

**NOT RECOMMENDED FOR FULL-TEXT PUBLICATION**

File Name: 13a0545n.06

Nos. 12-1742, 12-1757

**UNITED STATES COURT OF APPEALS  
FOR THE SIXTH CIRCUIT**

**FILED**  
**Jun 04, 2013**  
DEBORAH S. HUNT, Clerk

LOWREN DOW, )  
 )  
**Plaintiff-Appellant,** )  
 )  
 v. )  
 )  
 RHEEM MANUFACTURING CO., )  
 ROBERTSHAW CONTROLS CO., )  
 AND INVENSYS CONTROL )  
 SYSTEMS, )  
**Defendants-Appellees.** )  
 )  
 MICHIGAN FARM BUREAU )  
 GENERAL INSURANCE, )  
**Plaintiff-Appellant,** )  
 )  
 v. )  
 )  
 RHEEM MANUFACTURING CO., )  
 ROBERTSHAW CONTROLS CO., )  
 AND INVENSYS CONTROL )  
 SYSTEMS, )  
**Defendants-Appellees.** )  
 )

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ON APPEAL FROM THE  
UNITED STATES DISTRICT  
COURT FOR THE EASTERN  
DISTRICT OF MICHIGAN

**OPINION**

**Before: BOGGS, MOORE, and SUTTON, Circuit Judges.**

**KAREN NELSON MOORE, Circuit Judge.** In 2007, Plaintiff-Appellant Lowren Dow (“Dow”) was severely injured in an explosion that occurred when he attempted to light the pilot of a water heater manufactured by Defendant-Appellee Rheem Manufacturing Company (“Rheem”).

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The cause of the explosion is undisputed—the rubber gasket manufactured by Defendant-Appellee Robertshaw Controls Company (“Robertshaw”) dislodged from the valve’s safety magnet, creating a propane leak. The cause of the dislodgment, however, remains disputed; specifically, the parties disagree on whether the rubber gasket dislodged as a result of overpressurization stemming from misuse by Dow or as a result of a design defect that enabled the rubber gasket to adhere to the seat.

In 2009, Dow and Plaintiff-Appellant Michigan Farm Bureau General Insurance (collectively, “the plaintiffs”) filed civil actions against Robertshaw, Rheem, and Defendant-Appellee Invensys Control Systems (collectively, “the defendants”), alleging state-law claims based primarily in product liability and negligence. In 2011, the district court granted the defendants’ motion to exclude the testimony of the plaintiffs’ primary causation expert, Alan Kasner, and consequently granted their motion for summary judgment for failure to establish causation. The plaintiffs appeal. For the reasons stated below, we **AFFIRM** the judgment of the district court.

## I. BACKGROUND

The background facts in this case are largely undisputed. On July 16, 2007, Dow returned from work and tried to take a shower. R. 178 (Opp’n to Mot. for Summ. J. at 1) (Page ID #9441). When he realized that the hot water was not working, he went to the basement to examine the water heater and discovered that the pilot light was out. *Id.* Dow attempted to light the pilot, which caused an explosion that burned nearly all of his body and destroyed his house. *Id.* Experts have concluded that “there was a leak in the Robertshaw valve that occurred as the result of a rubber gasket dislodging from the valve’s safety magnet component and lodging in the valve’s upper inlet

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chamber, preventing the safety magnet from closing the inlet when there was a pilot outage.” R. 139 (Mot. for Summ. J. at 1) (Page ID #7244). This litigation centers on the cause of the gasket dislodgment, which is heavily disputed.

On September 17, 2009, the plaintiffs each brought a civil action against the defendants in the U.S. District Court for the Eastern District of Michigan. The actions were eventually consolidated. The plaintiffs alleged claims of products liability, negligence, breach of implied warranty, breach of express warranty, gross negligence, and willful disregard. R. 1 (Compl.) (Page ID #1).<sup>1</sup> At the time of the district court’s September 26, 2011, order granting judgment in favor of the defendants, there were forty-two motions pending before the district court. *Dow v. Rheem Mfg. Co.*, Nos. 09-13697-BC, 10-10753-BC, 11-10647-BC, 2011 WL 4484001, at \*3 (E.D. Mich. Sept. 26, 2011). The district court issued a ruling on the merits as to four of the motions—Robertshaw’s motion to exclude the testimony of Kasner, Robertshaw’s motion to exclude the testimony of William Woehrle, Robertshaw’s motion for summary judgment, and Rheem’s motion for partial summary judgment—and denied the remaining motions as moot. *Id.* at \*24–25.

