

2018 PA Super 231

RONALD M. DUNLAP	:	IN THE SUPERIOR COURT OF PENNSYLVANIA
Appellant	:	
v.	:	
FEDERAL SIGNAL CORPORATION	:	
***	:	
DINO ABBOT	:	
Appellant	:	
v.	:	
FEDERAL SIGNAL CORPORATION	:	
***	:	
KEITH BRADLEY	:	
Appellant	:	
v.	:	
FEDERAL SIGNAL CORPORATION	:	
***	:	
BRIAN CAVANAUGH	:	
Appellant	:	
v.	:	
FEDERAL SIGNAL CORPORATION	:	
***	:	
GLENN GASIOROWSKI	:	

Appellant :  
v.  
FEDERAL SIGNAL CORPORATION  
\*\*\*  
ROGER MAHER  
Appellant :  
v.  
FEDERAL SIGNAL CORPORATION  
\*\*\*  
CARL ROELL  
Appellant :  
v.

FEDERAL SIGNAL CORPORATION No. 1747 WDA 2016

Appeal from the Order Entered October 21, 2016  
In the Court of Common Pleas of Allegheny County Civil Division at  
No(s): GD-13-006083,  
GD-13-009820, GD-13-010550,  
GD-13-013251

BEFORE: BOWES, J., LAZARUS, J., and OTT, J.

OPINION BY BOWES, J.:

**FILED AUGUST 20, 2018**

Appellants Roger Maher and Carl Roell ("Maher and Roell") appeal from the order granting summary judgment in favor of Federal Signal Corporation ("Federal Signal"), and dismissing all remaining claims. We affirm.

Maher and Roell are members of the Pittsburgh Bureau of Fire. They are parties in a mass tort products liability action commenced by approximately 247 firefighters who allegedly suffered permanent hearing loss due to exposure to siren noise from the Q2B siren ("Q-siren") manufactured by Federal Signal. Their cases were consolidated for trial with cases filed by six other firefighters (collectively "plaintiff firefighters") under the **Dunlap** caption and designated as Trial Group 1A.<sup>1</sup>

The underlying complaint of the plaintiff firefighters is that the Q-siren is unreasonably dangerous and defective and negligently designed because it emits omnidirectional, high-decibel sound that, over time, causes permanent hearing loss to firefighters occupying the firetruck. They offered the expert testimony of Christopher J. Struck, an acoustics expert, to the effect that a shroud, particularly the Bromley Shroud, could be applied to the Q-siren to divert the noise to the front of the vehicle while still meeting industry standards for warning sirens. Instead of emitting sound in all directions, the shroud would funnel the noise in a cone-shaped direction in front of the firetruck, thereby reducing the noise level in the cab of that vehicle.

Federal Signal argued that attaching a shroud to reduce the angle at which the sound was emitted would render its product less safe for the pedestrians and motorists it was intended to warn. It pointed to the danger presented by the proposed design to motorists and pedestrians, especially at

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<sup>1</sup> Originally, Trial Group 1A consisted of eight plaintiffs. The claims of Christopher Wilson were dismissed prior to the order at issue herein.

intersections, as the shroud would reduce the noise level of the siren to the rear and sides of the vehicle. The company contended that plaintiff firefighters had failed to offer *prima facie* evidence that the shrouded alternative was effective and safe for all users, including the pedestrians and motorists it was intended to warn.

After the completion of discovery and the filing of all expert reports, Federal Signal filed a **Frye**<sup>2</sup> motion to preclude the expert testimony of Mr. Struck, and a motion for summary judgment on the strict liability claim. The Group 1A plaintiff firefighters opposed both motions. Following argument on January 21, 2016, the trial court denied the **Frye** motion, but granted summary judgment on the strict products liability claim. In response to Federal Signal's motion for clarification of the order, the trial court pointed out that the plaintiff firefighters' negligence claim was still outstanding, and granted leave to Federal Signal to seek summary judgment on that claim as well. Federal Signal filed the motion, the firefighter plaintiffs opposed it, and on October 21, 2016, the trial court granted summary judgment in favor of Federal Signal on the remaining negligence claims.

