REVISED October 11, 2016

IN THE UNITED STATES COURT OF APPEALS
FOR THE FIFTH CIRCUIT

United States Court of Appeals
Fifth Circuit

FILED
October 5, 2016

Lyle W. Cayce
Clerk

No. 15-10636

HENRY LEE SIMS, JR., individually and as legal heir to the Estate of Henry Lee Sims, Sr.; TIMOTHY EVERETT SIMS, individually and as legal heir to the Estate of Henry Lee Sims, Sr.; WILLIE EARL SIMS, individually and as legal heir to the Estate of Henry Lee Sims, Sr.; SHAMIKA RAE SIMS, individually and as legal heir to the Estate of Henry Lee Sims, Sr.; KATHLYN LENETTA SIMS, individually and as legal heir to the Estate of Henry Lee Sims, Sr.; BRENCE ERIC SIMS, individually and as legal heir to the Estate of Henry Lee Sims, Sr.; MICHAEL ANDRE SIMS, individually and as legal heir to the Estate of Henry Lee Sims, Sr.; SARAH DENISE SIMS, individually and as legal heir to the Estate of Henry Lee Sims, Sr.; PAMELA RACHAEL SIMS, individually and as legal heir to the Estate of Henry Lee Sims, Sr.,

Plaintiffs - Appellants

v.

KIA MOTORS OF AMERICA, INCORPORATED; KIA MOTORS CORPORATION,

Defendants - Appellees

Appeal from the United States District Court
for the Northern District of Texas

Before HIGGINBOTHAM, PRADO, and GRAVES, Circuit Judges.

PATRICK E. HIGGINBOTHAM, Circuit Judge:

Family members of decedent Henry Sims, Sr. filed this products liability suit against Defendants-Appellees Kia Motors of America (KMA) and Kia Motors Corporation (KMC) stemming from a tragic car accident, in which Mr. Sims, a passenger in a 2010 Kia Soul, died. Among other claims, they alleged that the Soul's fuel tank was defectively designed. After determining that Texas law applied and excluding testimony from two of their experts, the district court granted summary judgment in favor of Defendants. We AFFIRM.

I.

Henry Sims, Sr. died in the back seat of a 2010 Kia Soul after a traffic accident in Tarrant County, Texas. The initial impact occurred when the Soul collided with another car in an intersection, causing the Soul to spin and to strike various objects. One of those items was the immovable base of a yield sign, the "flange," the top of which had disconnected as it was designed to do upon contact. The flange was 3.25 inches tall. As the Soul continued forward, the base of the sign passed beneath the front bumper and continued along the underside of the vehicle before impacting the fuel tank. The sign base tore a large hole in the fuel tank, causing gasoline to leak onto the roadway. When the Soul eventually came to rest, the driver and passenger riding in the front seats safely exited the vehicle. The three passengers in the back, however, including Mr. Sims, were stuck inside when both rear doors wouldn't open. Because the fuel tank of the Soul had ruptured during the crash sequence, the car became engulfed in flames. Mr. Sims died in the fire.

Plaintiffs, Mr. Sims' children and grandchild, sued Defendants for products liability. They allege that "[g]iven the hazards posed by a vehicle's gas tank, vehicle manufacturers must take reasonable steps to design and manufacture a gas tank that is not susceptible to failure in collisions and that,

if fire in the gas tank does result, the fire does not immediately explode into the passenger cabin of the vehicle so that occupants have an opportunity to escape the burning car." They argue that Defendants should have utilized fuel tank fastening straps or a fuel tank shield or both in the 2010 Kia Soul, and that their failure to do so rendered the vehicle unreasonably dangerous and contributed to Mr. Sims's death. Plaintiffs retained two engineers as experts: Michael McCort, who was to investigate how the flange struck the fuel tank, and Jerry Wallingford, who was to testify that feasible, safer alternative designs would have prevented the fuel tank rupture.

Plaintiffs originally filed this action in the Central District of California against KMA. It was transferred to the Northern District of Texas due to the location of evidence and convenience of witnesses relevant to Plaintiffs' claims. With agreement of the parties, the complaint was amended to add KMC as an additional defendant.[1]

Defendants moved for partial summary judgment, arguing that one of the Plaintiffs, Mr. Sims's granddaughter, "has no cause of action as wrongful death statute beneficiary." Applying Texas law, the district court granted the motion since Texas law does not allow grandchildren to recover for wrongful death claims. Defendants also sought and received leave to designate responsible third parties to whom the jury may assign responsibility at trial, as is permitted under Texas law. Finally, Defendants moved to have Texas law apply to all claims, and the district court granted this motion.

Defendants then sought to exclude some or all of the Plaintiffs' expert testimony. The district court granted these motions, concluding that the testimony was unreliable. Defendants moved for summary judgment on all claims, arguing that – without expert testimony – the Plaintiffs raised no

[1] KMC is headquartered in South Korea.

genuine dispute as to the material facts of their claims. The district court granted the motion, and Plaintiffs timely appealed.

II.

Plaintiffs first challenge the district court's determination that Texas's substantive law – not California's – should apply. Our review is *de novo*.[2]

The parties do not dispute that California's "governmental interest approach"[3] controls our analysis of which state's substantive law applies.[4] Under this approach, courts take up to three steps to determine which state's law applies.