The plaintiffs filed motions to reconsider the district court’s order, challenging the district court’s rulings excluding Kasner’s testimony and granting Robertshaw’s motion for summary judgment. R. 220 (Mot. to Reconsider at 1) (Page ID #10623); R. 221 (Mot. to Reconsider at 1) (Page ID #10689). The district court denied the plaintiffs’ motions. *Dow v. Rheem Mfg. Co.*, Nos. 09-13697-BC, 10-10753-BC, 2012 WL 1621368, at \*2 (E.D. Mich. May 9, 2012). The plaintiffs

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<sup>1</sup>Citations to the district-court record refer to the Dow docket (No. 1:09-cv-13697-TLL-CEB).

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appeal from both the initial order and the order denying reconsideration. R. 230 (Notice of Appeal at 2) (Page ID #10946).

## II. EXPERT TESTIMONY

In order to prevail at the prima facie stage in a Michigan product-liability action, a plaintiff must proffer “proof (1) that the defendant has supplied a defective product and (2) that this defect has caused injury to the plaintiff.” *Thompson v. Carrollton Twp. Police Dep’t*, No. 283772, 2009 WL 1564529, at \*5 (Mich. Ct. App. June 2, 2009) (internal quotation marks omitted). At issue in the district court’s orders is causation. The exclusion of Kasner’s testimony is thus the central issue on appeal, as Kasner provided the sole expert opinion on adhesion, the plaintiffs’ theory of causation.

The district court excluded Kasner’s opinion that adhesion caused the dislodgment, explaining that it was unreliable under Federal Rule of Evidence 702. *Dow*, 2011 WL 4484001, at \*9–10. The primary reason given by the district court for excluding this testimony was Kasner’s failure to conduct testing on a critical factor of his analysis. *Id.* at \*9. On appeal, the plaintiffs argue that Kasner’s opinion was “based on extensive measurements and inspections of the Dow valve and exemplar valves.” Appellant Br. at 18. The defendants contend that Kasner’s opinion lacked a reliable foundation, as “Kasner testified that he had no physical evidence to support his theories, conducted no testing to support his theories, and stated that testing would be meaningless.” Appellee Br. at 29.

“We review a district court’s decision to admit or exclude expert testimony for abuse of discretion, finding such an abuse only if we are firmly convinced that the district court erred.”

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*Hardyman v. Norfolk & W. Ry. Co.*, 243 F.3d 255, 258 (6th Cir. 2001) (internal citations omitted).

“A district court abuses its discretion if it bases its ruling on an erroneous view of the law or a clearly erroneous assessment of the evidence.” *Newell Rubbermaid, Inc. v. Raymond Corp.*, 676 F.3d 521, 527 (6th Cir. 2012) (internal quotation marks omitted).

Federal Rule of Evidence 702 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. In assessing the relevance and reliability of an expert opinion, the district court must engage in “a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue.” *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 592–93 (1993).

“Red flags that caution against certifying an expert include reliance on anecdotal evidence, improper extrapolation, failure to consider other possible causes, lack of testing, and subjectivity.” *Newell*, 676 F.3d at 527.

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Kasner's adhesion theory is based primarily on two components: (1) the rubber gasket attached to the safety valve adhered to the metal seat and (2) the force of adhesion overcame the force of retraction, causing the rubber gasket to dislodge. It is not disputed that the first component of Kasner's theory was supported by sufficient testing. Kasner explained in his report that he conducted stress testing and found that the compressive stress "is sufficient to produce an intimate contact between the rubber and the metal, especially if the application of this stress is over extended duration," and "[a]n intimate contact between the rubber and the metal of the seat is sufficient to produce adhesion of the gasket to the metal." R. 134-6 (Kasner Report at 17) (Page ID #7038).

The second component, which Kasner deemed "[t]he key factor," was not tested. *Id.* Although Kasner explains certain foundational principles concerning adhesion, he engaged in no testing to determine adhesion measurements on the Dow valve or on the exemplar valves. *Id.* at 18 (Page ID #7039). Kasner acknowledged this admission yet contended in his deposition that testing would not yield useful data: "Given the number of variables involved, I don't think, even with testing, you can duplicate the—you know, the exact conditions on every valve." R. 178-6 (Kasner Tr. at 15:21–16:3) (Page ID #9513). His report echoed these sentiments, stating that "[t]he level of rubber/metal adhesion would depend on a number of factors, such as the roughness of the metal, contact stress and its duration, the amount of Molybdenum Disulfide or other release coatings, [and] the formulation of the rubber . . . ." R. 134-6 (Kasner Report at 17) (Page ID #7038).

The district court was not persuaded by Kasner's explanation, concluding that his failure to test the key factor made the adhesion opinion unreliable. *Dow*, 2012 WL 1621368, at \*8 ("First,

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Kasner's theory is not based on sufficient facts or data: he cannot intelligently opine on whether even the stickiest of conditions inside the valve would create sufficient adhesion force to validate his theory."). The plaintiffs disagree, arguing that "testing is not a required prerequisite to evidentiary admissibility" and "the variety of factors affecting adhesion measurements, at past levels that are undeterminable, makes it impossible to replicate in an exemplar valve the precise conditions experienced by the Dow valve in its pre-explosion history." Appellant Br. at 19.

