

**UNITED STATES DISTRICT COURT  
DISTRICT OF CONNECTICUT**

ACE AMERICAN INSURANCE COMPANY,	)	
	)	
Plaintiff,	)	Case No. 3:11-cv-1741 (CSH)
	)	
v.	)	
	)	<b>JANUARY 16, 2015</b>
EATON ELECTRICAL, INC.,	)	
	)	
Defendant.	)	
	)	

**RULINGS ON DEFENDANT'S MOTIONS TO PRECLUDE EXPERT  
WITNESS TESTIMONY AND FOR SUMMARY JUDGMENT**

**HAIGHT, Senior District Judge:**

This diversity action arises out of a fire that destroyed a residential building in Southbury, Connecticut. Plaintiff ACE American Insurance Company ("ACE"), which had insured the property owner against such loss, paid its insured's claim and filed this subrogation action against Defendant Eaton Electrical, Inc. ("Eaton"). Eaton had manufactured and sold a device called an "electric meter pan with circuit breakers" ("the Meter Pan") which had been installed in the building prior to the fire. The theory of Plaintiff's case, sounding in strict product liability, is that the Meter Pan "was defective and unreasonably dangerous," Complaint [Doc. 1] at ¶ 16, and the fire "was the direct and proximate result of the defect in the Meter Pan," *id.* at ¶ 19.

In support of that theory, Plaintiff relies upon an expert report and opinion rendered by Joseph A. Cristino, a professional electrical engineer. Counsel for Defendant have taken Cristino's

deposition. Defendant now makes a motion [Doc. 36] for an order striking Cristino's opinion and precluding his opinion testimony at trial. Defendant bases that motion upon the Supreme Court's seminal opinion in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), and its progeny, and couples the motion to preclude with a motion for summary judgment [Doc. 38] dismissing Plaintiff's complaint.

Plaintiff opposes both motions. The Court conducted a hearing, at which portions of the evidentiary record created during discovery were examined and able counsel argued all aspects of the case. This Ruling resolves both motions.

### **I. FACTUAL BACKGROUND**

The facts set forth in this Part appear to be undisputed.

In 2005, ACE's insured, Omega Engineering, Inc., constructed a development of four modular residential houses on Vista View Drive in the Town of Southbury, Connecticut. None sold. The homes stood vacant as the years passed. The property owner retained security monitoring services to be provided by a company called Armed & Ready Security Service. Armed & Ready reported to one Jonathan Turner, a representative of the owner. A number of false fire alarms and power outages occurred within the neighborhood. In 2008, Turner instructed Armed & Ready to disable the smoke alarm monitoring, but to continue monitoring the electric power, which apparently was left on in the vacant homes.

At about 10:47 p.m. during the night of January 16, 2011, an Armed & Ready employee telephoned Turner and advised him of a power outage at one of the five houses, the one located at 75 Vista View Drive. About ten minutes later, Armed & Ready contacted Turner again, to advise

that the home at 70 Vista View Drive was also without power. Both houses received power from the same utility company transformer. Underground electrical lines ran from the transformer to the houses and connected with the sort of device that is involved in this action. The night of January 16 was cold, with a temperature of 17° Fahrenheit, and snow covered the ground. Turner instructed Armed & Ready to "place a hold" on both houses for twelve hours, meaning that no further alarms or alerts were to be submitted to Turner, who did not send anyone to check on the properties. About two hours after being alerted to the loss of power at 75 Vista View Drive, Turner was advised that the house was on fire. By the time the first responders arrived, the house was engulfed in flame. The fire caused the damage for which ACE paid its insured, and now seeks by subrogation to recover from Eaton.

ACE's complaint against Eaton contains a single numbered count, Count I, which is captioned "Strict Product Liability," and focuses upon that device the complaint calls "the Meter Pan." The device was manufactured and sold by Defendant Eaton. Cristino, in an unchallenged section of his report, refers to the device as "a Cutler Hammer combination meter enclosure," and goes on to say: "A combination meter enclosure is one which has provisions for an electric utility revenue meter and a main disconnect (circuit breaker or fused disconnect switch)." Doc. 37-2 at 2. Plaintiff's brief [Doc. 44] at 6 expands upon that description of this device:

A combination meter enclosure is a device with a meter and, in a separate compartment, a main circuit breaker. The electric service enters the panel in the bottom[,] travel[s] the length of the panel to the meter, goes through the meter then the circuit breaker and then into the home where it provides electricity to the home's main distribution panel in the basement and then to the various appliances and outlets in the home. The circuit breaker is a safety device intended to protect the home from overcurrent situations.

Throughout this Ruling, I will adopt Cristino's phrasing, and refer to the product in question as the "meter enclosure," an apt phrase because the device enclosed a meter.