> First, the court determines whether the relevant law of each of the potentially affected jurisdictions with regard to the particular issue in question is the same or different. Second, if there is a difference, the court examines each jurisdiction's interest in the application of its own law under the circumstances of the particular case to determine whether a true conflict exists. Third, if the court finds that there is a true conflict, it carefully evaluates and compares the nature and strength of the interest of each jurisdiction in the application of its own law to determine which state's interest would be more impaired if its policy were subordinated to the policy of the other state, and then ultimately applies the law of the state whose interest would be the more impaired if its law were not applied.[5]

There is no dispute that the applicable laws in Texas and California are different. In Texas, grandchildren cannot recover in a wrongful death suit; in California, they can.[6] And under Texas's law but not California's, Defendants

---

[2] *Ellis v. Trustmark Builders, Inc.*, 625 F.3d 222, 225 (5th Cir. 2010).

[3] *Kearney v. Salomon Smith Barney, Inc.,* 137 P.3d 914, 922 (Cal. 2006).

[4] In diversity cases, when the initial forum selected by a plaintiff is proper, the transferee court must apply the same state law and choice of law rules that the transferor court would have applied but for the transfer. *Van Dusen v. Barrack*, 376 U.S. 612 (1964).

[5] *Kearney*, 137 P.3d at 922 (citations omitted).

[6] *Compare* TEX. CIV. PRAC. & REM. CODE § 71.004(a), *with* CAL. CIV. PROC. CODE § 377.60.

are permitted to designate a responsible third party to whom a jury may assign responsibility during trial.[7] Finally, Texas, unlike California, requires plaintiffs in design defect cases to show that there was a safer alternative design that Defendants could have used.[8]

Since California and Texas law differ, we consider whether there is a "true conflict." A true conflict arises when both states have a legitimate interest in applying their own laws. Texas's interests are legitimate. The Soul was sold in Texas, both drivers and all plaintiffs are Texans, and the accident occurred in Texas.[9] California's interest in applying its law is more tenuous. On appeal, the parties dispute whether the Soul was designed in California or Korea, a factual question that the district court did not explicitly answer. The record suggests that, despite some indications to the contrary in Kia's advertising materials, the parties originally agreed that the 2010 Kia Soul was designed in Korea, not California.[10] The district court implicitly agreed, noting that "[t]here is no nexus to California other than the fortuity that one of the defendants is a citizen of California."

---

[7] *Compare* TEX. CIV. PRAC. & REM. CODE § 33.004(e), *with* CAL. CIV. PROC. CODE (lacking an equivalent provision).

[8] TEX. CIV. PRAC. & REM. CODE § 82.005(b); *Barker v. Lull Eng'g Co.*, 20 Cal. 3d 413, 423-26 (1978).

[9] Texas probably also has an interest in enacting legislation to attract businesses like Kia to the state. Plaintiffs contend that under California's governmental interest approach, states have no interest in limiting the recovery of their own residents where the tortfeasors are not residents of that state. *See Hurtado v. Superior Court*, 522 P.2d 666, 670 (Cal. 1974). But *Hurtado* and similar cases may be limited to situations wherein the out-of-state defendants are individuals, not corporations. In fact, the California Supreme Court has since recognized that "nothing . . . suggests that a state's interest in the application of a statute limiting liability for specified commercial activity carried on within the state applies only to local companies and not equally to out-of state companies doing business within the state." *McCann v. Foster Wheeler LLC*, 48 Cal. 4th 68, 93 (2010).

[10] The Joint Pretrial Order submitted by both parties included as a fact "established by pleadings, by stipulations, and/or by admissions" that the 2010 Kia Soul was "designed, tested, and manufactured by Defendant Kia Motors Corporation," which is in Korea.

Plaintiffs counter that California has a legitimate interest because KMC and KMA "put themselves at the heart of California's regulatory interest" by engaging in business there. But while KMC and KMA have enjoyed the benefits of doing business with California residents, they also have done business in Texas. At best, this argument suggests that both California and Texas have an interest in applying their laws in this case.

Assuming without deciding that California has a legitimate interest in applying its laws under the second step of the governmental interest approach, we turn to the third step. We conclude that Texas's interests would be more impaired if California law applied than California's would be by the application of Texas law. Under California choice-of-law rules, "with respect to regulating or affecting conduct within its borders, the place of the wrong has the predominant interest."[11] California considers the "'place of the wrong' to be the state where the last event necessary to make the actor liable occurred."[12] The last event here – the accident – took place in Texas.[13] Therefore, the district court did not err in applying Texas law to all claims in the suit.

III.

The Plaintiffs next challenge the district court's decision to exclude part of expert Michael McCort's testimony and all of Jerry Wallingford's. McCort investigated the mechanics of how the fuel tank struck the flange and

[11] *See Hernandez v. Burger,* 102 Cal. App. 3d 795, 802 (1980).

[12] *Mazza v. Am. Honda Motor Co.*, 666 F.3d 581, 593 (9th Cir. 2012); *cf. Zinn v. Ex–Cell–O Corp.,* 148 Cal. App. 2d 56, 80 n.6 (1957) (concluding in a fraud case that the place of the wrong was the state where the misrepresentations were communicated to the plaintiffs, not the state where the intention to misrepresent was formed or where the misrepresented acts took place).

