

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF INDIANA  
EVANSVILLE DIVISION

CITIZENS INSURANCE COMPANY OF	)	
THE MIDWEST, AS SUBROGEE OF	)	
WILLIAM MAGEE,	)	
	)	
Plaintiff,	)	
	)	
vs.	)	3:11-cv-40-RLY-WGH
	)	
LG ELECTRONICS, USA, INC.,	)	
SEARS, ROEBUCK & COMPANY,	)	
	)	
Defendants.	)	

**ENTRY ON DEFENDANTS' MOTION TO BAR EXPERT TESTIMONY**

Plaintiff, Citizens Insurance Company of the Midwest, as subrogee of William Magee, has brought suit against Defendants, LG Electronics, USA, Inc. and Sears, Roebuck & Company, alleging a defectively designed refrigerator was the cause of Magee's property loss. Defendants seek to bar Charles R. Fricke, expert witness for Citizens, from testifying. (Docket # 150). For the reasons set forth below, Defendants' motion is **DENIED**.<sup>1</sup>

**I. Background**

In October 2006, Magee's relative purchased an LG-manufactured refrigerator from Sears for him. On May 18, 2010, there was a fire at Magee's residence, allegedly

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<sup>1</sup> Defendants filed their reply brief six days late (Docket # 171) without seeking leave of the court, violating Southern District of Indiana Local Rule 7.1. While the court declines to strike Defendants' reply as untimely filed, the court reminds Defendants of their responsibility to adhere to deadlines and the local rules.

caused by a design defect in the refrigerator. Magee suffered more than \$750,000 in property loss and damage. (Complaint ¶¶ 12-14). Citizens, as Magee's insurer, paid Magee's claims, subrogated his rights, and sued Defendants for negligence and breach of warranties. (*Id.* ¶¶ 15-33). Jurisdiction and venue are proper in this court. 28 U.S.C. §§ 1332, 1391.

## **II. Fricke's Inspection and Opinion**

Citizens hired Fricke, a member of the International Association of Arson Investigators (Plaintiff's Ex. 1 at 5), to investigate the fire and serve as its expert witness. Fricke has worked as a forensic engineer for 15 years, during which time he has performed investigations on refrigerators, taught seminars on failure analysis for home appliances, and built printed circuit boards for other appliances. (Deposition of Charles R. Fricke at 38, 41, 43-46).

After being retained by Citizens, Fricke, along with LG representatives, conducted an examination of the fire artifacts. (Defendants' Ex. B at 5). Fricke used the methodology prescribed in *National Fire Protection Association 921: Guide for Fire & Explosion Investigations* ("NFPA 921") during the inspection, documenting and examining every piece of evidence. Fricke found that the refrigerator was the only appliance suffering extreme degradation in its metal housing, and that while all combustible items in the refrigerator were consumed by the fire, this did not happen anywhere else in the kitchen. Moreover, the fire damage to the refrigerator was much greater than the other appliances. (Fricke Dep. at 46-47, 62-63, 110-11, 117-18). Fricke found that "all combustible components, including food items in the refrigerator were

thoroughly consumed by fire. (*Id.* at 64-65). Fricke further claimed that it is not uncommon for a fire to escape a sealed refrigerator, and the path of the fire and the burn patterns left by the fire were consistent with the fire starting in the refrigerator and escaping once the refrigerator door fell off. (*Id.* at 83-86, 154-57). From this, Fricke determined that the fire originated in the refrigerator.

Having determined the point of origin, Fricke noted that the refrigerator model in question had been the subject of many customer complaints for the interior lights staying on too long. (*Id.* at 66-67). Fricke concluded that the relay for the refrigerator's printed circuit board was insufficient to handle the electrical load required to shut off the light when the light got too hot. He opined that the faulty relay and printed circuit board and lack of a thermal cutoff, which would have turned off the refrigerator light, enabled the light bulb to overheat. The overheated light bulb, in turn, ignited the combustible items in the refrigerator. (*Id.* at 137-38, 141-42, 152). Once the fire started, there was enough fuel and oxygen in the refrigerator for the fire to grow, escape the refrigerator, and cause the structure fire. (Defendant's Ex. B at 12).

### **III. Legal Standard**

Defendants move to bar Fricke's testimony, claiming that he should not be qualified as an expert in this case and that his methodology is insufficient to support his conclusions.

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 evidence or determine facts at 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. While the trial court acts as the gatekeeper for expert witnesses, *Daubert v. Merrell Dow Pharm.*, 509 U.S. 579, 597 113 S. Ct. 2786, 125 L. Ed. 2d 469 (1993); *DePaepe v. Gen. Motors Corp.*, 141 F.3d 715, 720 (7th Cir. 1998), factual soundness and correctness of conclusions are reserved to the jury. *See Walker v. Soo Line R.R. Co.*, 208 F.3d 581, 587 (7th Cir. 2000). Excluding expert testimony under Rule 702 is the exception, not the rule. FED. R. EVID. 702, Advisory Comm. Note.