The combination meter enclosure and circuit breaker involved in the case at bar was enclosed within a rectangular metal container which was affixed against the exterior wood siding on the northerly face of the structure at 75 Visa View Drive. Cristino, retained as an expert on behalf of the ACE interests, visited the site on January 31, 2011, in the company of Michael Driscoll, a forensic fire investigator, and "other experts," in order to "initiate an investigation of the January 17<sup>th</sup> fire, evaluate possible electrical ignition sources and to formulate and proceed with a course of action to determine the cause of the fire." Cristino Report, Doc. 37-2 at 2. That report also recites that the underground electrical conduit ran from the transformer to a "combination meter enclosure located on the northerly face of the structure," and that:

A fire had occurred at the exterior of the structure on January 17, 2011, that extended into the structure and caused structural damage. The preliminary analysis identified the area of fire origin as being in the vicinity of the electric service meter enclosure and underground conductor conduit location on the northerly side of the structure.

*Id.*

The combination meter enclosure and circuit breaker that had been installed at the 75 Vista View Drive house had suffered extensive exterior and interior damage during the fire. Cristino conducted additional inspections and certain tests, and then delivered the report, Doc. 37-2, which contains the opinions Eaton seeks to preclude under *Daubert*. I will quote the essential parts of those opinions:

Based upon the site examination, laboratory analysis and information obtained from Eaton Corporation Cutler Hammer, it can be stated with a reasonable degree of engineering certainty that the

January 17, 2011, failure within the Cutler Hammer combination meter enclosure that was mounted on the exterior of an [sic] residential structure located at 75 Vista View Drive, Southbury, Connecticut, was due to a short circuit within the 200-amp main circuit breaker mounted within the meter enclosure. The short circuit originated within the circuit breaker's internal Line side components most probably due to a defect that allowed moisture ingress. The meter enclosure was designed and manufactured for outdoor applications. Therefore, the meter enclosure should have been capable of preventing the ingress of moisture typically experienced in a New England winter. The moisture compromised the circuit breaker's internal insulation system . . . . The fault most probably was located in the area of the internal Line side components within the circuit breaker. (This is based upon the observed damage within the circuit breaker remains.) . . . Due to the location of the fault, the Cutler Hammer main circuit breaker was unable to interrupt the electrical fault, thus allowing the fault to expand and intensify. This resulted in the production of temperatures in excess of 2500° Fahrenheit; caused failures of the Mylar insulation at the back of the circuit breaker and two steel components; the extension of the electrical fault outside of the confines of the meter enclosure caused the combustible materials to which the meter enclosure was mounted to ignite.

Based upon laboratory analysis and visual examination, the electrical failure within the Cutler Hammer combination meter socket enclosure was due to a fault that originated within the circuit breaker within the enclosure. Outside sources and failure scenarios have been considered and eliminated because of the location and severity of the damage to the aluminum, insulation material and steel components within the Cutler Hammer combination meter socket enclosure. Neither an external electrical fault nor an external fire could have produced the observed damage and, more importantly, an external event could not have kept the component remains intact.

Cristino report, Doc. 37-2, at 9-10.

I have referred to Cristino's *opinions* in the plural because a careful reading of these passages from his report reveals that Cristino, explicitly or impliedly, offers several separate but related conclusions in support of ACE's theory of the case. Those are:

1. There was a short circuit in the combination meter enclosure.
2. The short circuit caused the fire that damaged the house.
3. The short circuit was caused by the ingress of moisture into the combination meter enclosure.
4. The ingress of moisture into the combined meter enclosure must be ascribed to a defect in the enclosure.

On the present motion to preclude, Defendant contends that the Court, in its gatekeeping capacity mandated by *Daubert*, should slam the gate shut on Cristino's opinions and not let the jury hear them. Plaintiff contends that Cristino's opinions pass muster for admissibility, leaving it to the jury to assess their weight or value.

## **II. DISCUSSION**

### **A. Preliminary Considerations**

During the hearing on these motions, the extended colloquies involving able counsel – Mr. Rossi for Plaintiff ACE and Mr. Barton for Defendant Eaton – served to identify and narrow some of the issues.

One exchange indicated that the parties agree with the first of the four conclusions listed above. I put this question to Mr. Barton: "Do you agree that it happened that there was a short circuit in the circuit breaker?" Mr. Barton responded: "Without question, that is not in dispute by Mr. Rossi or myself. An arc fault occurred inside that circuit breaker." Transcript of Hearing ("Tr.") at 70. The remaining three conclusions are in dispute.