[13] *See Hill v. Novartis Pharm. Corp.*, No. 1:06-CV-00939-AWI, 2012 WL 967577, at *7 (E.D. Cal. Mar. 21, 2012) (holding that the last event necessary to make defendant liable in products liability case took place at the scene of injury).

Wallingford analyzed whether safer alternative designs existed. Because Plaintiffs intended to rely on experts to establish each of the essential elements of products liability claims,[14] the exclusion of their testimony was fatal to Plaintiffs' case.

We review a district court's decision to exclude expert testimony for abuse of discretion.[15] "A trial court abuses its discretion when its ruling is based on an erroneous view of the law or a clearly erroneous assessment of the evidence."[16] "In conducting our review, '[w]e are mindful that under *Daubert*[17] and Fed. R. Evid. 702,[18] a district court has broad discretion to determine whether a body of evidence relied upon by an expert is sufficient to support

---

[14] These elements include that (1) there was a safer alternative design, and (2) the defect was a producing cause of the personal injury, property damage, or death for which the claimant seeks recovery. TEX. CIV. PRAC. & REM. CODE § 82.005(b).

[15] *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 142-43 (1997).

[16] *Bocanegra v. Vicmar Servs., Inc.*, 320 F.3d 581, 584 (5th Cir. 2003).

[17] In *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 593-94 (1993) the Supreme Court offered a list of factors that district courts may use in evaluating the reliability of expert testimony. These factors include whether the expert's theory or technique: (1) can be or has been tested; (2) has been subjected to peer review and publication; (3) has a known or potential rate of error or standards controlling its operation; and (4) is generally accepted in the relevant scientific community. Later, in *Kumho Tire Co. v. Carmichael,* 526 U.S. 137, 150 (1999), the Supreme Court emphasized that the *Daubert* analysis is a "flexible" one, and that "the factors identified in *Daubert* may or may not be pertinent in assessing reliability, depending on the nature of the issue, the expert's particular expertise, and the subject of his testimony."

[18] Rule 702 provides that "[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."

that expert's opinion.'"[19] The proponent of expert testimony bears the burden of establishing the reliability of the expert's testimony.[20]

A.

We begin with Plaintiffs' first expert, engineer Michael McCort. Plaintiffs hired McCort to investigate how the fuel tank was able to contact the flange.[21] McCort traveled to the crash site to collect evidence, studied law enforcement documents about the crash, and inspected both the damaged Soul and an undamaged model. He determined that for the fuel tank to contact the flange, one of two events necessarily occurred: either (1) the entire car lost ground clearance, or (2) the fuel tank dropped independently from the vehicle. He ran several computer simulations, and determined that the body of the car could not have lowered far enough to allow the fuel tank to hit the flange. Therefore, McCort concluded that the fuel tank dropped independently of the vehicle's body. He did not, however, "know the precise mechanism" of how the fuel tank lowered, nor did he recreate this occurrence in a simulation.

The district court excluded the portion of McCort's testimony that argued that the fuel tank moved downward during the crash sequence. The court reasoned that "McCort's proffered expert opinions and related testimony regarding the 'downward displacement theory' were unreliable and thus, inadmissible for the lack of reliance on sufficient facts or reliable underlying

[19] *Johnson v. Arkema, Inc.*, 685 F.3d 452, 458-59 (5th Cir. 2012) (quoting *Knight v. Kirby Inland Marine Inc.,* 482 F.3d 347, 354 (5th Cir. 2007)); *see also Rider v. Sandoz Pharm. Corp.,* 295 F.3d 1194, 1197 (11th Cir. 2002) ("[J]udges have considerable leeway in both how to test the reliability of evidence and determining whether such evidence is reliable." (citing *Kumho,* 526 U.S. at 151-53)).

[20] *Johnson*, 685 F.3d at 458.

[21] McCort's declaration is in the record. There is no dispute about his qualifications, which include an engineering background and several years of experience in accident reconstruction.

data and do not satisfy any of the requirements of the standards set forth in parts (a) – (d) of Rule 702 of the Federal Rules of Evidence."

McCort employed a "differential diagnosis approach," a scientific technique that essentially involves the process of elimination.[22] This Court has previously found a similar methodology to be reliable under *Daubert* when used by medical experts.[23] In *Pipitone v. Biomatrix, Inc.*, for example, an expert witness, a doctor, used process of elimination to conclude with "99.9%" certainty that the defendant's drug caused plaintiff's infection.[24] The district court excluded his testimony, but this Court reversed. We explained that the doctor had satisfied *Daubert* by "eliminat[ing] . . . all other likely alternatives" using "generally accepted diagnostic principles."[25] Plaintiffs point to *Pipitone* as evidence of the reliability of differential diagnosis.

