

TERRENCE D. TINCHER and  
JUDITH R. TINCHER  
Plaintiffs/Appellees

VS.

OMEGAFLEX, INC., et al.  
Defendant/Appellant

IN THE COURT OF COMMON PLEAS  
CHESTER COUNTY, PENNSYLVANIA

NO. 2008-00974-CA  
1472 EDA 2011

CIVIL ACTION

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Attorneys for Defendant/Appellant

**OPINION**

BY: NAGLE, S.J.

August 5, 2011

Defendant, Omega Flex, Inc. ("Appellant") appeals from a verdict entered by a jury following trial in which it awarded the Plaintiffs, Terrence D. Tincher and Judith R. Tincher ("Appellees") \$958,895.85 in damages they sustained in a fire. The damage award included recompense for \$406,532.80 building damage, \$988.83 additional property/structures loss, \$503,945.58 contents loss, and \$47,428.64 alternate living expenses. On May 17, 2011 we awarded Plaintiffs delay damages of \$69,336.05. Appellant filed post-trial motions, which we denied by Order dated May 17, 2011.

On June 20, 2007, a fire ignited at the Appellees' home located at 570 Gramercy Lane, Downingtown, Chester County, PA. The source of

the fire was determined by the jury to be an indirect lightning strike<sup>1</sup> that energized the corrugated stainless steel tubing ("CSST") line<sup>2</sup>, marketed by Appellant as "TracPipe" and installed in the house, connecting the main natural gas supply to a natural gas fireplace located on the first floor of Appellees' home. The fire caused substantial undisputed damage to Appellees' home and its contents. They were not at home at the time of the lightning strike and ensuing fire. Appellees sued Appellant, OmegaFlex for damages upon claims of negligence, strict liability, and breach of implied warranties.

The predominant issue in the case was whether the corrugated stainless steel tubing, manufactured and sold by Appellant under the brand name "TracPipe", was defective because of its inferior wall thickness (equal to the thickness of 4 sheets of paper), rendering it incapable of withstanding perforation by an electrical arc produced by

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<sup>1</sup> There are 3 types of lightning strike: direct, indirect via air, and indirect via ground. Instantly, there was no evidence of a direct lightning strike to the Appellees' house. Rather, it was determined that lightning traveled in the ground from a direct strike nearby to the Appellees' house, in turn energizing the CSST pipe.

<sup>2</sup> CSST is a flexible tubing used to carry natural gas in buildings. It originated in Japan, which is subject to substantial earthquake activity. There, experience having taught that black iron pipe, traditionally used in building construction in the United States to convey natural gas, was highly susceptible to rupturing during an earthquake, corrugated flexible tubing was devised and successfully employed as a substitute material because of its ability to bend without breaking during such occurrences. It subsequently achieved some acceptance in the United States for such purpose in commercial and residential construction.

lightning. The Appellees' expert testimony posited that a lightning strike energized the TracPipe, and in doing so created an electrical arc with other metal that perforated the TracPipe by burning a hole in the pipe through which natural gas was then ignited. The hole in the TracPipe was recovered from the area of the fire's origin near the fireplace, and was tested. A severed grounding wire, called a "bonding wire"<sup>3</sup>, and its clamp were found hanging in the area of the fire's origin, and displayed signs of melting and "forced damage". It was determined to have been connected to the TracPipe's manifold. N.T. 10/12/2010, pp. 105 – 116.

Substantial expert testimony was educed during this trial in the disciplines of metallurgy, materials science, arc physics and both direct and indirect lightning strikes. Appellees produced evidence from which the jury could find that, in comparison to black iron pipe, TracPipe has substantially greater susceptibility to perforation by lightning-induced energy than does black iron pipe, rendering it defective and posing a substantially greater fire hazard. Appellees also produced uncontroverted

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<sup>3</sup> Bonding refers to the fact that in a building with electric service it is normal for safety reasons to connect all metal objects, such as pipes, together to the alternating current (AC) electric power supply to form an equipotential zone. Equipotential bonding involves joining together metalwork to the Earth's conductive surface so that it is at the same potential (i.e., voltage) everywhere. Inadequate bonding renders metal objects susceptible to a hazardous conductive path. Examples of articles that require bonding include metallic water piping systems and gas piping.

scientific evidence which established the approximate melting temperature of TracPipe, which is a stainless steel material, to be 2,600 degrees, well over two-times higher than the temperatures reached in a house fire, thereby eliminating the possibility that the TracPipe's perforation was caused by the fire itself. The house was examined after the fire by both fire officials and experts in fire cause and origin, who determined through examination of the physical evidence that the area of the house exposed to the greatest intensity of combustible fire damage occurred in the area of the fireplace where the perforated TracPipe was found.