We addressed a nearly identical issue in *Pride v. BIC Corp.*, 218 F.3d 566 (6th Cir. 2000), a case involving the admissibility of expert testimony on the cause of a fire. There, we affirmed the district court's exclusion of three experts' testimony as unreliable for "failure . . . to test their hypotheses in a timely and reliable manner or to validate their hypotheses by reference to generally accepted scientific principles as applied to the facts of this case." *Id.* at 578. With respect to one of Pride's experts, we explained that "[a]lthough [the expert] believed that the physical condition of the Pride lighter evidenced a failure to extinguish based on a manufacturing defect, he conceded that he did not perform any tests to determine if he could duplicate a failure to extinguish scenario that would result in the explosion that both parties agree occurred in Mr. Pride's lighter." *Id.* at 571. Rather, the expert relied on his performance of "a 'failure analysis' of the lighter by (1) conducting a stereo microscope visual examination of the lighter; (2) taking photographs; and (3) conducting a scanning electron microscope visual examination of the lighter parts." *Id.* at 570–71; *see also Newell*, 676 F.3d at 528–29 (holding that the district court did not abuse its discretion in excluding an expert who relied upon anecdotal evidence, failed to consider other causes, engaged in improper

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extrapolation, and failed to conduct testing); *Mohney v. USA Hockey, Inc.*, 138 F. App'x 804, 808 (6th Cir. 2005) (“Dr. Collins did not, however, attempt to replicate the incident, perform any manner of accident reconstruction or conduct any relevant technical or scientific testing of the helmet/facemask combination.”).

The facts in *Pride* are remarkably similar to those at issue here. As in *Pride*, Kasner testified that he did not conduct any testing to determine whether the force of adhesion could ever overcome the force of retraction, let alone whether it occurred in this instance. See *Nemir v. Mitsubishi Motors Corp.*, 381 F.3d 540, 555 (6th Cir. 2004) (reversing district court’s exclusion of expert opinion and observing that “the point of the purposeful manipulation was to show that partial latching *could occur under certain circumstances*, not to show directly that Nemir’s buckle partially latched during the accident—given the infinite possible variations, it would have been virtually impossible to determine the velocity and angle with which Nemir had actually buckled his belt on the day in question”) (emphasis added). Moreover, Kasner relied largely on a visual examination of the evidence as support for his conclusion. In *Pride*, we determined that an expert’s opinions were unreliable for those very reasons. Given our precedent, we cannot conclude that the district court abused its discretion by excluding Kasner’s testimony.

### III. SUMMARY JUDGMENT

Without Kasner’s testimony, the plaintiffs rely wholly on a differential-diagnosis theory to establish causation. The district court granted summary judgment to the defendants, concluding that the plaintiffs were “unable to provide substantial evidence to establish their theory that the rubber



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gasket dislodged from the plunger as a result of adhesion and that it did so because it was defective.”

*Dow*, 2011 WL 4484001, at \*15. “We review de novo a district court’s grant of summary judgment.” *Dye v. Office of the Racing Comm’n*, 702 F.3d 286, 294 (6th Cir. 2012). “We review the evidence and draw all inferences in the light most favorable to the [plaintiffs] as the nonmoving parties.” *Id.* Summary judgment is appropriate “if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” FED. R. CIV. P. 56(a).

Under Michigan law, a plaintiff satisfies his burden at the prima facie stage only if he can show that it is more likely than not that a defect caused the malfunction. *Skinner v. Square D Co.*, 516 N.W.2d 475, 480 (Mich. 1994). As explained in *Skinner*, “[t]here may be 2 or more plausible explanations as to how an event happened or what produced it; yet, if the evidence is without selective application to any 1 of them, they remain conjectures only.” *Id.* (internal quotation marks omitted). “[I]f such evidence lends equal support to inconsistent conclusions or is equally consistent with contradictory hypotheses, negligence is not established.” *Id.* at 481 (internal quotation marks omitted). Therefore, the plaintiffs’ differential-diagnosis argument gains traction only if the malfunction at issue resulted from one of only two potential causes.

The plaintiffs argue that the valve could have dislodged only as a result of overpressurization or adhesion. Although these two theories have been examined extensively throughout the course of the litigation, we cannot agree that these are the only two potential causes of dislodgment for purposes of our causation analysis. None of the experts have established that the universe of

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potential causes is limited to overpressurization and adhesion, and the parties do not stipulate to it. Therefore, merely proffering evidence ruling out overpressurization does not demonstrate that it is more likely than not that adhesion was the cause. Without Kasner's report and testimony, the plaintiffs here have presented no affirmative evidence that adhesion caused the valve to dislodge. Under Michigan law, the plaintiffs' product-liability claims thus fail.

#### **IV. CONCLUSION**

For the reasons stated, we **AFFIRM** the judgment of the district court.