Maher and Roell timely appealed and complied with the trial court's order to file a Pa.R.A.P. 1925(b) concise statement of errors complained of on appeal, and the trial court penned its Rule 1925(a) opinion. They raise one issue for our review:

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<sup>2</sup> **Frye v. United States**, 293 F. 1013 (D.C. Cir. 1923).

Whether the [t]rial [c]ourt made an error of law in granting [Federal Signal's] [m]otion for [s]ummary [j]udgment and dismissing the action due to the lack of expert testimony on the issue of whether the proposed feasible alternative design "will provide as much protection to motorists, pedestrians, and firefighters occupying the fire truck as the design of the Federal Signal siren that provides unrestricted 360-degree noise projection." Memorandum of the Hon. R. Stanton Wettick, Jr., [4/14/16, at 8.]

Appellants' brief at 4.

It is well settled that "summary judgment is appropriate only in those cases where the record clearly demonstrates that there is no genuine issue of material fact and that the moving party is entitled to judgment as a matter of law." ***Truax v. Roulhac***, 126 A.3d 991, 996 (Pa.Super. 2015) (*en banc*) (quoting ***Summers v. Certainteed Corp.***, 997 A.2d 1152, 1159 (Pa. 2010)). In ruling on such a motion, "the trial court must take all facts of record and reasonable inferences therefrom in a light most favorable to the non-moving party" and "resolve all doubts as to the existence of a genuine issue of material fact against the moving party." ***Id.*** "Where the non-moving party bears the burden of proof on an issue, he may not merely rely on his pleadings or answers in order to survive summary judgment." ***Babb v. Ctr. Cnty. Hosp.***, 47 A.3d 1214, 1223 (Pa.Super. 2012) (citations omitted). "[F]ailure of a non-moving party to adduce sufficient evidence on an issue essential to his case and on which he bears the burden of proof establishes the entitlement of the

moving party to judgment as a matter of law.”<sup>3</sup> ***Id.*** Thus, “a proper grant of summary judgment depends upon an evidentiary record that either (1) shows the material facts are undisputed or (2) contains insufficient facts to make out a *prima facie* cause of action or defense.” ***Basile v. H & R Block, Inc.***, 777 A.2d 95, 100 (Pa.Super. 2001) (quoting ***McCarthy v. Dan Lepore & Sons Co., Inc.***, 724 A.2d 938, 940 (Pa.Super. 1998)).

On appeal, this Court

may reverse a grant of summary judgment if there has been an error of law or an abuse of discretion. But the issue as to whether there are no genuine issues as to any material fact presents a question of law, and therefore, on that question our standard of review is *de novo*. This means we need not defer to the determinations made by the lower tribunals.

***Truax, supra*** at 996 (quoting ***Weaver v. Lancaster Newspapers, Inc.***, 926 A.2d 899, 902-03 (Pa. 2007)). “To the extent that this Court must resolve a question of law, we shall review the grant of summary judgment in the context of the entire record.” ***Id.*** at 903.

Thus, our responsibility as an appellate court is to determine whether the record either establishes that the material facts are undisputed or contains insufficient evidence of facts to make out a *prima facie* cause of action, such that there is no issue to be decided by the fact-finder. If there is evidence that would allow a

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<sup>3</sup> In ***Tincher v. Omega Flex***, 104 A.3d 328 (Pa. 2014), our Supreme Court noted that, in California, when a plaintiff proceeds on a strict products liability theory based on the risk-utility standard, the burdens of production and persuasion shift to the defendant to prove that its product is not defective in design. ***See Barker v. Lull Eng'g Co.***, 573 P.2d 443, 445 (Cal. 1978). The ***Tincher*** Court declined to address, however, whether such a burden-shifting rule applied in Pennsylvania.

fact-finder to render a verdict in favor of the non-moving party, then summary judgment should be denied.

*Id.* (quoting **Reeser v. NGK N. Am., Inc.**, 14 A.3d 896, 898 (Pa.Super. 2011)) (citations omitted).

Implicated herein is Pennsylvania's strict products liability law governing design defects. The Restatement (Second) of Torts § 402A remains the law of Pennsylvania in such actions. In **Tincher v. Omega Flex**, 104 A.3d 328, 399 (Pa. 2014), our Supreme Court declined to adopt the Restatement (Third) of Torts, but clarified that a plaintiff could prove defective design in two ways: 1) by showing that the product's danger is unknowable and unacceptable to the average consumer (the consumer expectations test); or 2) that a reasonable person would conclude that the probability and gravity of the harm caused by the product outweigh the burden or cost of taking precautions (the risk-utility standard).