Another subject that arose during the hearing was the nature of Plaintiff's claim. Mr. Barton

interpreted ACE's complaint as "a specific product defect allegation, not a malfunction theory," which in his view "ACE want[s] to pivot and go back to." Tr. at 64. Mr. Rossi rejected any suggestion that Plaintiff had altered its theory of the case. He said of the complaint that:

there's nowhere in there that the plaintiff alleges there was a design defect. I don't know where Eaton got that from, but the plaintiffs never alleged it. We generally allege that there was a defect, and the malfunction theory comes squarely within the confines of our complaint. We never say there's a specific defect. We say there's a defect. That's what the malfunction theory is designed for.

Tr. at 94.

A plaintiff is, within reason, the master of its own complaint. I take Mr. Rossi at his word and interpret ACE's subrogation claim against Eaton as based upon the malfunction theory of products liability. This Court's evaluation of the admissibility at trial of Cristino's opinions is informed by the scope and effect of that malfunction theory, as determined by Connecticut law. The leading case on the subject is the Connecticut Supreme Court's decision in *Metropolitan Property and Casualty Insurance Company v. Deere and Company*, 302 Conn. 123 (2011) ("*Metropolitan*").

## **B. The Malfunction Theory of Products Liability under Connecticut Law**

In *Metropolitan*, the plaintiff Metropolitan Property and Casualty Insurance Company insured the home of residents of Cheshire, Connecticut. A substantial portion of the residence and its contents were destroyed by a fire that broke out at about 1 p.m. on a day in July 2003. Metropolitan paid its insureds' losses and then sued defendant Deere and Company by subrogation. Deere had manufactured and sold a gasoline-powered lawn tractor to the homeowners. When the owners were not using the tractor to mow the lawn surrounding the home, they stored it in an attached garage, where the tractor was reposing when the fire broke out, having been used earlier in the day for its

intended purpose.

The theory of Metropolitan's subrogation claim against Deere was that the Deere lawn tractor contained a manufacturing defect in its electrical system that caused the fire. The trial judge admitted, over Deere's objection, the testimony of two expert witnesses called by Metropolitan in support of that theory. The jury returned a verdict in the plaintiff's favor. Deere appealed to the Connecticut Appellate Court. The Supreme Court of the State transferred the undecided appeal to its docket, 302 Conn. at 125 n. 1, reversed the rulings of the trial court, and remanded the case to that court with directions to grant the defendant's motion for a directed verdict and render judgment for the defendant. 302 Conn. at 158.

The Supreme Court's decision in *Metropolitan* brings Connecticut within the jurisdictions recognizing the "malfunction theory" of products liability. All product liability actions, the Court observes, require a plaintiff to prove that "the product was in a defective condition unreasonably dangerous to the consumer or user," 302 Conn. at 131. "Although most product liability cases are based on direct evidence of a specific product defect, there are cases in which such evidence is unavailable," and in such a case, courts use "the 'malfunction theory' of products liability to permit a jury to infer the existence of a product defect that existed at the time of sale or distribution on the basis of circumstantial evidence alone." *Id.* at 131, 133. In other words:

The absence of direct evidence of a specific product defect is not, however, fatal to a plaintiff's claims, and a plaintiff, under certain circumstances, may establish a prima facie case using circumstantial evidence of a defect attributable to the manufacturer . . . . The malfunction theory of products liability permits the plaintiff to establish a prima facie product liability case on the basis of circumstantial evidence when direct evidence of a defect is unavailable.

*Id.* at 132, 133.

During the course of its opinion in *Metropolitan*, the Connecticut Supreme Court took pains to stress that the malfunction theory exposes product manufacturers to inherent and potentially unfair risks of liability, against which trial judges are instructed to erect safeguards. "Moreover," the Court said, "the application of the malfunction theory in cases in which the evidence is speculative raises substantial questions of fairness in allowing cases to proceed against product manufacturers . . . . For these reasons, it is important that appropriate limitations be placed on the application of the malfunction theory, and, when the evidence presented by the plaintiff does not remove the case from the realm of speculation, courts must intervene to prevent such cases from reaching a jury." 302 Conn. at 137-138 (citations omitted). Having sounded that general caution, the Court gave these specific curative instructions:

With these concerns in mind, we conclude that, when direct evidence of a specific defect is unavailable, a jury may rely on circumstantial evidence to infer that a product that malfunctioned was defective at the time it left the manufacturer's or seller's control if the plaintiff presents evidence establishing that (1) the incident that caused the plaintiff's harm was of a kind that ordinarily does not occur in the absence of a product defect, and (2) any defect most likely existed at the time the product left the manufacturer's or seller's control and was not the result of other reasonably possible causes not attributable to the manufacturer or seller. These two inferences, taken together, permit a trier of fact to link the plaintiff's injury to a product defect attributable to the manufacturer or seller. A plaintiff may establish these elements through the use of various forms of circumstantial evidence . . .

*Id.* at 139-141 (footnote omitted).