But this Court has cautioned that "the results of a differential diagnosis are far from reliable *per se*."[26] In *Pipitone*, the doctor did not merely "rule out" alternative causes of infection. He also "ruled in" defendant's drug as the cause by evaluating "the timeliness of the infection (symptoms of which began to appear hours after the [drug] injection), the source of the [drug], [and] the type of organism (salmonella) that infected [plaintiff]."[27] Other courts have explicitly cautioned that merely "ruling out" other possible explanations is not enough to establish reliability; experts must also have some scientific basis for

---

[22] *See Baker v. Dalkon Shield Claimants Trust*, 156 F.3d 248, 252-53 (1st Cir. 1998).

[23] *See Pipitone v. Biomatrix, Inc.*, 288 F.3d 239 (5th Cir. 2002).

[24] *Id.* at 248.

[25] *Id.* at 248, 246.

[26] *Johnson.*, 685 F.3d at 468; *see also Moore v. Ashland Chem. Inc.*, 151 F.3d 269, 278-79 (5th Cir. 1998) (affirming the district court's exclusion of an expert who performed differential diagnosis of possible causes of plaintiff's illness, but failed to present reliable evidence otherwise supporting his opinion defendant's chemical was the cause).

[27] *Id.*

"ruling in" the phenomenon they allege.[28] This Court has not held – and does not here hold – that differential diagnosis may never satisfy *Daubert*. Rather we observe that the district court has broad discretion to make the fact-specific inquiry in a given case as to whether such an approach is sufficiently reliable, especially in the absence of evidence "ruling in" an expert's conclusion.[29]

The parties dispute whether McCort in fact "ruled in" his downward displacement theory using scientifically reliable methodology. In his initial expert report, McCort indicated that after the accident, the tank "was found to be approximately the same vertical height" as it normally is on an undamaged vehicle. He speculated that although the tank "had displaced downward" prior to impacting the flange, the "significant forces" from the impact had returned the tank to its normal height. The report did not point to any physical evidence that "ruled in" the theory that the tank had initially displaced downward.

McCort later offered two pieces of evidence to "rule in" his conclusion that the tank displaced downward. First, he observed that the mounting brackets of the fuel tank were "bent" upwards. When deposed, McCort conceded that the bending "probably" was the result of the flange contacting the fuel tank; that is, the mounting brackets did not bend *before* the fuel tank hit the flange, causing the tank to drop, but rather *after* the tank hit the

---

[28] *See Ruggiero v. Warner-Lambert Co.*, 424 F.3d 249, 254 (2d Cir. 2005) ("Where an expert employs differential diagnosis to 'rule out' other potential causes for the injury at issue, he must also 'rule in' the suspected cause, and do so using 'scientifically valid methodology'") (citations omitted); *Buck v. Ford Motor Co.*, 810 F. Supp. 2d 815, 830 (N.D. Ohio 2011) ("[W]here an expert employs differential diagnosis to 'rule out other potential causes for the injury at issue, he must also rule in the suspected cause, and do so using scientifically valid methodology'"); *Fireman's Fund Ins. Co. v. Tecumseh Prods. Co.*, 767 F. Supp. 2d 549, 555 (D. Md. 2011) (expert must show that "objects and materials are capable of behaving in the manner [he] hypothesize[d] under the conditions of the event in question").

[29] *See Ruggiero*, 424 F.3d at 254 ("We cannot say that a differential diagnosis *may never* provide a sufficient basis for an opinion as to general causation. . . . The district judge has broad discretion in determining whether in a given case a differential diagnosis is enough by itself to support such an opinion").

flange.[30] McCort reasoned that the bend was nonetheless probative of his downward displacement theory because the fact that the brackets "bent in one direction" suggested that "[t]here's no reason they couldn't bend in another direction" – downwards.

Second, McCort's declaration states that "Kia's own testing shows that the tank displaces downward several inches during normal acceleration and deceleration events, even without the vehicle sustaining any collision-related damage." McCort did not mention this testing in his original report, nor did he reference it during his deposition. Plaintiffs have not pointed to any source in the record substantiating that claim. When mentioning Kia's internal testing in their briefing, Plaintiffs cite only to McCort's declaration.

McCort's claim about Kia's internal test could help "rule in" his theory, especially if it were otherwise substantiated in the record.[31] The only evidence we found in the record concerning McCort's theory – besides his own declaration – is in the deposition of Plaintiffs' other expert, Wallingford, and he appears to undermine McCort's position. Defense counsel asked Wallingford about the "sled test" that formed the basis for "[his] opinion that the bottom of the tank bulges." Wallingford responded that the test appeared "in the . . . documentation [that] came from Kia" and begins to concede that he was not

[30] "Q: And – but that bending could be in conjunction with the slip base interacting with the fuel tank? A: I agree, and I think it probably is."

