

IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF PENNSYLVANIA

ALLSTATE INSURANCE COMPANY

v.

C.A. NO. 12-1113

LG ELECTRONICS, INC.

v.

A1 ELECTRIC PLUMBING AND HEATING  
HEFFLEGER KITCHEN CENTER

MEMORANDUM OPINION

SCHMEHL, J.

JUNE 16, 2014

Plaintiff brought this action as subrogee, of Florentina and Basile Boicu, against defendant LG Electronics (“LG”), seeking to recover monies it paid to the Boicus under an insurance policy as a result of a house fire. Plaintiff claims that a malfunction in an over-the-range residential microwave oven manufactured by LG was the cause of the fire. Plaintiff has brought causes of action against LG for product liability, negligence and breach of warranty. LG subsequently filed a third-party complaint against the third-party defendants for negligence. Presently before the Court is LG’s motion to preclude the expert testimony of plaintiff’s expert, Gregory L. Booth, P.E. (“Booth”). The Court heard oral argument on the motion on May 21, 2014. For the reasons that follow, the motion is denied.

The microwave was installed at the Boicu residence around September 2008. (Florentina

Boicu Dep. at 8-10.)<sup>1</sup> As Mrs. Boicu was about to get in her car early on the morning of January 24, 2011, she suddenly realized she had forgot her work bag. (Id. at 13.) She went back into her home to get her work bag. (Id.) When she reentered her home, she smelled smoke. (Id.) Mrs. Boicu woke her husband and advised him that she smelled smoke. (Id.) Mr. Boicu went to the basement to check the furnace. (Id.) Mrs. Boicu proceeded to the kitchen and noticed smoke and either flame or sparks inside the microwave. (Id. at 14.) When Mr. Boicu arrived, he noticed a lot of smoke coming out of the cabinet above the microwave and from around the microwave. (Basile Boicu Dep. at 31-32.) He also saw “a little bit of light” inside the microwave. (Id. at 33.) At no time did Mr. Boicu observe flames inside the microwave. (Id.) When he opened the cabinet above the microwave, flames exploded and started burning the cabinets. (Id. at 32.) The microwave had never previously malfunctioned and had not been used that morning or the day before. (Id. at 26-27; Florentina Boicu Dep. at 10-11.)

Neither plaintiff nor LG dispute that the fire originated in the vicinity of the microwave oven. Plaintiff claims the fire was caused by either a design or manufacturing defect in the microwave. LG claims the fire was caused as a result of damage sustained to the microwave’s power cord during or after installation. To prove its theory that the microwave was defective, plaintiff has submitted an original expert report and a supplemental expert report from Booth. In his supplemental report, Booth stated that he had reviewed the eyewitness testimony of Mr. and Mrs. Boicu as well as photographs of the housing of the microwave after the fire. (Doc. 72-3.) From these photographs, Booth confirmed that the plastic parts and circuit boards of the

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<sup>1</sup> There is a dispute as to whether the microwave was installed by either of the third-party defendants or by Mr. Boicu himself.

microwave were completely destroyed by the fire and that the magnetron, capacitor and transformer were all that remained in place within the microwave housing. (Id. at 5.) Booth also reviewed photographs of the remains of the power cord for the microwave and noted that all three conductors showed signs of arcing together. (Id.) He further confirmed that an examination and testing with a voltage/ohm meter indicated the separated romex wire was the black wire or hot wire. (Id. at 6.)

Booth stated the cause and origin of the fire was the microwave oven. (Id. at 7-8.) He based his finding on the eyewitness testimony of the Boicus that they observed a light or flame in the microwave cooking department at the time of the fire and photograph 2 which depicted the fire traveling up both sides of the microwave oven and into the cabinetry above. (Id.) Booth concluded:

After review of all the evidence and documentation in my possession, it is my professional opinion, to a reasonable degree of engineering and scientific certainty, that the microwave was defective and the fire was the result of a malfunction of the microwave oven which initiated heat and flames which spread to the surrounding cabinetry and caused the damage to the Boicu home.

(Id. at 9.) Booth further opined that the microwave was defective because it lacked power surge protection to prevent a fire event occurring if voltage transients are present. (Id.)

The admissibility of expert testimony is a question of law governed by Federal Rule of Evidence 702. Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 588-89 (1993). The Rule provides:

A witness who is qualified as an expert by knowledge, skill, experience, training or education may testify in the form of an opinion or otherwise if: (a) the expert's scientific technical, or other specialized knowledge will help the trier of fact to

understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed.R.Evid. 702. According to our Court of Appeals, Rule 702 sets forth three separate restrictions on the admission of expert testimony: qualification, reliability, and fit. Calhoun v. Yamaha Motor Corp., U.S.A., 350 F.3d 316, 321 (3d Cir. 2003)(quoting Schneider v. Fried, 320 F.3d 396, 405 (3d Cir. 2003)). Rule 702 embraces a “liberal policy of admissibility,” pursuant to which it is preferable to admit any evidence that may assist the trier of fact. Pineda v. Ford Motor Corp., 520 F.3d 237, 243 (3d Cir. 2008)(quoting Kannankeril v. Terminix Int’l, Inc., 128 F.3d 802, 806 (3d Cir. 1997)).