Having declared these general principles, the *Metropolitan* Court applied them to the facts of that case. The Court summarized its holdings at the beginning of its opinion. The opinion notes

that in the trial court, defendant Deere moved "for a directed verdict and to set aside the verdict, in which the defendant claimed that the plaintiff had failed to present sufficient evidence to establish liability." 302 Conn. at 125. The Supreme Court then said:

The plaintiff responds that the trial court properly admitted the evidence and expert testimony at issue and that it presented sufficient evidence to sustain the jury's verdict pursuant to the "malfunction theory" of products liability, which permits a plaintiff to prove its case on the basis of circumstantial evidence. Although we agree that a plaintiff may base a product liability action on the "malfunction theory," we conclude that the plaintiff's evidence in the present case was insufficient to establish its products liability claim, and, therefore, we reverse the judgment of the trial court.

*Id.* at 125-126. In a footnote with which the Supreme Court concludes its opinion in *Metropolitan*, 302 Conn. at 158 n. 20, the Court clarified the nature and extent of its dispositive holding:

Because we conclude that the plaintiff's evidence was not sufficient to support an inference that a failure of the electrical system was attributable to the defendant, we need not examine whether all of the plaintiff's evidence, taken together, was sufficient to remove the case from the realm of speculation and to support a finding that the defendant more likely than not caused the homeowners to suffer harm.

I take this to mean that under Connecticut law, a plaintiff relying upon the "malfunction theory" in a products liability action must satisfy a two-pronged burden of proof: first, proof of the *existence* of a product failure attributable to the defendant; and second, a *causal connection* between that failure and the loss complained of. In *Metropolitan*, the Supreme Court did not reach the second prong because *Metropolitan* failed to prove that the lawn tractor failed in a manner attributable to Deere. That interpretation is reinforced by an earlier footnote in the *Metropolitan* opinion, 302 Conn. at 140 n. 9, where the Court, having described in text a plaintiff's ability to prove the existence of a product defect by circumstantial evidence, is careful to add in the footnote: "In addition to these

two elements, a plaintiff, as a threshold matter, must present sufficient evidence to support a finding that the product, and not some other cause apart from the product, was more likely than not the cause of the plaintiff's injury."

In the case at bar, a careful examination of Mr. Cristino's report shows that it is a chain of inferences, whose structure consists of the following links (quotations are from pages 8-9 of the Cristino report):

(a) On January 17, 2011 (the day of the fire), a "failure" occurred "within the Cutler Hammer combination meter enclosure that was mounted on the exterior" of the residential structure.

(b) The failure "was due to a short circuit within the 200-amp main circuit breaker mounted within the meter enclosure."

(c) "The fault most probably was located in the area of the internal Line side components within the circuit breaker."

(d) "Due to the location of the fault, the Cutler Hammer main circuit breaker was unable to interrupt the electrical fault, thus allowing the fault to expand and intensify," resulting in "the production of temperatures in excess of 2500° Fahrenheit" which "caused failures of the Mylar insulation at the back of the circuit breaker and two steel components; the extension of the electrical fault outside of the confines of the meter enclosure caused the combustible materials to which the meter enclosure was mounted to ignite." To render this particular portion of Cristino's report in plain English, he is saying that the short circuit in the circuit breaker caused the house to catch on fire.

(e) "The short circuit originated within the circuit breaker's internal Line side components most probably due to a defect that allowed moisture ingress." A condition in the meter enclosure that allows "moisture ingress" may fairly be characterized as a *product defect*, Cristino reasons,

because: "The meter enclosure was designed and manufactured for outdoor applications. Therefore, the meter enclosure should have been capable of preventing the ingress of moisture typically experienced in a New England winter. The moisture compromised the circuit breaker's internal insulation system which included the Bakelite-type material from which the circuit breaker body was formed and the internal insulating air gaps." Cristino's opinion concludes that it was a fault of this nature in the meter enclosure, capable of this mischief, that brought about the mechanics of destruction described in subparagraph (d), *supra*.

This is the chain of inferences which, according to Cristino's report and ACE's theory of the case, establishes Eaton's liability as the manufacturer of a defective product that caused the destruction of the house.

In *Metropolitan*, the Connecticut Supreme Court recognized that such a chain of inferences may in principle support a viable claim for product liability based upon the malfunction theory, but stressed the rigors of making that showing in practice. The Court included much of its opinion's guidance in footnotes, and as a source of instruction for the case at bar, it is useful to quote 302 Conn. at 140 n. 9 at some length:

In most cases, direct evidence will strongly support a finding that a particular product caused the plaintiff's harm.