[31] *See generally First United Fin. Corp. v. U.S. Fid. & Guar. Co.*, 96 F.3d 135, 141 (5th Cir. 1996) (Garza, J., concurring) (discussing the tension between FED. R. EVID. 703, which allows experts to state opinions based on facts or data outside the record, and FED. R. CIV. P. 56(e), which requires affidavits to set forth specific facts establishing a genuine issue of material fact). This Court has not yet resolved the apparent inconsistency between the leeway given experts under Rule 703 and the specificity requirements of Rule 56. *Stagliano v. Cincinnati Ins. Co.*, 633 F. App'x 217, 220 n.2 (5th Cir. 2015). We need not resolve the issue here, but we note that McCort's claim that Kia's testing showed downward displacement would be stronger if there were documentation of such testing in the record.

familiar with the precise parameters of the testing.[32] The next three pages of the deposition, including the rest of Wallingford's answer to the question about the particulars of the test, are absent from the record. On the next page of the deposition in the record, Wallingford continued to discuss Kia's internal testing. He stated that "[i]t shows and should have showed the Kia engineers the tank will significantly swell." But when asked, "[D]idn't you just tell us that the swelling of the tank is not a factor in this accident, this tank rupture?" Wallingford replied in the affirmative.[33]

The record is not wholly clear whether Wallingford was discussing the same internal testing referenced in McCort's declaration. In their briefing, Defendants argue that Wallingford was indeed referring to the same testing as McCort. They maintain that Wallingford's concession that the swelling was not a factor in this accident undermines McCort's theory; that Kia's testing cannot "rule in" the downward displacement theory if the swelling played no role in this accident. Plaintiffs, given the opportunity to clarify that Wallingford was talking about a different phenomenon, did not. Instead, Plaintiffs wrote that:

> Defendants' own testing confirms that the Kia Soul's fuel tank moves down several inches during normal driving, even when the vehicle is not involved in a crash [citing McCort's declaration]. Defendants complain that this testimony is irrelevant because this tank "swelling" did not contribute to the crash [citing Defendant's brief]. This misses the point. Defendants' contention that it was impossible for the tank to drop during this crash ignores that the tank does drop several inches, under normal driving conditions, even when the vehicle is not damaged.

[32] "Q: What were the parameters of this test? What was the speed, direction, et cetera? A: I have not looked at in particularly [*sic*] to see what the . . . ."

[33] "This particular one, but it's extremely poor engineering design . . . ."

This language does not reject Defendants' assertion that the internal testing referenced by McCort is the same internal testing that Wallingford explained was not a factor in this accident. And if Kia's internal testing showed a phenomenon that, although dangerous, did not play a role in this accident, the probative value of that testing in "ruling in" the downward displacement theory is minimal. Therefore, McCort's unsubstantiated reference to Kia's testing is not a reliable basis for his downward displacement theory.

Because the record does not reflect any reliable facts or data "ruling in" McCort's downward displacement theory, the district court did not abuse its discretion in excluding it.

B.

The district court also did not abuse its discretion in excluding engineer Jerry Wallingford's testimony. Wallingford's initial report argued, *inter alia*, that the Soul was unreasonably dangerous and that there were safer alternative designs that Kia could have used.[34] Texas law defines a "safer alternative design" as a design "other than the one actually used" that in reasonable probability:

> (a) would have prevented or significantly reduced the risk of the claimant's personal injury, property damage, or death without substantially impairing the product's utility and
> (b) was economically and technologically feasible at the time the product left the control of the manufacturer or seller by the application of existing or reasonably achievable scientific knowledge.[35]

Plaintiffs argue on appeal that Wallingford should have been permitted to testify about two safer alternative designs: a fuel tank shield and fuel tank

[34] Wallingford also originally intended to testify as to the vehicle's crashworthiness. The district court excluded this testimony, a decision which Plaintiffs have not appealed.

[35] TEX. CIV. PRAC. & REM. CODE § 82.005(b).

fastening straps.[36] According to Plaintiffs, Wallingford would have shown that a fuel tank shield, made of either plastic or metal, would have prevented the fuel tank from dropping in the crash, or would have prevented rupture by "absorb[ing] or redirect[ing] the energy from the impact." Similarly, they maintain that Wallingford could have shown that fuel tank fastening straps would have prevented the tank from moving, or would have raised the tank higher into the cavity of under the vehicle, avoiding contact with the flange. In his investigation, Wallingford reviewed photographs and law enforcement reports from the scene of the accident, Kia's internal documents about the Soul, and depositions from other parties, including Kia's experts. He also employed "the laws of physics" and his own experience and education.

The district court excluded his testimony, writing that:

> Mr. Wallingford's proffered expert opinions and related testimony regarding the fuel tank straps and fuel tank shield are unreliable and thus, inadmissible for the lack of reliance on sufficient facts or reliable underlying data, and do not satisfy any of the requirements of the standards set forth in parts (a) – (d) of Rule 702 of the Federal Rules of Evidence.

The district court's order also indicates that its exclusion was, at least in part, due to Wallingford's dependence on McCort's theory that the tank displaced downwards during the accident. The court wrote that "[i]n particular, Wallingford's opinions are based on the premise [from McCort's report] that 'following the initial crash, the fuel tank deformed downward.'" Since the court had already deemed McCort's testimony inadmissible, it concluded that Wallingford's testimony about safer alternative designs was also inadmissible.

[36] Wallingford originally argued that a different fuel tank service cover would have also prevented Mr. Sims's death, but Plaintiffs do not argue on appeal that he should have been allowed to testify about that alternative design.