LG does not challenge the qualifications of plaintiff’s expert, but challenges the reliability and fit of his methodology. To be “reliable,” the testimony must be based on the “methods and procedures of science,” rather than on “subjective belief or unsupported speculation.” In re Paoli R.R. Yard PCB Litig., 35 F.3d 717, 742, 744 (3d Cir. 1994). In assessing the “reliability “ of an expert’s methodology under Rule 702, this court should consider the following factors: “(1) whether a method consists of a testable hypothesis; (2) whether the method has been subjected to peer review; (3) the known or potential rate of error; (4) the existence and maintenance of standards controlling the technique’s operation; (5) whether the method is generally accepted; (6) the relationship of the technique to methods which have been established to be reliable; (7) the qualifications of the expert witness testifying based on the methodology; and (8) the non-judicial uses to which the method has been put.” Oddi v. Ford Motor Co., 234 F.3d 136, 145 (3d Cir. 2000)(citations omitted); Elcock v. Kmart Corporation, 233 F.3d 734, 745-46 (3d Cir. 2000)

(citations omitted).

Booth testified that he followed the general methodology of fire investigation established by the National Fire Protection Association. See National Fire Protection Association, NFPA 921, Guidelines for Fire and Explosion Investigations. Booth testified that he utilized “[t]he entire document” of NFPA 921 (Booth Dep. at 79.) Section 18.2.1 of NFPA 921 provides that:

Any determination of fire cause should be based on evidence rather than on the absence of evidence; however, when the origin of the fire is clearly defined, it is occasionally possible to make a credible determination regarding the cause of the fire, even when there is no physical evidence of the ignition source available. This finding may be accomplished through the credible elimination of all other potential ignition sources

(Id.)

Here, the origin of the fire is clearly defined since the parties agree that the fire originated in the vicinity of the microwave. Booth found that the microwave was the cause of the fire based on the eyewitness testimony of the Boicus who testified that they observed a light or flame in the microwave cooking department at the time of the fire and photograph 2 which depicted the fire traveling up both sides of the microwave oven and into the cabinetry above. Booth testified that the power cord could not have been the cause of the fire through arcing of the power cord unless the power cord was so poorly designed and manufactured that it was the equivalency of paper mache. (Booth Dep. at 90-93.)<sup>2</sup>

NFPA 921 has been found by numerous courts to be reliable for purposes of Rule 702.

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<sup>2</sup> Indeed, LG’s expert also testified that he relied on NFPA 921 in eliminating the microwave oven as the cause of the fire and concluding that the cause was damage to the microwave’s power cord either during or after installation. (Richard Kovarsky, P.E. Dep. at 129.) Therefore, this case, as do most product liability cases, involves a classic battle of the experts.

See, e.g., Mutual Benefit Insurance Company v. Kaz, Inc., Hoang v. Funai Corp., Inc., 652 F.Supp. 2d 564 (M.D. Pa. 2009); Booth v. Black and Decker, Inc., 166 F.Supp. 2d 215, 220 (E.D.Pa. 2001). As a result, this court finds that Booth's methodology is reliable for purposes of Rule 702.

Booth also concluded that the microwave was defective because it lacked overvoltage protection to prevent a fire occurring if voltage transients are present. LG contends that Booth has not introduced any reliable source of transient voltage at the Boicu home, repeatedly references irrelevant and inapplicable industry standards, has not conducted any testing on an exemplar microwave to determine the levels of voltage necessary to cause a malfunction in the microwave and relies on unreliable information to support his hypothesis that transient voltage caused the microwave to self-start.

Booth used NFPA 921 to eliminate the power cord as the source of the fire and therefore conclude that the microwave was the cause of the fire. The Court has already concluded that this methodology was reliable for purpose of Rule 702. Booth's additional opinion that the microwave was defective because it lacked a surge protection device is separate from his opinion of the fire being caused by a malfunction of the microwave. LG can expose any deficiencies in Booth's conclusion that the microwave was defective because it lacked overvoltage protection through cross-examination at trial. See e.g. Stecyk v. Bell Helicopter Textron Inc., 295 F.3d 408, 415 (3d Cir. 2002). ("A party confronted with an adverse expert witness, who has sufficient, though perhaps not overwhelming facts and assumptions as to the basis of his opinion can highlight those weaknesses through effective cross-examination.")

For the foregoing reasons, LG's motion to exclude the testimony of Booth is denied.