The fire was of such intensity that the fireplace and significant parts of the first floor collapsed into the basement. Fire cause and origin experts for both sides examined the house, David Smith for Appellant, N.T. 10/18/2010, pp. 529 – 589, and Michael J. Moyer, Reading Fire Department Fire Investigator for Appellees, N.T. 10/11/2010, pp. 68 – 76 and N.T. 10/12/2010, pp. 88 – 156. Smith opined that lightning had caused the fire at the TracPipe tubing near the fireplace. Moyer opined the cause of the fire was an indirect lightning strike which affected the TracPipe causing it to breach at a hole. N.T. 10/18/2010, p. 572; and N.T. 10/12/2010, p.108.

Appellant's testimony, while not disagreeing with the location in which the fire had started or the TracPipe's perforation, opined that the fire was not caused by the indirect lightning strike, but instead caused by the electrical system which caused an electric arc, in turn causing the perforation in the TracPipe.

Appellants argued, that considering the risk-utility of TracPipe, Appellees had not proven it to be unreasonably dangerous, thereby requiring the court's analysis of same to resolve in Appellant's favor.

Secondly, Appellants moved for dismissal of Appellees' failure to warn claim. Appellees sued on a theory, among others, that Appellant should have provided warnings to use bonding wire of a greater diameter and with greater connection frequency than was used in the Appellees' house. Appellant argued that under the National Fire Protection Code a licensed electrician was not required to follow any such instruction and would not have done so. Conversely, Appellees argued, for reasons we discuss hereinafter, that the risk-utility standards predominated in their favor, and that the duty to warn related not to the electrician installing an electric system in a building, but to the Appellees as the end user's of the TracPipe product.

At the close of Appellees' case, Appellant moved for a nonsuit, which we declined to grant. N.T.10/18/10, pp. 514 – 526. A compulsory nonsuit can only be granted in cases where it is clear that a cause of action has not been established. A nonsuit should not be granted where, after viewing the evidence in the light most advantageous to the plaintiff, recovery is reasonably possible on the legal principles upon which plaintiff's case is dependent. *Braun v. Target Corp.*, 983 A.2d 752 (Pa.Super. 2009); *McMillan v. Mountain Laurel Racing Inc.*, 240 Pa.Super. 248, 367 A.2d 1106 (1976).

At the close of all the evidence, Appellant moved for a directed verdict on the risk-utility strict liability claim. Appellees withdrew their negligent duty to test claim, agreeing it was subsumed in their negligent design claim. Appellees also voluntarily dismissed their failure to warn claim. N.T. 10/19/10, pp. 743 – 744. A directed verdict may be granted only where the facts are clear and free from doubt. In deciding a motion for a directed verdict, the trial court must consider the facts in the light most favorable to the nonmoving party, accepting as true all evidence which supports that party's contention and reject all adverse testimony. *Lilley v. Johns-Manville Corp.*, 408 Pa.Super. 83, 596 A.2d 203 (1991); *Lear, Inc. v. Eddy*, 749 A.2d 971, 973 (Pa.Super. 2000) cited in *Fetherolf*

*v. Torosian*, 759 A.2d 391 (Pa.Super. 2000). With this standard in mind, we denied the motion for a directed verdict.

On the verdict slip returned by the jury, the jury found that Appellant's TracPipe was defective<sup>4</sup>, that the defect existed when the TracPipe left the Appellant's hands, and that the defect was a proximate cause of Appellees' harm; however, the jury also found that Appellant was not negligent in designing the TracPipe.<sup>5</sup>

#### ERRORS CLAIMED ON APPEAL BY APPELLANT

On appeal, Appellant claims it was entitled to judgment notwithstanding the verdict on Plaintiffs' strict liability claim for the following reasons: (1) Plaintiffs failure to prove the TracPipe was defective for its intended use under the Restatement (Second) of Torts §402A; (2) their failure to prove a safer alternate design existed in accordance with (i)

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<sup>4</sup> Three types of defective conditions may give rise to strict liability, including manufacturing defect, a design defect, and a failure to warn defect. *French v. Commonwealth Associates, Inc.*, 980 A.2d 623 (Pa. Super 2009)(citing *Phillips v. A-Best Products Co.*, 542 Pa. 124, 131, 665 A.2d 1167, 1170 (1995).