Plaintiffs argue that this conclusion rested upon "a clearly erroneous assessment of the evidence,"[37] because Wallingford only partially incorporated McCort's theory into his. Indeed, Wallingford's report concluded that a shield would have protected the fuel tank from rupture upon contact with the flange, whether the tank dropped or not. In this regard, the record shows that Wallingford's conclusions were, at least in part, independent from McCort's inadmissible theory. To the extent the district court's exclusion of Wallingford's testimony about the *shields* rested upon its understanding to the contrary, the court erred.[38]

On the other hand, the district court correctly determined that Wallingford's fuel tank *straps* theory necessarily rested upon McCort's inadmissible downward-displacement theory. Wallingford reasoned that using straps to raise the tank would have "maximize[d] the ground clearance" such that the tank avoided contact with the flange. He substantiated this theory by looking to the measurements of the flange, the Soul's ground clearance, and the height at which the flange contacted the tank. It is undisputed that the flange was 3.25 inches in height. Wallingford provided varying measurements for the ground clearance of the Kia Soul, depending on the occupancy of the vehicle. He first reported that the fuel tank "has a ground clearance of approximately 210 millimeters (slightly more than 8 inches)" and later explained that "the gas tank rides about 6 inches off of the ground when carrying five passengers." Wallingford also observed that the top of the flange

[37] *Bocanegra v. Vicmar Servs., Inc.*, 320 F.3d 581, 584 (5th Cir.2003).

[38] However, the district court's exclusion of Wallingford's testimony did not rest entirely upon its view that Wallingford's testimony built upon McCort's. As excerpted above, the court also cited to Rule 702 generally. The record provides ample support for the position that Wallingford's shield theory cannot satisfy *Daubert* even assuming it did not build upon McCort's theory.

contacted the front of the fuel tank approximately two inches above the bottom of the tank.

Wallingford's theory must account for the gap between the top of the flange – 3.25 inches off the ground – and the height at which Wallingford asserts it contacted the tank – approximately 8 inches off the ground. McCort's theory about tank displacement is not the only way to account for the closing of this gap. For instance, the wheels could have deflated, sinking the entire car lower to the ground. But that was not Wallingford's theory.[39] Instead, he relied on McCort's theory, writing that "[h]ad Kia used fuel mounting straps, rather than direct mounting of the fuel tank, the downward deformation of the fuel tank would have been minimalized preserved [*sic*] the ground clearance of the fuel tank."

On appeal, Plaintiffs argue that "Wallingford's opinions regarding the use of the fuel tank straps are not reliant upon the opinions of Mr. McCort." They reason that McCort analyzed mounting bolts, "a completely different technology" than straps. This distinction bears no logical relevance to whether Wallingford relied on McCort's theory that the tank displaced downwards. Plaintiffs also insist that "the use of fuel tank straps would have increased the ground clearance of the fuel tank sufficiently to avoid contact with the signpost base regardless of how the tank ultimately dropped." That may be true, but nothing in Wallingford's report, testimony, or declaration explains how lifting the tank would have prevented the rupture here without assuming the tank was already lower to the ground than usual. Therefore, the district court properly excluded Wallingford's theory about fuel tank straps, because it relied on McCort's inadmissible downward displacement theory.

[39] In fact, Plaintiffs' other expert, McCort, insisted that the body of the car could not have sunk low enough to cause the fuel tank to contact the flange.

Turning to the court's exclusion of Wallingford's shield theory, we again conclude that the district court did not abuse its discretion. After briefing from both parties, the court held a *Daubert* hearing concerning the admissibility of Wallingford's proffered testimony. Defendants raised essentially the same arguments they do on appeal. Specifically, they argued that Wallingford's proposed fuel tank shield (i) would not have made a difference in this accident; (ii) had not been subject to risk-utility analysis; and (iii) had not been shown to be technologically or economically feasible.

Some of these arguments are without merit. For instance, under Texas law, a claimant can establish the technical feasibility of a safer alternative design by showing its use by others in the industry.[40] Wallingford's report indicated that at least some kinds of tank shields were widely used by car manufacturers – including Kia – well before this accident. Defendants' experts also indicated that fuel shields were commonly used in the industry. Therefore, Wallingford likely met his burden of demonstrating technical feasibility.

Wallingford also offered some evidence that the alternative designs were possible from a risk-utility perspective. In Texas, "the plaintiff must show the safety benefits from the proposed design are foreseeably greater than the resulting costs, including any diminished usefulness or diminished safety."[41] The burden is minimal: plaintiffs need only offer "*some* evidence that their alternative design . . . would not have introduced other dangers of equal or greater magnitude."[42] Here, Wallingford initially reported that "the use of a

---

[40] *See Goodner v. Hyundai Motor Co., Ltd.*, 650 F.3d 1034, 1043-44 (5th Cir. 2011) (citing *Honda of Am. Mfg. Inc. v. Norman*, 104 S.W.3d 600, 607 (Tex. App. 2003)).

[41] *Hodges v. Mack Trucks Inc.*, 474 F.3d 188, 196 (5th Cir. 2006) (internal quotations omitted).

[42] *Uniroyal Goodrich Tire Co. v. Martinez*, 977 S.W.2d 328, 337-38 (Tex. 1998) (emphasis added); *cf. Smith v. Louisville Ladder Co.*, 237 F.3d 515, 520 (5th Cir. 2001) (reversing verdict where plaintiff "conceded . . . he made no risk-benefit analysis, including what additional hazards" his new design would have caused).

fuel tank shield would not have hindered the performance of the vehicle." He later added, "I have concluded that the benefits far outweigh any impairment in utility," but noted additional weight as one potential minor impairment.[43] Those assertions probably meet his minimal burden to show the risk-utility of the alternative designs.