Plaintiff firefighters proceeded under the risk-utility test. The relevant factors for such an analysis were set forth in **Tincher**:

1. The usefulness and desirability of the product – its utility to the user and the public as a whole.
2. The safety aspects of the product – the likelihood that it will cause injury, and the probable seriousness of the injury.
3. The availability of a substitute product which would meet the same need and not be as unsafe.
4. The manufacturer's ability to eliminate the unsafe character of the product without impairing its usefulness or making it too expensive to maintain its utility.

5. The user's ability to avoid danger by the exercise of care in the use of the product.
6. The user's anticipated awareness of the dangers inherent in the product and their availability, because of general public knowledge of the obvious condition of the product, or the existence of suitable warnings or instructions.
7. The feasibility, on the part of the manufacturer, of spreading the loss by setting the price of the product or carrying liability insurance.

**Tincher, supra** at 398-99 (quoting John W. Wade, *On the Nature of Strict Tort Liability for Products*, 44 Miss. L. J. 825, 837-38 (1973)). The **Tincher** Court recognized that trial courts would not necessarily have the expertise to balance these factors, and thus, in the majority of cases, experts would be required to analyze them.

According to Maher and Roell, their design for the shrouded siren would eliminate the unsafe character of the siren without impairing its usefulness as a warning device. They claim that the trial court erred in requiring expert testimony to the effect that the proposed alternative design would provide as much protection to motorists, pedestrians, and firefighters occupying the fire truck as Federal Signal's Q-siren. They contend first that the trial court looked at the risk-utility test, focused on the third factor, and incorrectly expanded it to include non-users of the product, namely pedestrians and motorists. In addition, Maher and Roell contend that such expert testimony is unnecessary

in light of evidence that the proposed alternative design, the shrouded siren, meets all industry requirements set forth in SAE J1849.<sup>4</sup>

Federal Signal counters first that Maher and Roell's argument based on the SAE standard is not properly before this Court, as the standard and testimony regarding its promulgation were only submitted to the trial court with the motion for reconsideration. They maintain that evidence that was not before the trial court in ruling on the motion for summary judgment is not part of the record on appeal.

Second, Federal Signal argues that the trial court correctly granted summary judgment since Maher and Roell did not present expert testimony necessary for a *prima facie* case. Not only were the plaintiff firefighters required to demonstrate a feasible alternative design, but also that the alternative design was effective and did not introduce a new or greater hazard. Mr. Struck's expert testimony did not address the general effectiveness of the shrouded siren versus the Q-siren vis-'a-vis the public.

Third, Federal Signal argues that even if the SAE standard is considered, compliance therewith is not *de facto* proof that a siren is safe and effective. It maintains that the standard only sets minimum noise outputs in the front

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<sup>4</sup> The Society of Automotive Engineers promulgates industry standards. SAE J1849 contains performance requirements, guidelines, and test methods for electronic siren systems and electromechanical sirens used on emergency vehicles with the right-of-way.

of the vehicle and does not contemplate the general risk to pedestrians and motorists.

Finally, Federal Signal maintains that the trial court properly considered the safety of the public, namely pedestrians and motorists, as well as firefighters in determining whether the product's design was defective. It points to language in ***Tincher, supra*** at 399, advising courts to consider the "utility to the user and to the public as a whole." Federal Signal observes that Maher and Roell cite no authority in support of their contention that pedestrians and motorists are not users of the warning device.

As the trial court noted, sirens are dangerous products. They emit noise calculated to warn motorists and pedestrians of the presence of a speeding emergency vehicle. In order to prevail in the instant products liability action, plaintiff firefighters had to prove that Federal Signal's Q-siren was unreasonably dangerous, and that exposure to the noise caused the firefighters' hearing loss. The trial court found that the medical evidence in the record, if credited by the factfinder, established the requisite causation. Unreasonably dangerous design could be established with proof of an alternative feasible design that would reduce the decibel level of the noise

experienced by the firefighters, but still provide effective warnings to the public.<sup>5</sup> The court found that proof lacking.