There are those cases, however, such as the present case, in which the evidence that a particular product caused the accident will be wholly circumstantial. This adds an additional inference to the chain of inferences necessary for the trier of fact to find that a defect attributable to the manufacturer caused the plaintiff's injury. This means that, to find the manufacturer liable pursuant to the malfunction theory, the trier of fact must find, first, that the manufacturer's product caused the plaintiff to suffer harm, second, that the product failed *as a result of a defect* and not some other cause, and, third, that the defect was attributable to the manufacturer

and not something or someone else. The addition of this inference to the chain of inferences adds to the danger that the evidence of each element, taken together, may be too speculative to support a finding of liability on the part of the manufacturer. When *each of these inferences* is based on circumstantial evidence alone, *it is essential* that the plaintiff present sufficient evidence not only to support *each of the inferences* but also to satisfy the trier of fact that, after consideration of all of the evidence and inferences together, it is more likely than not that the manufacturer caused the plaintiff to suffer harm. Even if there is sufficient evidence to allow the trier of fact to draw *each of the inferences* necessary to establish a claim pursuant to the malfunction theory, if the trier of fact nevertheless is not convinced that the manufacturer caused the plaintiff to suffer harm, the trier of fact must return a verdict for the manufacturer.

(emphasis added) (citation omitted) .

Applying these holdings by high authority to the present case, there is sufficient evidence in the record to justify Cristino's conclusion that a short circuit in the Eaton-manufactured meter enclosure caused the house to catch fire. The meter enclosure was recovered and examined after the casualty. Counsel for Eaton agree that a short circuit occurred within the product's confines at some time. Cristino's report states, without subsequent contradiction, that "preliminary analysis identified the area of fire origin as being in the vicinity of the electric service meter enclosure and underground conductor conduit location on the northerly side of the structure." Doc. 37-2 at 2. The post-casualty internal condition of the meter enclosure is consistent with heat sufficient to cause combustion being transmitted from the meter enclosure to the combustible residential house structure to which the meter enclosure was attached.

But these circumstances are not sufficient to cast Eaton in liability for a product defect. As the Supreme Court observed in *Metropolitan*, 302 Conn. at 136, "proof of an accident alone is insufficient to establish a manufacturer's liability. The fact of a product accident does not necessarily

establish either the existence of a defect or that the manufacturer is responsible, both of which must be proven in product liability cases."

This requirement of proof brings us directly to the heart of the case: Cristino's stated opinion that *the cause of the short circuit within the meter enclosure* (which in turn caused the house fire) was a defect in the meter enclosure which "allowed moisture ingress." That is the only passage in Cristino's opinion that purports to identify a product defect in the meter enclosure. It goes to the heart of the case because the existence of a product defect is an essential element of a product liability claim. If a plaintiff does not prove that element, then quite apart from questions of causation, a defendant product manufacturer has no case to answer.

While the Connecticut Supreme Court held in *Metropolitan* that under the malfunction theory a plaintiff may establish the element of existing defect "through the use of various forms of circumstantial evidence," 302 Conn. at 140, it is instructive to note the kinds of circumstantial evidence on the issue that the Court immediately identified:

evidence of (1) the history and use of the particular product, (2) the manner in which the product malfunctioned, (3) similar malfunctions in similar products that may negate the possibility of other causes, (4) the age of the product in relation to its life expectancy, and (5) the most likely causes of the malfunction. If lay witnesses and common experience are not sufficient to remove the case from the realm of speculation, the plaintiff will need to present expert testimony to establish a prima facie case.

*Id.* at 141 (citations and footnotes omitted). In the case at bar, ACE attempts to establish that prima facie case though the opinion of its expert, Mr. Cristino, that Eaton's meter enclosure was defective because it allowed "moisture ingress." Cristino uses that phrase rather than the more common noun "water," presumably because the source of the offending "moisture" could have been water, snow,

ice, or a combination of these inescapable forces of nature.

Product liability cases are fact-intensive, but the kind of circumstantial evidence the *Metropolitan* Court identified in category (4) *supra* resonates in the case at bar. That circumstance focuses upon the age of the accused product, and in that regard the Court said in *Metropolitan*:

When a product malfunctions when it is new, the inference that the malfunction resulted from a defect attributable to the manufacturer is likely to be stronger than when the product is older because of the diminished possibility of other causes in the case of the newer product.

302 Conn. at 144 (citation omitted). Expanding on that principle, the *Metropolitan* Court said in a footnote at 302 Conn.156 n. 19:

We note that when the product at issue is new or nearly new, there is much less of a possibility that a malfunction would be caused by factors not attributable to the manufacturer (such as mistreatment, lack of maintenance, or improper maintenance). Therefore, it would not necessarily be speculative to conclude that any defect in the product is attributable to the manufacturer in a recently purchased product, even in the absence of additional affirmative evidence linking the defect to the manufacturer.