On the other hand, Defendants have a strong argument that Wallingford did not show that shields would have made a difference in this case. That is, they argue that Wallingford cannot establish that the absence of a shield caused the fuel tank to rupture here. The record shows, and the district court agreed, that this argument was central to Wallingford's testimony. During the *Daubert* hearing, the court said that "[t]he causation issue, what caused it to rupture is, to me, the most important thing here."

Plaintiffs argue that Wallingford met his burden to establish causation. In his report, he indicated that a "fuel tank shield would have absorbed or redirected the energy from the impact," preventing the rupture. Plaintiffs note that Wallingford was not required under Texas law to actually "build and test" a model of the shield in order to establish that it is a safer alternative design.[44] The proposed design need only be "capable of being developed."[45] As Wallingford stated during his deposition, "from a monetary standpoint" he

[43] Wallingford provided this additional information through a declaration submitted after his initial report and deposition. Defendants note that Wallingford had the opportunity to disclose the information contained in the declaration earlier, but they have not explicitly argued that the information cannot be considered because of its alleged untimeliness. Instead, Defendants argue that the declaration is a "sham" because it is inconsistent with Wallingford's deposition. Even if this inconsistency is a "sham," the proper remedy is not striking the entire declaration but rather the inconsistent part. *See Cole v. Frank's Casing Crew & Rental Tools, Inc.*, No. CIV.A.H-04-2566, 2005 WL 2647966, at *5 (S.D. Tex. Oct. 17, 2005).

[44] *See Gen. Motors Corp. v. Sanchez*, 997 S.W.2d 584, 592 (Tex. 1999); *see also Genie Indus., Inc. v. Matak*, 462 S.W.3d 1, 7 (Tex. 2015).

[45] *Gen. Motors Corp.*, 997 S.W.2d at 592; *see also Genie Indus.*, 462 S.W.3d at 7; *Boatland of Hous., Inc. v. Bailey,* 609 S.W.2d 743 (Tex. 1980).

could not justify building a full-size prototype to test whether his proposed design would withstand recreated crash conditions.

However, as this Court explained in *Casey v. Toyota*, "Texas law expects that an alternative design be tested before a jury can reasonably conclude that the alternative would prevent or reduce the risk of injury."[46] This testing need not entail actually constructing a model shield; testing can be as simple as applying math and physics to establish the viability of a design. In *General Motors v. Sanchez*, for instance, the Supreme Court of Texas explained that plaintiffs in design defect cases do not have to "build and test" a prototype "to prove a safer alternative design." But the expert in *Sanchez* relied on more than his own conclusory testimony. As the court emphasized, the *Sanchez* expert used "engineering principles" to "support his conclusion" that his proposed design would lower the risk of accident from ten percent to one percent.[47] Wallingford offered no such figures.

Plaintiffs also point to a recent Supreme Court of Texas case, *Genie Industries v. Matak*, in which the court reiterated that a safer alternative design "need not be actually built and tested."[48] There, the court reviewed plaintiff's expert's testimony about possible safer alternative designs, and found only "weak" and conclusory evidence that the proposed designs would have prevented the accident.[49] However, concluding that there was more "than a scintilla" of evidence, the court upheld the jury's determination that there were safer alternative designs.[50] *Genie Industries* does little to help Plaintiffs here. The *Genie* court was reviewing a jury's judgment in favor of the plaintiff,

[46] *Casey v. Toyota Motor Eng'g & Mfg. N. Am., Inc.,* 770 F.3d 322, 332 (5th Cir. 2014).
[47] *Sanchez*, 997 S.W.2d at 591.
[48] 462 S.W.3d 1 (Tex. 2015).
[49] *Id.* at 9.
[50] *Id.* at 9, 12.

necessitating a deferential standard of review.[51] The *Genie* court's description of the expert's evidence suggests that the testimony would not have survived a more stringent review.[52] Here, we review the district court's exclusion of an expert for an abuse of discretion.

Finally, Plaintiffs argue that Defendants' expert provided testimony supporting Wallingford's causation argument. Specifically, Defense expert Jack Ridenour testified that Ford built its Panther Platform vehicles with fuel tank shields as "part of the solution" to the problem of fuel tanks rupturing. Since Panther Platforms were used as law enforcement vehicles, they were often involved in collisions involving speeds in excess of 100 miles per hour. Ridenour testified that the shields, along with "other upgrades," "improved the performance of the vehicle [but] [t]hey did not eliminate the risk." Ford "felt that they were effective upgrades." Since it is undisputed that the collision here involved speeds of less than 100 miles per hour, Plaintiffs argue that Ridenour's testimony shows that a fuel tank shield would have prevented the rupture of the Kia Soul's tank.

This conclusion requires quite a leap. Ridenour stated that Ford "felt" that the fuel tanks shields – in conjunction with trunk packs and other changes not named in the record[53] – were effective. He also said they improved the vehicle's performance, although he did not specifically say in what regard. Ridenour also noted that the changes did not eliminate "the risk," presumably

---

[51] *Id.* at 3.