Plaintiff firefighters' acoustics expert, Mr. Struck, presented an alternative siren design that would afford greater protection for firefighters from hearing loss by adding a Bromley Shroud, which would direct the noise to the front of the fire truck and away from the cab. However, he focused solely on the benefits of the shrouded design to the firefighters occupying the cab of the firetruck; he did not opine whether that design would protect the public. The expert offered no opinion whether this alternative design was as effective in warning all users, including pedestrians and motorists, located to the side and rear of the vehicle. In addition, Mr. Struck expressly stated that he had no opinion as to what specific angle the siren needed to project in order to be effective as a warning device, and that he "would simply defer to the industry standard, the SAE J1849." Struck Deposition, 4/19/13, at 150.

The trial court concluded that, after **Tincher**, expert testimony was required regarding the alternative product's effectiveness as a warning device for all users. It rejected the notion that the SAE J1849 standard, or the proposed alternative's compliance with the standard, was a substitute for such

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<sup>5</sup> The trial court noted evidence in the record from an expert in an Illinois case that, in forty to fifty-two percent of accidents involving emergency response vehicles, the initial point of collision was the side or back of the emergency vehicle. Trial Court Memorandum, 4/14/16, at 7 n.6 (citing Arndt Tr., 11/17/11, at 1216:5-8).

expert testimony, as it was only a minimum industry standard.<sup>6</sup> We agree for the reasons that follow.

For decades after Section 402A became the law of Pennsylvania, defendants in strict products liability actions sought to introduce proof of their product's compliance with minimum industry standards in order to negate the existence of a design defect. We held such evidence to be inadmissible under the then-prevailing law of **Azzarello v. Black Bros. Co.**, 391 A.2d 1020 (Pa. 1978) (*overruled by Tincher, supra*), reasoning that compliance with minimum standards is not proof of non-defective design and that negligence concepts have no place in strict liability.

This Court recently noted in **Webb v. Volvo Cars of America, LLC**, 148 A.3d 473 (Pa.Super. 2016), that the prohibition against evidence of government or industry standards had "its genesis in the now-defunct

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<sup>6</sup> We find no merit in Federal Signal's position that the SAE standard is not before us on appeal because a copy of the standard was not initially provided to the court. The standard was identified in Mr. Struck's report and discussed at his deposition. Plaintiff firefighters contended that a jury could find that the alternative design provided the same protection to the public based merely on its compliance with that industry standard. At oral argument on the motion for summary judgment, counsel for Federal Signal explained why the expert's opinion that the proposed alternative design met the industry standard was insufficient to demonstrate that it was effective in protecting the public. **See** N.T., 1/21/16, at 33. In granting summary judgment in favor of Federal Signal, the trial court did not need a copy of the standard in order to find that industry standards are minimum standards only, and that plaintiff firefighters could not prevail without expert testimony that the alternative design was effective in protecting motorists and pedestrians.

**Azzarello** regime.” ***Id.*** at 483. Nonetheless, we concluded therein that the overruling of **Azzarello** did not provide a sufficient basis to disregard the evidentiary rule espoused in **Lewis v. Coffing Hoist Div., Duff Norton Co., Inc.**, 528 A.2d 590 (Pa. 1987), and **Gaudio v. Ford Motor Co.**, 976 A.2d 524, 547 (Pa.Super. 2009), that a product’s compliance with government standards is irrelevant and inadmissible in a strict products liability action.<sup>7</sup> ***Id.*** at 483. In particular, we found that **Tincher** did not undermine the concern, identified in **Lewis**, that defective design could be widespread in the industry, and hence, evidence that a product comported with industry standards was not proof of non-defectiveness. **See Lewis, supra** at 594.<sup>8</sup>

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<sup>7</sup> We do not disagree with the learned Dissent that this Court posited in **Webb v. Volvo Cars of America, LLC**, 148 A.3d 473 (Pa.Super. 2016), that the evidentiary rule prohibiting admission of industry standards might be re-examined post-**Tincher**. Nonetheless, in **Webb**, this Court reasoned that **Tincher** did not abrogate the accepted notion that defective design can be widespread in an industry, and that compliance with industry standards is not proof of non-defectiveness.

