion in concluding that Clayton's step-four testimony was unreliable.

The trial judge did not abuse her discretion in declining to allow Clayton to testify that the fire in the Cash home was caused by the capacitor's vapors and plastic sleeve having ignited. That is so for several mutually reinforcing reasons.

First, Clayton's conclusion could not be squared with the data. The sparks that resulted from Clayton's simulation of contact between a capacitor and heat sink did not cause the capacitor's vapors or plastic sleeve to ignite *in any of Clayton's experiments*. Even when Clayton resorted to a lighter, no flame remained when the lighter was withdrawn. *See supra* at 9. Thus, as with the preceding step in Clayton's causal chain, the testing supported the precise opposite of Clayton's conclusion: it demonstrated that ignition does *not* result when the television's capacitor touches the heat sink. Excluding his testimony to the contrary was thus a straightforward application of the principles that testing (or the lack thereof) provides an important indicia of reliability, *Daubert*, 509 U.S. at 593, and that testimony should be excluded when there is too great an analytical gap between the data and the opinion proffered, *Joiner*, 522 U.S. at 146.

Fireman's Fund Insurance Co. v. Canon U.S.A., Inc., 394 F.3d 1054 (8th Cir. 2005), is instructive here. There, two experts had conducted three tests on an exemplar to support their theory that a copier machine caught fire when a thermal fuse failed to cut off the current. *Id.* at 1058-59. In conducting their tests, the experts

bypassed various safety features in the heater control circuitry, except for the purportedly faulty thermal fuse. *Id.* at 1058. When they introduced an electrical current, a "thin brown scorch line," but no fire, arose before the fuse activated to shut off the current. *Id.* The Court excluded the experts' testimony because this experiment did not establish that the thermal fuse would fail to prevent a fire; indeed, the fuse activated before any fire resulted. *Id.* Similarly, Clayton's experiments produced a spark but no fire, thereby doing nothing to establish that the television was designed in a way that would have failed to prevent a fire.

Second, even if Clayton's tests *had* supported his theory, his testimony was nonetheless inadmissible because his testing regime was too far-removed from the conditions that were present in the Cash home. In *Joiner*, 522 U.S. at 144, the Court held that the trial court did not abuse its discretion by excluding testimony that the plaintiff's cancer had been caused by on-the-job inhalation of PCBs because the tests on which that conclusion was based involved mice who had PCBs injected into their abdomens. *See also McClain*, 401 F.3d at 1245 (holding that trial judge abused discretion by admitting expert opinion premised on related but different drug); *McDowell v. Brown*, 392 F.3d 1283, 1300 (11th Cir. 2004) (affirming exclusion of expert who relied on study showing that injury resulted from 48-hour medical treatment delay to opine that 24-hour delay caused plaintiff's injury); *Allison*, 184 F.3d at 1313-14 (upholding exclusion of expert opinion premised on studies

conducted on rats where expert failed to sufficiently explain correlation to humans); *Giannotti v. Beleza Hair Salon, Inc.*, 296 Ga. App. 636, 639-40 (2009) (upholding exclusion of expert testimony premised on tests that did not replicate circumstances of plaintiff's injury); *Dale v. General Motors Corp.*, 109 F. Supp. 2d 1376, 1379-82 (N.D. Ga. 1999) (upholding exclusion of expert's testimony that was premised on test involving conditions considerably different than those present in car crash); *Walker v. Blitz USA, Inc.*, 663 F. Supp. 2d 1344, 1356 (N.D. Ga. 2009) (expert's opinion inadmissible where he relied on tests involving conditions "markedly different" from conditions of plaintiffs' accident).

Clayton admitted that, by adding wires and removing the safety fuse, he created conditions that were more severe than the circumstances that existed on the morning of the fire. *See supra* at 7-8. Because his tests were "so dissimilar to the facts presented in this litigation[,] . . . it was not an abuse of discretion for the [trial court] to have rejected the expert['s] reliance on them." *Joiner*, 522 U.S. at 144-45.

Third, as Clayton acknowledged, introducing the same short circuit in other places on the television power board, or on any other appliance's power board, would yield the same results. *See supra* at 6-7. Thus, even if his experiment had resulted in ignition—which it did not—that would still not have demonstrated that the fire originated as Clayton posited.

Finally, Clayton did not demonstrate that his ignition theory or technique had gained general acceptance within the scientific community. *Daubert*, 509 U.S. at 593-94. Although Clayton testified that various elements of his test had been endorsed by the scientific community,[9] he acknowledged that he had conjured up the overall testing regimen himself, that it did not follow any published protocol or test standards, and that it was not subjected to publication or peer review. (Clayton Dep., R-10489-90,10553-54.) Nor did Clayton testify about the known and potential error rate of his methodology. *Cf. Daubert*, 509 U.S. at 594.