[52] *See id.* at 8 ("Absent more, [the expert's] testimony is the mere ipse dixit of a credentialed witness"); *id.* ("[The expert's] conclusion that the design would have been safer . . . has little support in the evidence"); *id.* ("The obvious flaw in the [proposed alternative] design is that it would do little to prevent misuse").

[53] Further obscuring Ridenour's testimony is the fact that Plaintiffs only provided select excerpts from the deposition. For instance, pages 75-77 of his testimony are absent from the record, despite being right in the middle of his testimony concerning fuel tank shields.

of tank rupture. Reviewing for abuse of discretion, we cannot conclude that Ridenour's testimony provided a reliable basis for Wallingford to conclude that a fuel tank shield would have prevented rupture in this case.

Wallingford also failed to establish the economic feasibility of the alternative designs. In Texas, experts testifying about safer alternative designs must establish that the designs were economically feasible.[54] Wallingford did not discuss the issue in his report. After the Defendants moved to exclude his testimony, arguing *inter alia* that he failed to show economic feasibility, Plaintiffs submitted a sworn declaration, in which Wallingford described the cost of shields and straps.[55]

At the *Daubert* hearing, the court expressed some concern that Wallingford had not provided any information about economic feasibility in his original report. Defense counsel stated that Plaintiffs "[were] trying to fill that gap up now," with the declaration, to which the court responded, "[w]ell, is that something beyond his report?" After defense counsel explained that it was, the court replied that it would "think some more about that."

Plaintiffs argue that Wallingford implicitly showed the alternative designs' economic feasibility by noting that the designs are widely used in the automobile industry. But "[w]hile the use of an alternative design by another manufacturer may establish technological feasibility, [Texas courts] have held that, as a matter of law, it does not establish economic feasibility."[56] On appeal, Plaintiffs do not mention Wallingford's sworn declaration about costs,

---

[54] TEX. CIV. PRAC. & REM. CODE § 82.005(b).

[55] The declaration explained that fuel tank shields cost between $40 and $300, and fuel tank straps cost $25 to $85.

[56] *Honda of Am. Mfg., Inc. v. Norman*, 104 S.W.3d 600, 607 (Tex. App. 2003); *see also Goodner v. Hyundai Motor Co.*, 650 F.3d 1034, 1043-44 (5th Cir. 2011) ("A few Texas appellate courts have found that the use of an alternative design by another manufacturer alone cannot establish economic feasibility."); *Smith v. Aqua-Flo, Inc.,* 23 S.W.3d 473, 477 (Tex. App 2000); *Jaimes v. Fiesta Mart,* 21 S.W.3d 301, 306 (Tex. App. 1999).

apparently abandoning the argument that it serves to "fill a gap" in his original report.

Finally, Plaintiffs insist that Defendants created the gap in Wallingford's theories by failing to ask him relevant questions during his deposition and by cutting him off when he was starting to provide more thorough explanations of his theory. This argument misconstrues the burden of proof in matters of expert testimony. It is Plaintiffs who bear the burden of establishing the reliability of the expert's testimony.[57] Defendants are not obligated to help Plaintiffs meet that burden during depositions.

Because the district court did not abuse its discretion in determining that Plaintiffs' experts did not rely on sufficiently reliable methods and data, we affirm its exclusion of some of McCort's testimony and all of Wallingford's.

IV.

Finally, Plaintiffs argue that the district court should not have granted summary judgment in favor of Defendants. We disagree. Summary judgment is proper if "the movant shows that there is no genuine dispute as to any material fact."[58] Our review of the district court's grant of summary judgment is *de novo*.[59]

Under Texas law, "expert testimony is generally encouraged if not required to establish a products liability claim."[60] In particular, expert testimony is crucial in establishing that the alleged design defect caused the injury.[61] As the district court correctly concluded, without admissible expert

---

[57] *Johnson*, 685 F.3d at 458.

[58] FED. R. CIV. P. 56(a).

[59] *Tiblier v. Dlabal*, 743 F.3d 1004, 1007 (5th Cir. 2014).

[60] *Ford Motor Co. v. Ledesma*, 242 S.W.3d 32, 42 (Tex. 2007).

[61] *See Mack Trucks, Inc. v. Tamez*, 206 S.W.3d 572, 583 (Tex. 2006) (holding that expert testimony was required to establish causation in products liability case, because "[a] lay juror's general experience and common knowledge do not extend to whether design

testimony, the plaintiffs cannot raise a genuine issue of material fact concerning key elements of their products liability claim. It follows that the court properly granted summary judgment in favor of the defendants.

We AFFIRM the judgment of the district court.

---

defects such as those alleged in this case caused releases of diesel fuel during a rollover accident"); *Nissan Motor Co. v. Armstrong,* 145 S.W.3d 131, 137 (Tex. 2004) (holding, in a case where the plaintiff alleged and the jury found design, manufacturing, and marketing defects, that "[i]n [prior] cases, it was not enough that a vehicle accelerated when claimants swore they had done nothing. Instead, we have consistently required competent expert testimony and objective proof that a defect caused the acceleration. . . . These requirements are not peculiar to unintended acceleration cases.").