The corollary of that principle is that the older a product, the more speculative becomes a theory of damage caused by a defect attributable to the manufacturer. However, whether the product be new or old, just unwrapped from its packaging or hanging on the side of a house for six years, a products liability plaintiff must prove the existence of a defect that caused the harm. That element was stressed in *Metropolitan*, when the Supreme Court came to apply the principles it articulated to the facts in that case.

Applying these principles of law to the facts in *Metropolitan*, the Court rejected the opinion of plaintiff's expert, offered to show that a defect existing in the electrical system of a lawn tractor,

which caused fire damage to a home, was attributable to the tractor manufacturer. The Court reasoned:

In addition, the plaintiff's evidence failed to link an electrical failure in the tractor to a defect attributable to the defendant. The evidence presented at trial clearly established that there were no problems reported with the tractor's electrical system during the first four years of use and that the tractor functioned properly during that time, weakening any inference that the tractor's electrical system was defective at the time it was manufactured or when it was sold to the homeowners. . . .

Furthermore, because the evidence established that the tractor was not new or nearly new when it malfunctioned, the plaintiff was required to present additional evidence to explain how the tractor could have had a defect in the electrical system when it left the defendant's manufacturing facilities yet function without problems for several years before failing in July, 2003. The plaintiff did not present any such evidence.

302 Conn. at 155-56.

In the present case, the evidence shows that the house in question was one of four that a developer, ACE's insured, constructed in 2005 in hopes of selling them. The houses did not sell, but electricity was maintained in them, making use of the meter enclosures manufactured by Eaton. The fire occurred in 2011, six years later. Cristino's theory of product defect is that a meter enclosure "manufactured for outdoor applications . . . should have been capable of preventing the ingress of moisture typically experienced in a New England winter." This argument is logical, but leaves plaintiff hoist with his own petard, for there is no evidence in the present record that Eaton's meter enclosure failed to keep internally dry during five or six winters of considerable severity. If an external meter enclosure left the manufacturer's control, at the time of the product's sale to a property owner, in so defective a condition that foreseeable amounts of natural outdoor water (rain, snow,

ice) could penetrate the product and cause it to short circuit, one would expect this to happen sooner rather than later – surely, sooner than six years later.

In addition, the evidence of the meter enclosure's internal structure makes it somewhat unlikely that water introduced from the outside would have penetrated to the precise part of the mechanism required to produce a short circuit capable of disabling the circuit breaker. At oral argument on the present motions, counsel for Eaton called the Court's attention to the fact that, after Mr. Cristino rendered his opinion with respect to the defect in the meter enclosure, he immersed an Eaton circuit breaker in a bucket of water, and then froze it, and then put the circuit breaker on the meter panel, and the device "worked fine." Transcript of Hearing ("Tr.") at 33. That benign result was obtained, counsel argued, because "the various components inside the circuit breaker [are] encapsulated in various labyrinths of plastic and oil." Tr. at 33-34.

Counsel for Eaton also read into the hearing transcript this exchange during his examination of Cristino at the latter's previously conducted deposition:

Q. So essentially, if I've got the logic correct, with respect to your reasonable degree of engineering certainty, an unknown amount of moisture from an unknown source made its way into the breaker panel from some unknown point, migrated into the breaker in an unknown fashion, entered the breaker through an unknown source, compromising unknown components within the breaker that caused an arc fault on the Line side. Did I accurately depict what your testimony is?

A. Yes, sir.

Q. And you believe this unknown defect, which you cannot tell me or testify to, allowed the moisture ingress. Is that correct?

A. That's correct.

Tr. at 37. Having read that exchange at the argument, counsel concluded with an advocate's flourish:

"That is not science, your Honor. That is guesswork, something the jury should not be allowed to hear." Tr. at 37-38.

Rhetoric aside, this is a significant exchange. Cristino was not a potted plant (to borrow a phrase used by a different attorney during a high profile hearing in an earlier era). Cristino is an experienced engineer, expert consultant and witness. He comes across during his deposition as intelligent and articulate, quite prepared to defend the opinions he had expressed and counsel for Eaton was engaged in challenging. If Cristino disagreed with the summaries of his opinion counsel put to him in the quoted exchange, there is no reason to think that he would not have said so. Instead, Cristino accepted as accurate counsel's recitations of the essence of Cristino's opinions. This is a material factor when the Court comes to consider whether Cristino's opinions would be admissible at a trial.

### **C. The Defendant's Motion to Strike and Preclude**

The Connecticut Supreme Court's opinion in *Metropolitan* is significant in resolving the present motions because the opinion analyzes, under governing Connecticut law, what a plaintiff must prove, and its expert witnesses must say, in order to prevail upon a products liability claim based on the malfunction theory. Accordingly, *Metropolitan* bears upon the validity, effect and legal sufficiency of Cristino's opinions in the case at bar. But *Metropolitan* does not directly address whether those opinions can be admitted at trial in this federal case. That question, presented by these motions, falls under Rule 702 of the Federal Rules of Evidence, which district judges administer in discharging their "gatekeeper" function described in *Daubert* and its progeny.