For these reasons, the trial judge did not abuse her discretion in concluding that Clayton's step-four testimony failed to meet the standards of *Daubert*, *Joiner*, and O.C.G.A. §24-7-702(b).

3. The trial court did not abuse its discretion in concluding that Clayton "failed to adequately address and rule out other potential fire sources."

Cash rightly points out that the process of elimination can be a reliable method of ascertaining a fire's cause. (*See* NFPA, R-3585 §18.5 (2011 ed.); Appellants' Br.32 (citing cases).) But common sense, the scientific method, and case law dictates that all reasonably plausible ignition sources must be considered, and that each source should be eliminated only by way of reliable scientific investigation and

[9] In particular, he testified that scientists commonly conduct reverse-polarity testing (Clayton, MT-145), and that he had published a peer-reviewed article regarding flammability testing (Clayton Dep., R-10690).

testing. *See Mich. Millers Mut. Ins. Corp. v. Benfield*, 140 F.3d 915, 921 (11th Cir. 1998) (affirming exclusion of expert who failed to properly investigate, and could not explain methodology for eliminating, other ignition sources); *Bryte ex rel. Bryte v. Am. Household, Inc.*, 429 F.3d 469, 478 (4th Cir. 2005) (upholding exclusion of expert testimony for failing to properly exclude other reasonable causes).

This common-sense principle is likewise reflected in NFPA 921. (*See* R-3481-86 §§18.2, 18.3.2, 18.4, 18.4.2, 18.5, 18.6, 18.6.5 (indicating that fire investigator should identify all plausible ignition sources, develop a separate hypothesis for each, and test each hypothesis).) Before selecting a final hypothesis regarding a fire's cause, "[t]he investigator should document the facts that support the cause determination *to the exclusion of all other reasonable causes*." (NFPA, R-3586 §18.7 (2011 ed.) (emphasis added).) [10]

[10] Cash relies on various documents to argue that the 2011 edition of NFPA 921 is more demanding than the "official" 2004 edition. (Appellants' Br.27-29 (citing Georgia firefighter standards, GFIA resolution, and Office of Insurance and Safety Fire Commissioner's notice).) But Cash did not submit these documents to the trial court; nor did she register an objection to the 2011 edition submitted by LG below. (*See* Ex. H to Mot. to Excl, R-3580-86.) And while Clayton claimed to have complied with NFPA standards, he did not point to any particular edition. (Pls.' Resp. to Mot. to Excl., R-5461, 5465; *see also* Clayton Dep., R-10488, 10553.) In any event, this argument is a red herring because Cash fails to specify the distinctions among versions of the document or to explain how those distinctions make a difference here. (*Cf.* Appellants' Br.27-29.)

Furthermore, when confronted with evidence that undercuts one's conclusion, common sense and case law likewise indicate that an investigator should consider whether the new evidence calls for a revision of his or her opinions. In *Fireman's Fund*, 394 F.3d at 1059, for example, the court affirmed the exclusion of experts' testimony where they had failed to test their hypothesis against all known facts and "did not attempt to reconcile th[e] empirical evidence with their theory." Similarly, in *Pritchard v. Dow Agro Sciences*, 705 F. Supp. 2d 471, 489, 490-91 (W.D. Pa. 2010), the court excluded testimony where the expert "never addressed two studies raised by Defendants and their experts which refute his opinion" and failed to adequately respond to the defendants' proposed alternative causation theories. *See also Fail-Safe, L.L.C. v. A.O. Smith Corp.*, 744 F. Supp. 2d 870, 889-90 (E.D. Wis. 2010) (excluding testimony of expert who, in drafting second report, failed to grapple with evidentiary developments that refuted opinions in first report and "all but 'cherry picked' the data he wanted to use").

Clayton's methodology reflected similar shortcomings. He ruled out the cable box as a source of the fire in part because he found that it did not have a blown fuse, but subsequent testing by LG expert James Dydo revealed that a fuse *was* electrically blown before it was damaged by the fire and that a diode also revealed evidence of an electrical fault that preceded the fire. *See supra* at 11. Although Dydo's findings refuted the premise of Clayton's conclusions, Cash submitted no affidavit rebutting

Dydo's findings or indicating that Clayton undertook further testing or investigation. *See supra* at 11.

Similarly, while Clayton had expressed the view at his deposition that all electrical cords had been recovered from the fire, after learning that LG's expert found that various artifacts were indeed missing, Clayton did not submit an affidavit rebutting that finding or explaining how those items could be excluded as plausible sources of the fire. *See supra* at 12.