<sup>5</sup> The jury's verdict was based upon strict liability, in which negligent design is not a proper consideration. "Thus, we conclude that in a strict liability design defect claim, the plaintiff must establish that the product was unsafe for its intended user. We also explicitly state that a manufacturer will not be held strictly liable for failing to design a product that was safe for use by any reasonably foreseeable user as such a standard would improperly import negligence concepts into strict liability law." *Phillips v. Cricket Lighters*, 576 Pa. 644, 841 A.2d 1000 (2003).

the Restatement (Third) of Torts governing product liability, §§1 and 2, or (ii) a “fireworthiness” theory derived from the crashworthiness exception to §402A; (3) Appellant’s contention the jury should not have been permitted to consider Appellees’ claim where Appellant allegedly proved that the utility of its TracPipe outweighed the isolated risk of lightning strikes; and (4) Plaintiffs’ failure to prove that any alleged defect in the TracPipe caused the fire or the damages. Appellant also seeks a new trial because the court refused to instruct the jury on the applicability of (i) the Restatement (Third) of Torts governing product liability, §§1 and 2, (ii) the “fireworthiness” theory derived from the crashworthiness exception to §402A, and (iii) because the jury verdict slip did not ask the jury to determine whether Appellees had proven that a safer alternate design to TracPipe existed at the time it was designed.

In our view, this was a proper case for submission of the issue of strict liability to a jury, which heard extensive expert testimony, and made an informed decision that should not be disturbed.<sup>6</sup>

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<sup>6</sup> See Footnotes 4 and 5 above.

## DISCUSSION

### New trial and Judgment N.O.V. Motions

The general rule requires that a timely and specific objection at trial is required to preserve an issue for review on appeal. *Harman v. Borah*, 562Pa. 455, 756 A.2d 1116, 1124 (2000). Pennsylvania Rules of Civil Procedure Rule 227.1, which governs post-trial relief, provides in relevant part that a ground may not serve as the basis for post-trial relief, including a judgment n.o.v., unless it was raised in pre-trial proceedings or at trial. The Rule further notes that error that could have been corrected by timely objection in the trial court may not constitute a ground for such a judgment. Pa.R.C.P. 227.1(b)(1); *Straub v. Cherne Industries and Dealers Service*, 583 Pa. 608, 880 A.2d 561 (2005). Because Appellant fairly raised the issues pertaining to its Motion during trial, we find no waiver.

Appellant moved for judgment n.o.v. in its post trial motion. A judgment n. o. v. (non obstante verdicto) should be entered only in a clear case, and any doubts should be resolved in favor of the verdict. *Steward v. Chernicky*, 439 Pa. 43, 266 A.2d 259 (1970); *Hutchison ex rel. Hutchison v. Luddy*, 560 Pa. 51, 742 A.2d 1052 (1999). In considering a motion for judgment n. o. v., the evidence, together with all reasonable

inferences arising from the evidence, is considered in the light most favorable to the verdict winner. *Miller v. Checker Cab Co.*, 465 Pa. 82, 348 A.2d 128 (1975).

When considering whether to grant Appellant a new trial, as it has requested, the court must first determine whether there was legal or factual trial error or an abuse of discretion, and whether that error, if any, is sufficient basis for granting a new trial. The decision is a discretionary matter because it requires consideration of the particular circumstances of the case. *Morrison v. Com., Dept. of Public Welfare*, 538 Pa. 122, 646 A.2d 565, (1994); *Harman ex rel. Harman v. Borah*, 562 Pa. 455, 756 A.2d 1116 (2000). Instantly, the grounds advanced by Appellant relate to application of the law and abuse of discretion, as to which we find no error was committed for the reasons discussed in this Opinion.