Before admitting expert testimony, the court must determine whether: the witness is qualified as an expert; the testimony is based on sufficient facts or data and reliable methods and principles, and the expert reliably applied those principles and methods; and the testimony assists the trier of fact in determining a relevant fact at issue. *See Lees v. Carthage Coll.*, 2013 WL 1590038, at \*4 (7th Cir. Apr. 16, 2013) (citing FED. R. EVID. 702; *Smith v. Ford Motor Co.*, 215 F.3d 713, 717-19 (7th Cir. 2000)).

#### **IV. Discussion**

##### **A. Qualification as Expert**

The parties agree that Fricke has a degree in electrical engineering and experience in utility procedures. (*See Plaintiff's Ex. 1*). However, Defendants claim that these qualifications by themselves are insufficient to qualify him as an expert, *Ancho v. Pentek Corp.*, 157 F.3d 512, 518 (7th Cir. 1998); *Deimer v. Cincinnati Sub-Zero Products, Inc.*, 58 F.3d 341, 345 (7th Cir. 1995), and since he does not have the requisite knowledge, skill, experience, or training, he should not be permitted to testify at all. Defendants

advance several arguments in support. First, they note that Fricke has never designed or professionally repaired home appliances, performed safety analysis on refrigerators, or designed or built printed circuit boards like the one at issue. Defendants further argue that Fricke is not qualified to give his opinion because he is not a cause and origin expert, and the basis for his opinion—the burn patterns—can only be properly analyzed by a cause and origin expert. Finally, Defendants claim, Fricke’s lack of professional publications or membership in professional societies besides IAAI show that he lacks the professional qualifications to be treated as an expert.

The court disagrees. As Citizens notes, Fricke is a professional engineer and has worked as a forensic engineer for 15 years, during which time he performed forensic investigations on refrigerators and attended classes on proper cause-and-effect analysis for failed home appliances. (Fricke Dep. at 38, 41-42, 43-46). While he has not built printed circuit boards for refrigerators, he has built them for other appliances. (*Id.* at 46). Fricke’s qualifications are at least equal to those of the expert in *Liberty Mut. Fire Ins. Co. v. LG Electronic USA, Inc.* In that case, the plaintiffs alleged that a design defect in a dehumidifier caused a structural fire. The court allowed a forensic engineer who had attended and taught seminars on the ignition of electric devices to testify as an expert despite having never designed a dehumidifier. 2012 WL 5497852, at \*1, 3 (E.D. Wisc. Nov. 13, 2012).<sup>2</sup> Finally, Fricke has testified as a forensic fire expert in 33 matters since

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<sup>2</sup> Defendants claim *Liberty Mutual* is inapposite because, unlike Fricke, the expert in that case was not proposing a novel theory of how the fire started. Like several other issues discussed *infra*, this bears on how much weight the jury should accord Fricke’s testimony; it is not itself a reason to bar his testimony. *See, e.g., Smith*, 215 F.3d at 719 (7th Cir. 2000).

2009. (Plaintiff's Ex. 4). The court therefore finds he is sufficiently qualified to offer expert testimony on the cause of this fire.

### **B. Reliability of Reasoning or Methodology**

Defendants claim that Fricke's opinion as to causation is merely a series of bottom line conclusions without alternative design or supporting tests or evidence. (*See* Fricke Dep. at 152). The Seventh Circuit has held merely conclusory opinions are insufficient to satisfy the requirement that an expert testify on matters not readily apparent to the layperson. *Dhillon v. Crown Controls Corp.*, 269 F.3d 865, 871 (7th Cir. 2001); *Bourelle v. Crown Equip. Co.*, 220 F.3d 532, 539 (7th Cir. 2000); *Rosen v. Ciba-Geigy Corp.*, 78 F.3d 316, 319 (7th Cir. 1996).

Defendants emphasize that Fricke was unable to identify the combustibles that led to the fire, and he failed to perform any testing or calculations to support his opinions on the cause or spread of the fire. (Defendants' Ex. B at 11; Fricke Dep. at 66-70, 73, 87, 115-18). Defendant's further argue that despite LG providing Fricke an exemplar refrigerator, Fricke conducted no testing as to whether overheated light bulbs could reach temperatures that could ignite common products in a refrigerator. He also did not perform calculations or testing to determine whether there would be enough oxygen in the refrigerator for the fire to escape the refrigerator and cause a structural fire. Moreover, Magee had never complained about the light remaining on when the door was closed, and Fricke never examined the refrigerator's printed circuit board or light assembly. Therefore, his conclusion that the refrigerator light must have been on from

the time Magee left until the fire started—approximately 30 minutes—is pure speculation.