Under these circumstances, the trial court had ample basis to conclude that Clayton "failed to adequately address and rule out other potential fire sources." (Order, R-4.)

4. *United Fire & Casualty Co. v. Whirlpool* is not to the contrary.

Cash relies heavily on *United Fire & Casualty Co. v. Whirlpool Corp.*, 704 F.3d 1338 (11th Cir. 2013), in arguing that the trial court erred in excluding Clayton's testimony. (*See* Appellants' Br.31, 33.) *United Fire* involved a house fire allegedly caused by a defective dryer. The plaintiff hired expert Raymond Arms to testify about the fire's source and ignition sequence. 704 F.3d at 1340. The district court excluded Arms's testimony in its entirety after concluding that his ignition-sequence testimony was unreliable. *Id.* at 1341. The Eleventh Circuit affirmed the exclusion of the ignition-sequence testimony, but held that the unreliability of that testimony

did not provide a basis for excluding the expert's testimony regarding the source of the fire. *Id.* at 1340-42.

The Eleventh Circuit's holding in *United Fire* lends nothing but support to the lower court's decision here. *United Fire* affirmed the trial court's exclusion of the ignition-sequence testimony because the expert had failed to perform exemplar testing to evaluate "the plausibility of his ignition theory" and "could not point to any published studies documenting this ignition sequence and he had never seen this ignition sequence occur before in his professional experience." *Id*. at 1340. Here, too, Clayton could not point to any published studies documenting his ignition sequence; nor had he observed this ignition sequence in the past. *See supra* at 7, 21, 27; *see also* Clayton Dep., R-10554 (stating that he had to design his own test because a television presented a "unique situation"). Indeed, Clayton's ignition theory was even less plausible than Arms's because, unlike Arms (*cf.* 704 F.3d at 1340), Clayton *did* test exemplars, and that testing contradicted his hypothesis.

The Eleventh Circuit's conclusion regarding Arms's source testimony doesn't change the analysis. The trial court had excluded the source testimony not because it was unreliable, but because Arms's *ignition-sequence* theory was unreliable—a "sweeping" ruling that constituted an abuse of discretion. *Id.* at 1341. Indeed, the trial court there "did not address any of Mr. Arms'[s] testimony as it related to where the fire started" and "there was no other potential source of heat that could have

damaged the linoleum under the dryer besides a fire in the dryer." *Id.* at 1342. Here, in contrast, the trial court *did* address Clayton's source testimony (*see* Order, R-4.) and the area of origin contained several other potential heat sources (*see supra* at 10-12). Furthermore, Arms's testimony regarding the source of the fire was not contradicted by his own testing, as he had not tested any exemplar dryers at all. *See* 704 F.3d at 1339.

* * *

The Eleventh Circuit has held that "*[a]ny* step that renders the analysis unreliable under the *Daubert factors renders the expert's testimony inadmissible.*'" *McClain*, 401 F.3d at 1245 (quoting other decisions). Clayton testified that each step in his ignition sequence was critical to his theory; without any one of them, there would be no fire. (Clayton Dep., R-10474 (indicating that it was critical to his theory that the capacitor's vent touch the heat sink); R-10473 (indicating that it was critical to his theory that a flame arise).) Thus, the trial court's conclusion about the unreliability of Clayton's posited steps three and four provided ample basis to exclude his entire theory. His failure to reliably exclude other conceivable sources likewise provided a sufficient basis for exclusion. *See Mich. Millers Mut. Ins. Corp.*, 140 F.3d at 921; *Bryte*, 429 F.3d at 478.

This would not be the first time that Clayton's opinions have been excluded. In *Whirlpool Corp. v. Camacho*, 298 S.W.3d 631, 643 (Tex. 2009), the Texas

Supreme Court excluded Clayton's opinion that a fire had been caused by a defective lint tube. His opinions and theory had not been published or shown to be accepted as valid by the scientific community. *Id.* at 643. Furthermore, he cited no tests showing that his posited sequence had occurred in a dryer of the kind in question (*id.* at 640), and did not do his own testing even though his theory was eminently subject to testing (*id.* at 642). *See also Bush v. Coleman Powermate, Inc.*, No. 03-04-00196-CV, 2005 WL 1241075, at *7 (Tex. App. May 26, 2005) (excluding Clayton's testimony because he did not perform tests based on facts of case, he did not review other testing from case, and his conclusion was based on underlying assumptions contrary to evidence).