### Restatement (Third) of Torts.

At trial, we denied Appellant's Motion in Limine, which sought to apply the law stated in the Restatement of Torts (Third) to Appellees' claims. We ruled in this fashion because Appellants were unable to convince us that our Supreme Court has adopted this iteration of the Restatement. Our independent research at the time convinced us that Pennsylvania courts apply the Restatement (Second) of Torts § 402A, and

not the Restatement (Third). *Webb v. Zurn*, 220 A.2d 853 (Pa. Super. 1966); *French v. Commonwealth Associates*, supra; *Gaudio v. Ford Motor Co.*, 976 A.2d 524, 531-32 (Pa. Super. 2009); *Estate of Hicks v. Dana Companies, LLC*, 984 A.2d 943, 975-76 (Pa. Super. 2009) (in an asbestos related strict products liability case, the trial court properly rejected the defendant's pre-trial request to have the case proceed under Restatement (Third) of Torts, Products Liability, § 2 (1997), rather than § 402A of the Restatement (Second) of Torts. While Appellant may have the right to advance on appeal to our Supreme Court that it should adopt the Restatement (Third) of Torts governing product liability, under current law, Appellees bore no burden to prove a safer alternate design existed in accordance with the latter standard.<sup>7</sup>

### Risk-Utility Analysis.

Appellants argue that we erred in submitting the strict liability claim to the jury because, as a matter of law, the utility of TracPipe outweighs the isolated risk of lightning. We denied Appellant's motion seeking

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<sup>7</sup> See *Walnut Street Associates, Inc. v. Brokerage Concepts, Inc.*, 20 A.3d 468 (Pa. 2011); *French v. Commonwealth Associates, Inc.*, supra (The Restatement (Second) of Torts § 402A,3 adopted as the law of this Commonwealth ..., governs all claims of products liability and allows recovery where a product in "a defective condition unreasonably dangerous to the consumer or user" causes harm to the plaintiff.").

summary judgment<sup>8</sup> on several grounds after considering the parties' arguments.<sup>9</sup>

Under Pennsylvania law, the finding of a defect requires a balancing of the utility of the product against the seriousness and likelihood of the injury and the availability of precautions that, though not foolproof, might prevent the injury. *Burch v. Sears, Roebuck and Co.*, 320 Pa.Super. 444, 467 A.2d 615 (Pa.Super. 1983). The case is given to the jury only after the court has initially considered the risk associated with the product weighed against its utility, an analysis characterized by the courts as implicating social policy considerations. *Surace v. Caterpillar, Inc.*, 111 F.3d 1039 C.A.3 (Pa. 1997); *Marshall v. Philadelphia Tramrail Co.*, 426 Pa.Super. 156, 626 A.2d 620, (1993); *Phillips v. Cricket Lighters*, 576 Pa. 644, 841 A.2d 1000, 1013 (2003) ( Justice Thomas G. Saylor's Concurring Opinion). Once admitted at trial, the jury determines, as it did in this instance,

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<sup>8</sup> In considering Appellant's motion for summary judgment, we were informed that Appellant is a named defendant in a class action lawsuit in which TracPipe is similarly targeted, and that it is defending some thirty-two lawsuits wherein its TracPipe is alleged to have been ruptured by lightning ignition, causing property damage. Appellees' expert, Mark Goodson, P.E. testified at trial that he was involved in over 80 incidents where corrugated steel pipe has failed when exposed to lightning effects. N.T. 10/13/10, pp. 269 – 337.

<sup>9</sup> We also direct the Court's attention to the plethora of pre-trial motions in limine, which we ruled upon by separate orders.

whether the product lacks any element necessary to make it safe for its intended use.

At trial, counsel argued the *Surace v. Caterpillar* factors<sup>10</sup> that are required to be considered in the court's risk-utility analysis before allowing the case to reach the jury for decision on the issue of strict liability.

Weighing these factors, we allowed the matter to go to a jury on the strict liability claim.<sup>11</sup> In doing so, we considered the following factors.

The Appellees' case compared TracPipe to black iron pipe, positing that by comparison, TracPipe poses a significantly higher risk of lightning-induced perforation. While Appellant argued to us that black iron pipe can also break, by comparison it seldom does in this

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<sup>10</sup> These factors are: (1) The usefulness and desirability of the product-its utility to the user and to 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 avoidability, because of general public knowledge of the obvious condition of the product, or of the existence of suitable warnings or instruction; and (7) The feasibility, on the part of the manufacturer, of spreading the loss of [sic] setting the price of the product or carrying liability insurance. See *Surace*, 111 F.3d at 1043 (1993)(citing Pennsylvania cases).