<sup>8</sup> The continued viability of the evidentiary rule espoused in **Lewis** and **Gaudio** is not before us. However, that issue arose in **Renninger v. A&R Mach. Shop**, 163 A.3d 988 (Pa.Super. 2017), a post-**Tincher** design defect case. The plaintiff proceeded under a risk-utility analysis. Plaintiff worked in a plant that constructed modular homes. Casters were attached to the bottom of the frame of the homes to enable them to move along the assembly line. Plaintiff sustained a serious injury when a caster designed and manufactured by the defendant ran over his foot. Prior to trial, plaintiff filed a motion *in limine* to preclude evidence of industry standards applicable to casters, as well as OSHA standards. The trial court denied the motion, reasoning that, “industry standards may supply the jury with a useful starting point from which to evaluate the caster’s design.” ***Id.*** at 997. At trial, plaintiff’s expert opined that the casters were defective because they lacked a toe guard; the defense

The question herein is whether Maher and Roell adduced sufficient evidence on the effectiveness of their proposed alternative design to withstand summary judgment. They argue that proof that their design comported with industry standards is enough to prove its effectiveness for all users.

The trial court concluded that expert opinion to that effect was necessary and that, although Mr. Struck opined that the proposed alternative design was safer for firefighters, he did not offer any expert opinion regarding the effectiveness of that design in warning motorists and pedestrians. In lieu of expert opinion on that subject, Mr. Struck merely deferred to the SAE standards, which are minimum requirements only.

In ruling on the motion, the trial court considered evidence of the industry standards and the compliance of the firefighters' proposed design with those standards. The court determined that compliance with standards alone was not *prima facie* evidence that a product's design was non-defective and effective, and held that expert opinion was necessary to establish that the

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expert testified that the casters met the industry and ANSI standards, which did not require a guard. The jury returned a defense verdict. On appeal, plaintiffs-appellants purported to challenge the trial court's admission of industry standards regarding casters, as well as the OSHA standards. Unfortunately, they limited their argument to the latter. Accordingly, we confined our analysis to the arguments actually presented and did not reach the question whether the court erred in permitting the defense expert to introduce and rely upon industry standards for casters after **Tincher**.

proposed alternative design was effective and met the need of all users, not just firefighters.

At issue are technical matters that are beyond the ken of ordinary persons and within the knowledge of expert witnesses available to the parties. We agree with the trial court that expert opinion on the effectiveness of the alternative design as a warning for pedestrians and motorists was required, and that it was lacking herein.<sup>9</sup> While Maher and Roell offered expert opinion that their proposed alternative design was safer for firefighters, they failed to adduce competent expert opinion that it also met the need for an effective warning for motorists and pedestrians. Maher and Roell's proof that their proposed design met the industry standard was not enough to establish a *prima facie* case that it was more effective for all users than the Q-siren.

Order affirmed.

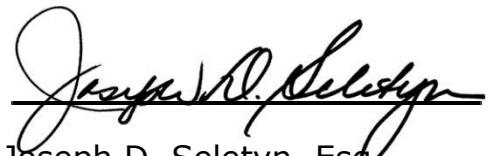
Judge Ott joins the opinion.

Judge Lazarus files a dissenting opinion.

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<sup>9</sup> The Dissent expresses disagreement with the notion "that we must disregard the evidence in this case purporting to show Maher and Roell's alternative design is effective for purposes of the risk-utility standard" and maintains that "[t]he evidence of record is sufficient to make a *prima facie* case that the Q-siren was defective and Maher and Roell's proposed alternative design provided as much protection to the public as the Q-siren." Dissenting Opinion at 7-8. The record reflects, however, that the trial court did not disregard the standards in ruling on the motion for summary judgment. Rather, the court concluded that expert opinion was required on the efficacy of the alternative design with regard to pedestrians and motorists; evidence of compliance with the standards alone did not suffice for purposes of making out a *prima facie* case.

Judgment Entered.

A handwritten signature in black ink, appearing to read "Joseph D. Seletyn". The signature is fluid and cursive, with a horizontal line underneath it.

Joseph D. Seletyn, Esq.  
Prothonotary

Date: 8/20/2018