In *Daubert*, the Supreme Court charged trial judges with the responsibility of acting as

gatekeepers to exclude unreliable expert testimony. In *Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999), the Court clarified that this gatekeeper function applies to all expert testimony, not just testimony based in science. Rule 702, which according to its caption governs "Testimony by Expert Witnesses," was amended in 2000 "in response to *Daubert*" and to cases applying it, including *Kumho*. Advisory Committee Note to 2000 Amendments at 463.<sup>1</sup> The Committee's purpose in amending Rule 702 was not to "codify" specific factors of reliability identified in *Daubert*; rather, "The standards set forth in the amendment are broad enough to require consideration of any or all of the specific *Daubert* factors where appropriate." Note at 464. The Advisory Committee recognized that "Courts both before and after *Daubert* have found other factors relevant in determining whether expert testimony is sufficiently reliable to be considered by the trier of fact." *Id.*

After Rule 702(a) defines an "expert witness" as one whose "specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue" (in itself a condition of admissibility), Rule 702 goes on to provide that an expert witness

may testify in the form of an opinion if: . . .

- (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(a)-(d).

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<sup>1</sup> This quotation from the Advisory Committee's Note on the 2000 amendments to Rule 702 is taken from the full text of the Note which appears in West's Pamphlet on Federal Civil Judicial Procedure and Rules (2014 revised edition) at pages 463-466.

The Court said in *Daubert*, 509 U.S. at 595, of district judges' gatekeeping function that the "focus, of course, must be solely on principles and methodology, not on the conclusions they generate." But that does not require "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." *General Electric Co. v. Joiner*, 522 U.S. 136, 146 (1997). In its Note on the 2000 amendments to Rule 702 at 465, the Advisory Committee said succinctly: "The trial judge in all cases of proffered expert testimony must find that it is properly grounded, well-reasoned, and *not speculative* before it can be admitted." (emphasis added).

Proponents of expert witness opinion testimony are wont to say (as does the Plaintiff at bar) that an adversary's criticisms of the opinion go only to its weight, not admissibility, and the jury should evaluate the opinion in that light. The Second Circuit does not regard that approach with favor. "The Federal Rules of Evidence require a greater degree of discrimination than that," the Second Circuit said in *Boucher v. U.S. Suzuki Motor Corp.*, 73 F.3d 18, 22 (1996), and added that "we must resist the temptation to answer objections to receipt of expert testimony with the shorthand remark that the jury will give it the weight it deserves." (citations and internal quotation marks omitted). The *Boucher* court concluded: "Since Boucher's expert testimony was not accompanied by a sufficient factual foundation before it was submitted to the jury, it was inadmissible under Federal Rule of Evidence 702." *Id.* (citation and internal quotation marks omitted). The Second Circuit regarded that error as reversible, vacated the district court judgment on the point of damages at issue, and remanded the case for a further trial.

In the case at bar, while I acknowledge Mr. Cristino's expertise as an electrical engineer, and

fully accept the sincerity with which he states his opinions, the admissibility of those opinions at a jury trial is governed by Rule 702, and by *Daubert* and its progeny. I must apply those authorities, in my capacity as gatekeeper, which may be defined as keeping the gate of litigation firmly closed against opinions lacking the requisite indicia of reliability to qualify them for a jury's consideration.

Performing that gatekeeper's function, I am unable to admit into evidence Cristino's opinion that the cause of the events culminating in the fire damage to the house in question was a defect in Eaton's meter enclosure which allowed the ingress of moisture into the enclosure. Meaning no disrespect, that particular opinion is speculation, either unsupported by or contrary to evidence in the record.

As to an absence of evidence supporting this opinion: There is no evidence as to what the defect consisted of physically; how the defect (whatever it was) allowed "moisture" to penetrate the cover of the meter enclosure, and in what quantity; what the moisture consisted of; where the moisture came from; when the ingress occurred; and how the moisture, once allowed ingress into the meter enclosure, succeeded in causing the short circuit in the circuit breaker, which appears to have been a well-protected and insulated component of a sophisticated piece of equipment. Cristino is not to be blamed for these evidentiary shortcomings. The indicated evidence may not be available to anyone. But that is not the issue. Rule 702(b) requires that an expert opinion, to be admissible, must be "based on sufficient facts or data." There is no data in this case, and a near-total absence of facts.