<sup>11</sup> While there is little doubt that corrugated steel tubing and its manifolds and fittings branded by Appellant as TracPipe are highly utilitarian, it is equally clear that safety cannot and should not become utility's stepchild. TracPipe is a product that is designed, intended and manufactured to convey a highly dangerous and explosive substance, hydrocarbon gas, capable of causing serious damage, injury and even death if allowed to escape, or if exposed to an uncontrolled ignition source.

environment, and certainly does not have susceptibility to lightning strikes, which are plentiful in the eastern United States.

Appellant also argued that Appellees' expert, Dr. Thomas W. Eager, ScD, P.E., who was qualified as an expert in metallurgy, arc physics and materials science, had tested only a piece of the TracPipe in determining its significantly greater risk of failure, whereas Appellees' comparison of black iron pipe to TracPipe required proof of a system-wide failure. (Black iron pipe is connected by a series of U-joints and other connections when installed, and can arguably fail at those joint connections). The difficulty with this argument is that, given Appellees' evidence, the TracPipe has the real potential for failure at any point along the runs of pipe that comprise a total installation, depending upon where lightning energizes the pipe.

In conducting our analysis, we also considered the likelihood of TracPipe's potential for causing serious damage and injury resulting from a breach in the pipe wall, and the Appellant's ability to eliminate the product's unsafe aspects. In another pre-trial motion in limine, Appellant disclosed the type of TracPipe installed in Appellees' home in 1998 was subsequently replaced by its product line called "CounterStrike", a type of CSST that has energy dissipating capability allegedly designed to protect

against transient electrical energy from lightning. Citing Pennsylvania Rules of Evidence 403 and 407<sup>12</sup>, Appellant sought to exclude evidence of its later development and sale of this CounterStrike tubing, as an inadmissible subsequent remedial measure. Appellees written response included marketing material published by Appellant that touts CounterStrike as being 5,000% more effective at withstanding electrical energy than TracPipe. Appellees argued that Rule 407 was not implicated because Appellant had not performed remedial measures on its TracPipe, adding that even if CounterStrike was arguably a remedial measure, it was developed and sold before the 2007 fire at Plaintiffs' home rather than after the fire, as Rule 407 requires.

While Appellees also logically argued that the marketing of CounterStrike demonstrated the feasibility of a safer alternate design and product, we were aware that Appellant continued to market TracPipe at the time of trial, and we concluded that simply changing the product by making it safer does not necessarily support an inference that the initial version of the product was defective. *Duchess v. Langston Corp.*, 564 Pa. 529, 545, 769 A.2d 1131, 1146-50 (2001)(citing *Werner v. Upjohn Co.*,

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<sup>12</sup> Rule 407 excludes evidence of subsequent remedial measures to prove the party who took the measures sold, designed or manufactured a product with a defect or a need for a warning or instruction.

628 F.2d 848, 858 (4th Cir.1980), cert. denied; (Rule 407's general prohibition is expressly inoperable in relation to remedial measures evidence offered "for impeachment or to prove other controverted matters, such as ownership, control, or feasibility of precautionary measures.")). Nonetheless, it was clear that Appellant markets CounterStrike as a product engineered to significantly decrease the potential for lightning induced damage to its fuel gas piping system, by cladding it with an energy dissipating rubber jacket that allegedly significantly protects its corrugated steel flexible tubing from becoming energized by a lightning strike. Demonstrably then, the mechanical feasibility of a safer design was demonstrated to the court, without adverse consequences to either the product or the consumer, that would significantly lessen, if not eliminate altogether, the unsafe character of TracPipe.

While we ruled evidence of Counterstrike inadmissible to prove the defectiveness of TracPipe, we were fully aware of Counterstrike's availability during our risk-utility analysis.

Likewise considered in the risk-utility analysis, is the likelihood that the average consumer, usually a new home purchaser, is unaware of, or will not be made aware of the potential danger associated with the CSST natural gas piping system employed in construction, much less the ability

to control what components the builder has included in the construction. The same holds true for the housing resale market. Unless a danger is widely known and understood, home inspectors normally alert homebuyers only to "defects" in the house, and not the comparable efficacy of construction materials. These factors implicate both the homebuyers awareness of a potential danger and the ability to avoid loss. Instantly, the Appellees were unaware that TracPipe was used in the construction of their home.

Dr. Thomas W. Eager, Appellees' expert in metallurgy, arc physics and materials science, opined at trial that because the pipe wall thickness of TracPipe is significantly thinner than the wall thickness of black iron pipe, the product commonly used in construction for the transmission within occupied buildings of natural gas, TracPipe is not capable of withstanding the foreseeable effects of an indirect lightning strike.