The same is true here: Clayton cited no tests showing that his posited sequence had occurred in a television of the kind in question; he had not published his opinions; and he did not claim that his theory had been accepted by the scientific community. *See supra* at 5, 7, 21, 27. Indeed, the basis for exclusion is even greater here than it was in *Camacho* because Clayton *did* conduct testing and that testing repudiated the opinion that he had come to hold. *See supra* at 4-5, 8-9.

II. Enumeration of Error No. 2: The trial court did not err in granting LG's motion for summary judgment.

The trial court correctly held that LG was entitled to summary judgment because, as Cash herself conceded, she could not prove her case without Clayton's testimony. (Appellants' Br.39; Statement by Cash's Counsel, MT-84.) But there is

an additional reason why summary judgment was proper: Even if Clayton's testimony were admissible, it would be insufficient to demonstrate that a defect within the television proximately caused the fire. As *Daubert* recognized, where "the scintilla of evidence" presented by an expert is insufficient to allow a reasonable jury to rule in a party's favor, the court remains free to direct a judgment or grant summary judgment. 509 U.S. at 596.

Once again, *Fireman's Fund* is instructive. There, the court concluded that even if the experts' testimony had been admitted, summary judgment was nonetheless proper because their testimony was insufficient to allow a reasonable jury to find that a purportedly malfunctioning fuse had caused the fire. 394 F.3d at 1061. Here, too, Clayton's testing provided an insufficient basis for any reasonable jury to conclude that the fire originated in the LG television.

Furthermore, Clayton's failure to reliably rule out other possible causes provided a separate and independent reason to award summary judgment to LG. *See Nationwide Agribusiness Ins. Co. v. CNH America LLC,* No. 1:12-cv-01430, 2014 WL 2520502, at *7 (N.D. Ohio 2014) (granting summary judgment where experts "fail[ed] to rule out any number of potential causes of the fire"); *Auto Club Grp. Ins. Co. v. All-Glass Aquarium Co., Inc.*, 716 F. Supp. 2d 686, 692 (E.D. Mich. 2010) (granting summary judgment where plaintiff's expert relied on speculation to rule out electrical cord as cause of fire); *Citizens Ins. Co. of Am. v. Sears Roebuck & Co.*,

203 F. Supp. 2d 837, 850 (W.D. Mich. 2002) (granting summary judgment where plaintiffs' experts could not reliably rule out other possible causes of fire).

In light of the deficiencies in Clayton's testimony, the trial court's award of summary judgment to LG Electronics was proper even if his testimony were found admissible.

CONCLUSION

For the reasons set forth above, the trial court's decision should be affirmed.

Respectfully submitted,

/s/ Ayesha N. Khan
Ayesha N. Khan
Admitted Pro Hac Vice
John Moss
Admitted Pro Hac Vice
Potomac Law Group, PLLC
1300 Pennsylvania Ave., NW, Suite 1300
Washington, DC 20004
(202) 204-3005
akhan@potomaclaw.com
jmoss@potomaclaw.com

Edward C. Bresee, Jr.
Ga. Bar No. 004820
Arthur J. Park
Ga. Bar No. 227992
Mozley, Finlayson & Loggins, LLP
5605 Glenridge Dr., Suite 900
Atlanta, GA 30342
(404) 256-0700
mbresee@mfllaw.com
apark@mfllaw.com

Counsel for Appellee LG Electronics, Inc.

CERTIFICATE OF COMPLIANCE WITH WORD COUNT LIMIT

I hereby certify that this submission does not exceed the word count limit imposed by Court of Appeals Rule 24.

/s/ Ayesha N. Khan
Ayesha N. Khan
Admitted Pro Hac Vice
Potomac Law Group, PLLC
1300 Pennsylvania Ave., NW, Suite 1300
Washington, DC 20004
(202) 204-3005
akhan@potomaclaw.com

CERTIFICATE OF SERVICE

I hereby certify that, on March 29, 2017, I filed the foregoing Brief of Appellee LG Electronics, Inc., using the Court's eFast system, making it available to the Clerk and Court.

I further certify, pursuant to Georgia Court of Appeals Rule 6(d), that there is a prior agreement with Appellants' counsel to allow documents in a .pdf format sent via email to suffice for service. Accordingly, I have this day furnished the foregoing Brief by electronic mail to:

David A. Sleppy
dsleppy@catheyandstrain.com

Dennis T. Cathey
dcathey@catheyandstrain.com

Jason C. Webster
jwebster@thewebsterlawfirm.com

/s/ Ayesha N. Khan
Ayesha N. Khan
Admitted Pro Hac Vice
Potomac Law Group, PLLC
1300 Pennsylvania Ave., NW, Suite 1300
Washington, DC 20004
(202) 204-3005
akhan@potomaclaw.com