Finally, Fricke conceded in his deposition that he was unaware of any structural fires arising from a similar set of circumstances, that he had no evidence a fire could escape to start a structural fire, and that he had conducted no alternative design. (Fricke Dep. at 120-21, 157). Defendants argue that given the uniqueness of Fricke's causation opinion, which lacked any testing or external support, Fricke's testimony should be barred as unreliable. *Dhillon*, 269 F.3d at 870; *Bourelle*, 220 F.3d at 536-38.

This is a close call, and the court notes its concern that Fricke did not perform any tests to verify his theory of the cause and spread of the fire. However, Fricke did participate in an extensive investigation and examination of the fire artifacts. LG Chief Engineer Kyong Dong Baek testified that the light bulb could ignite food (Deposition of Kyong Dong Baek at 44), and NFPA 921 also recognizes this as a potential ignition source. (Fricke Dep. at 134).

Defendants accuse Citizens of mischaracterizing Baek's testimony, claiming that his statement that the light bulb could start a fire when overheated was in response to a general question and said nothing about the lamp on the refrigerator in question. (Baek Dep. at 30-31). Further, LG testing has shown that a fire from a lamp remaining on will self-extinguish in the refrigerator due to lack of oxygen. (Baek Dep. at 45; Deposition of Nam Seon Cho at 53). However, Baek's testimony does not directly refute Fricke's opinion, and LG's test results factor into the weight accorded Fricke's testimony, a factual matter for the jury. Mindful that the Rule 702 threshold is a modest one and that

there is some external support for Fricke's opinion, the court finds that his opinion is based on sufficient facts.

Fricke's methodology is also reliable and valid. NFPA 921 has been upheld as reliable, peer-reviewed, and accepted. *Fireman's Fund Ins. Co. v. Canon U.S.A., Inc.*, 394 F.3d 1054, 1057-58 (8th Cir. 2005); *Truck Ins. Exchange v. MagneTek, Inc.*, 360 F.3d 1206, 1215 n.11 (10th Cir. 2004). NFPA 921, in attempting to establish a systematic approach for investigating fires, directs examiners to: (1) determine and establish the origin of the fire; (2) investigate the cause, including examining artifacts, to determine how the ignition source(s), fuel, and oxidant(s) were brought together; and (3) using the data collected, determine the cause through inductive reasoning. (NFPA 921 § 4.1). It is clear from his report that Fricke did that. While Defendants accuse him of not properly following NFPA 921, it is not clear, as a matter of law, Fricke failed to properly follow the procedures. The court therefore concludes that Fricke's methodology and reasoning are sufficiently reliable in their application to allow his testimony.

The court notes, however, that Fricke's opinion is based in part on Baek's testimony that later models of Magee's refrigerator increased the relay current on the printed circuit board from five to 16 amps and added additional thermal protection. (Defendants' Ex. B at 7, 11-12 (citing Baek Dep. at 28)). Subsequent remedial measures are not admissible for an opposing party to prove "negligence, culpable conduct, a defect in a product, a defect in a product's design, or a need for a warning or instruction." FED. R. EVID. 407. Therefore, Fricke will not be permitted to testify on any subsequent design

changes to the refrigerator, and to the extent his expert report relies on those changes, it may not be considered by the jury.

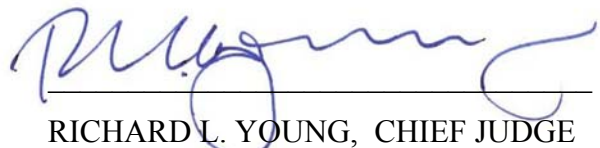
**C. Relevance**

Having determined that Fricke is qualified as an expert and that his methodology and reasoning are reliable, the court must determine whether his testimony will help the trier of fact analyze a key issue. Since a qualifying expert opinion often helps the trier of fact determine the cause of a fire, *see, e.g., U.S. v. Gardner*, 211 F.3d 1049, 1054 (7th Cir. 2000), Fricke's opinion meets the relevance element.

**V. Conclusion**

For the foregoing reasons, Defendants' motion to bar the testimony of Plaintiff's expert Charles Fricke (Docket # 150) is **DENIED**. Fricke will be permitted to testify as an expert at trial with the above-mentioned restriction on discussion of subsequent remedial measures.

**SO ORDERED** this 2nd day of May 2013.



RICHARD L. YOUNG, CHIEF JUDGE  
United States District Court  
Southern District of Indiana

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