Appellant's expert, Michael Stringfellow, PhD, with a degree in Physics and a specialty in lightning science, acknowledged that lightning is a common occurrence in Pennsylvania. N.T. 10/13/10, p. 356 et seq. He also agreed with the other experts in the case that a lightning storm occurred in the area of the Appellees' home at the time of this fire. He further testified that there was evidence of lightning strikes close to their

home that night, but little evidence of a direct strike. He believed, therefore, that the house was hit by an indirect lightning strike, as did the other experts, which traveled to the house, and created "quite high voltages in the house"; however, he opined the electrical energy of the strike was insufficient to have burned a hole through the TracPipe causing the breach. Appellees' experts disagreed with that opinion. His opinion appears to have been that the lightning strike breached a copper electric wire that arced to the TracPipe, but he agreed he had not seen or been presented with any electric wire from the house evidencing arc damage about which he speculated. N.T. 10/18/2010, direct pp. 657, et seq., cross, pp. 700 et seq., and redirect pp. 712 et seq. Dr. Stringfellow readily admitted that black iron pipe is significantly more resistant to breach by lightning arc damage than is TracPipe due to black iron pipe's thickness. Dr. Eager testified that, in comparison to black iron pipe, CSST, marketed by Appellants as "TracPipe", is far more likely to perforate when an electrical arc current, such as may be caused by an indirect lightning strike occurring more typically in this part of the Country, attaches to the TracPipe. N.T. 10/13/10, pp. 357-358. There was, as well, evidence from which the jury could have concluded the TracPipe was not adequately designed to include the grounding necessary to compensate for the

thinness of its pipe walls, including the furnishing of installation instructions for such grounding, which would dissipate electrical energy sparked by an indirect lightning strike over its installed surface.

It has long been the law in Pennsylvania that a “defective condition” includes the lack of adequate warnings or instructions required for a product's safe use. *Thomas v. Arvon Products Co.*, 424 Pa. 365, 227 A.2d 897 (1967); *Sherk v. Daisy-Heddon*, 498 Pa. 594, 450 A.2d 615, 618 (1982)(plurality); *Mackowick v. Westinghouse Elec. Corp.*, 525 Pa. 52, 575 A.2d 100, 102 (1990); *Jacobini v. V & O Press Company*, 527 Pa. 32, 588 A.2d 476 (1991). A product will be deemed defective if it left the supplier's control lacking any element necessary to make it safe for its intended use or possessing any feature that renders it unsafe for the intended use. *Azzarello v. Black Bros. Co.*, 391 A.2d 1020 (Pa. 1978); *Phillips v. Cricket Lighters*, 841 A.2d 1000, 1005 (Pa. 2003). Evidence was also educed in this case that if adequate grounding at specified intervals along the length of the pipe installation had been included in the Appellant's installation instructions to protect against electrical arcing with other metal surfaces, the TracPipe pipe would have been better protected from being energized by lightning. This implicated Appellees failure to warn claim, which led to wrangling over the applicability of National Fire

Protection Code 780. Appellees' expert, Mark Goodson, P.E. testified that Appellant should have provided warnings regarding the diameter of the bonding wire that should have been used and the frequency of its use in grounding the TracPipe installed in Appellees' house. N.T. 10/18/10, p. 516.

Considering all of these factors, it was and remains the trial court's opinion that full consideration was given in its risk-utility analysis to the gravity of potential danger posed by TracPipe, and the case was properly submitted to the jury for determination of the issue of strict liability.

Appellant's additional argument that the trial court erred in failing to instruct the jury according to the law reflected in Restatement (Third) with respect to the definition of design defect and risk-utility analysis is also without merit for the reasons discussed earlier in this Opinion.

### Fireworthiness Theory

At trial, Appellant unsuccessfully sought to extend the "crashworthiness" doctrine to the instant case by application of a "fireworthiness" theory, requiring, in its words, "a more rigorous standard of proof than the usual 402A claim". "The term crashworthiness" means "the protection that a motor vehicle affords its passenger against personal injury or death as a result of a motor vehicle accident." *Kupetz v. Deere &*

*Co., Inc.*, 435 Pa.Super. 16, 644 A.2d 1213 (1994). The rationale is that manufacturers are strictly liable for defects that do not cause the accident but nevertheless cause an increase in the severity of injuries that would have occurred without the defect. The crashworthiness doctrine is a subset of strict products liability law that most typically arises in the context of vehicular accidents. *Gaudio v. Ford Motor Co.*, 976 A.2d 524 (Pa.Super. 2009).