As for evidence to the contrary: Mr. Cristino tested his moisture-ingress theory by immersing a replica of the device in a bucket of water, then freezing the water containing the device (to evoke, one imagines, the rigors of a Connecticut winter), and then testing the circuit breaker component –

which worked perfectly well. One can commend Mr. Cristino for making the test, and there may be reasons for the disappointing result he achieved – disappointing, at least, if the test was intended to demonstrate the validity of his opinion about the ingress of moisture into the meter enclosure. But the test does not enhance the reliability of Cristino's opinion on the existence of a product defect: quite to the contrary.

After careful consideration of all the evidence in the present record, my conclusions come down to these. In order for ACE to succeed on its claim against Eaton for product liability, ACE must prove (together with other elements) that in 2005 ACE's insured received from Eaton a meter enclosure device that contained a defect which caused the house's destruction by fire six years later. The proclaimed defect upon which ACE bases the theory of its case is the meter enclosure's asserted propensity to allow the ingress of moisture into the device. ACE is entitled in principle to prove the existence of that defect by circumstantial evidence. The decisive question is whether ACE's proof suffices in practice. It does not. Cristino's opinion, upon which ACE's theory rests, is ingenious but entirely speculative. Not only is that opinion unsupported in any meaningful way by circumstantial evidence, the concept of a defect admitting a fatal amount of moisture is contrary to circumstantial evidence: the length of time the device remained in place exposed to the elements, with seemingly no malfunctions; and the continued operation of the circuit breaker component in the comparable device which Cristino subjected to what it is fair to call water torture. This record is devoid of evidence, direct or circumstantial, sufficient to support Cristino's opinion on this core issue, and significant circumstances argue against the opinion. I conclude that Cristino's opinion does not pass muster under Rule 702, and would not be admissible at a trial.

In *Metropolitan* and *Boucher*, inadmissible expert opinions were admitted by the trial

courts, and judgments for the plaintiffs were vacated. In the case at bar, the question of the admissibility of the opinion expressed by plaintiff's expert is presented before trial, through defendant's invocation of Rule 702. This Court's conclusion of inadmissibility is reached at an earlier stage in the litigation. That is, one supposes, what a gatekeeper is supposed to do.

For the foregoing reasons, Defendant's motion to preclude the expert opinion testimony of Joseph Cristino [Doc. 36] will be GRANTED.

To the extent that Defendant's motion prays that Cristino's opinion be stricken, that relief will be subsumed in the Order granting preclusion.

#### **D. Defendant's Motion for Summary Judgment**

Defendant having succeeded on its motion to preclude the opinion testimony of Plaintiff's expert witness, Defendant's companion motion for summary judgment under Fed. R. Civ. P. 56 [Doc. 38] will also be granted.

That necessarily follows, as the night the day, because Cristino's opinion was the only evidence available to Plaintiff to prove that a defect existed in Defendant's meter enclosure. In *Metropolitan*, the Connecticut Supreme Court held that the existence of a defect attributable to the manufacturer was an essential element of a claim for malfunction theory product liability. In such a circumstance, courts frequently couple an order precluding a plaintiff's expert witness testimony with an order granting the defendant summary judgment. *See, e.g., Valente v. Testron, Inc.*, 559 F. App'x 11, 14 (2d Cir. 2014) ("With Seluga's testimony properly excluded, the record is devoid of any evidence supporting Valente's theory that the golf car had a design defect or that such a design defect likely caused his accident. . . . Accordingly, the district court properly granted summary

judgment to defendants on Valente's strict liability and negligence design defect claims."); *Russo v. Keough's Turn of the River Hardware, LLC*, 529 F. App'x . 50, 52 (2d Cir. 2013) ("Without the testimony of their expert witness, Russo's claims fail because there would be no evidence from which a reasonable jury could conclude that the ladder was defective."); *Trumps v. Toastmaster, Inc.*, 969 F.Supp. 247, 254 (S.D.N.Y. 1997) (Summary judgment is appropriate if it appears that the non-moving party cannot prove an essential element in its case. . . . Plaintiff nowhere suggests that she has any evidence addressing either of these issues other than the opinions of Kaufmann, which are not admissible.").

### **III. CONCLUSION**

For the foregoing reasons, the Court resolves the pending motions as follows:

The Motion of Defendant Eaton Electrical, Inc. [Doc. 36] to preclude at trial the expert witness testimony of Joseph Cristino, called as a witness by Plaintiff ACE American Insurance Company, is GRANTED.

The Motion of Defendant Eaton Electrical, Inc. [Doc.38] for summary judgment dismissing the Complaint of Plaintiff ACE American Insurance Company is GRANTED.

The Clerk of the Court is directed to dismiss the Complaint WITH PREJUDICE, and to close the file.

It is SO ORDERED.

Dated: New Haven, Connecticut  
January 16, 2015

/s/Charles S. Haight, Jr.  
CHARLES S. HAIGHT, JR.  
Senior United States District Judge