Essentially, Appellant argued that since, in its opinion, TracPipe did not cause the lightning strike, Appellees' claim that TracPipe increased their damages by failing to protect against the foreseeable occurrences of a lightning strike required this court to hold Appellees to a "fireworthiness" burden of proving a safer alternative design. The upshot of Appellant's argument is that just as automobile accidents are foreseeable, and a car maker must design and manufacture the product so that it protects occupants from harm by being "reasonably crashworthy," so, too, in order to prevail, Appellees were required to prove TracPipe was not "fireworthy". In so arguing, Appellant concedes that *General Services* prohibits further expansion of foreseeability-based strict liability beyond the crashworthiness context, but argues "the Court was obliged to at least apply a legal standard similar to that of a crashworthiness case",

specifically by proving there existed a safer alternative design for TracPipe. Appellant's lower court brief, p. 11.

In products liability actions, the plaintiff can recover under strict liability by showing the product was sold in a defective condition that was unreasonably dangerous, and that defect was the proximate cause of the plaintiff's injuries. *French v. Commonwealth Associates*, supra. "[D]efect' is defined in terms of safety for intended use; that is, 'the jury may find a defect where the product left the supplier's control lacking any element necessary to make it safe for its intended use or possessing any feature that renders it unsafe for the intended use.'" *Estate of Hicks v. Dana Companies, LLC*, supra (quoting *Azzarello v. Black Bros. Co.*, supra.). Appellant argues it was entitled to judgment as a matter of law because Appellees failed to prove a safer alternate design. Appellant contended during this litigation that the occurrence of a lightning strike causing an electrical arc to its CSST pipe was not an *intended use* of TracPipe, and, therefore, could not form the basis for the imposition of strict liability. It posited that TracPipe was designed to provide a flexible alternative to rigid black iron pipe to transport natural gas throughout a dwelling, but was never intended to safely conduct electric currents or act as a lightning protection system.

The general rule is that there is no strict products liability where the harm is caused by *unintended uses* of the product, even where the use is foreseeable by the manufacturer. *Pennsylvania Dep't of General Services v. U.S. Mineral Products Co.*, 898 A.2d 590, 600 (Pa. 2006) (citing *Phillips v. Cricket Lighters*, supra (plurality opinion)). *General Services* involved a fire that occurred in a building in which PCBs were detected in the aftermath of a fire. The building's materials emitted PCBs when exposed to the fire.

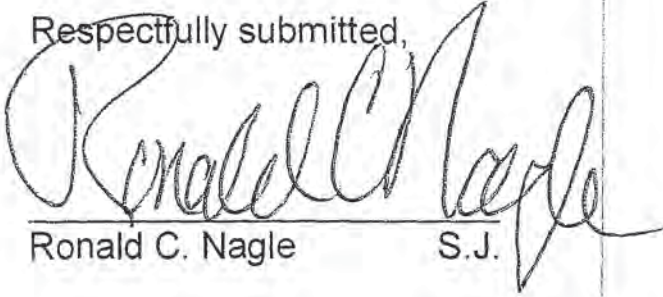
In contrast, TracPipe was intended to transmit flammable natural gas in buildings, including residential homes. Appellees' allegations involving Appellant's TracPipe relate not to how the product performed during the fire, but how the product actually caused the fire that destroyed Appellees' home and contents because it was unsafe when exposed to lightning-induced energy that created an electrical arc with other metal that burned a hole in the TracPipe, causing a gas-fed fire. *Pennsylvania Dep't of General Services*, 898 A.2d at 600-601 n.11. The *General Services* case stands for the proposition that incineration of building materials is not a use intended by the manufacturer; therefore, damages in strict liability are unavailable where the harm flowing from the product was the contamination it causes upon its burning.

Instantly, the important factual distinction between the instant case and *General Services* is that Appellees based their strict liability claims upon the contention that TracPipe is defective because it is susceptible to being easily perforated by a current generated by a lightning strike, which in this case burned a hole in the pipe's thin wall through which natural gas was then ignited. Thus, the jury was confronted with the product's defect and its origin that led to its combustion, rather than its design and reaction to combustion.

This simply was not a "fireworthiness" case, and there is no merit in Appellant's argument. Appellant's development and marketing of CounterStrike, which it advertizes as 5,000% more effective at withstanding electrical energy than TracPipe also militates against Appellant's argument. For these reasons, we also reject as without merit Appellant's contention that the jury verdict slip should have asked the jury to determine whether Appellees had proven that a safer alternate design to TracPipe existed at the time it was designed.

For the foregoing reasons, we perceive no trial error, and recommend the Appellant's appeal be denied.

Respectfully submitted,

A handwritten signature in cursive script that reads "Ronald C. Nagle". The signature is written in black ink and is positioned above a horizontal line.

Ronald C. Nagle

S.J.

**Appeal Docket Sheet**

Superior Court of Pennsylvania

**Docket Number: 1472 EDA 2011****Page 1 of 4****November 27, 2011****CAPTION**

Terence D. Tincher &amp; Judith R. Tincher

v.

Omega Flex, Inc.  
Appellant**CASE INFORMATION**

Initiating Document: Notice of Appeal

Case Status: Active

Case Processing Status: November 21, 2011 Awaiting Appellee Paperbooks

Journal Number:

Case Category: Civil Case Type(s): Products Liability

**CONSOLIDATED CASES****RELATED CASES****SCHEDULED EVENT**

Next Event Type: Appellee Brief Filed

Next Event Due Date: December 21, 2011

Next Event Type: Appellant Reproduced Record Filed

Next Event Due Date: December 21, 2011

**COUNSEL INFORMATION****Appellant** Omega Flex, Inc.

Pro Se: No

IFP Status: No

Attorney: Dennison, Kristen Elizabeth  
 Law Firm: Campbell Campbell Edwards & Conroy, P.C.  
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 Wayne, PA 19087  
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Attorney: Michael, Helen K.  
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## Appeal Docket Sheet

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Filed Date	Docket Entry / Representing	Participant Type	Filed By
June 8, 2011	Notice of Appeal Docketed	Appellant	Omega Flex, Inc.
June 8, 2011	Docketing Statement Exited (Civil)		Bramblett, Karen Reid
July 11, 2011	Order Directing Compliance with Pa.R.A.P. 3517		<b>Due Date: July 21, 2011</b> Per Curiam
	Comment: The Appellant has failed to file timely the docketing statement required by Pa.R.A.P. 3517. Appellant is directed to file the docketing statement with the Prothy of this court by July 21, 2011. Failure to file the docketing statement by that date will lead to an order dismissing the appeal.		
July 21, 2011	Docketing Statement Received (Civil)	Appellant	Omega Flex, Inc.
August 3, 2011	Application to be Admitted Pro Hac Vice Filed Omega Flex, Inc.	Appellant	Michael, Helen K.
August 3, 2011	Application to be Admitted Pro Hac Vice Filed Omega Flex, Inc.	Appellant	Epps, Brian K.
August 12, 2011	Trial Court Record and Opinion Received		Chester County Court of Common Pleas
August 22, 2011	Notice to Defer Preparation of Reproduced Record Pursuant to Pa.R.A.P. 2154b	Appellant	Omega Flex, Inc.
August 25, 2011	Application for Extension of Time to File Brief - First Request	Appellant	Omega Flex, Inc.
August 30, 2011	Order Granting Application for Extension of Time to File Appellant Brief		Per Curiam
	Comment: until 10/21/11.		
September 2, 2011	Order Granting Application to be Admitted Pro Hac Vice		Per Curiam
	Comment: (also applies to Brian Epps)		
October 14, 2011	Application for Extension of Time to File Brief - Second Request	Appellant	Omega Flex, Inc.
October 18, 2011	Order Granting Application for Extension of Time to File Brief and Reproduced Record		Per Curiam
	Comment: Appellant's designation of contents of reproduced record shall be filed on or before November 21, 2011. Appellant's brief and reproduced record shall be filed on or before December 21, 2011. No further extensions will be granted.		
November 18, 2011	Application to be Admitted Pro Hac Vice Filed Omega Flex, Inc.	Appellant	Conroy, William J.
	Comment: for Christopher Landau		
November 21, 2011	Certificate of Service of Appellant's Advance Form Brief Filed	Appellant	Omega Flex, Inc.

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**DOCKET ENTRY**

Filed Date	Docket Entry / Representing	Participant Type	Filed By
November 21, 2011	Designation of Contents of Reproduced Record	Appellant	Omega Flex, Inc.