



“SO, DO I HAVE TO MAKE ONLY MINIVANS?”

WHAT ARE A MANUFACTURER’S DUTIES WITH REGARD TO SAFER ALTERNATIVE DESIGNS?

by Amanda S. Jacobs



Gas prices are at record levels, and the automobile industry is under pressure to produce more fuel-efficient cars. Let's assume that the market works as it should, and these manufacturers do produce those cars. Can the following scenario be far behind?

A car manufacturer is sued after its "mini"—its compact, two-door, energy-efficient model—collides with a semi. The plaintiff sues for design defect and alleges that a safer, feasible alternative design was available: namely, the larger, heavier, (gas-guzzling) four-door sedan that the manufacturer offers, which ranked higher in crash tests.

What is a "safer, feasible alternative design"? Must this car manufacturer sell only its four-door sedans? Must all of its models

be equipped with 18 airbags? Or armored sides? Or high-performance braking and traction systems? In short, to avoid liability, must every vehicle be a minivan or Humvee?

In the vast majority of American courts, proof of an available "safer, feasible alternative design" is an element of a plaintiff's design defect case. The Third Restatement of Torts makes it the sine qua non of a design defect claim. This article analyzes what constitutes a "safer, feasible alternative design," what obligations are imposed upon manufacturers, and what evidence is admissible to prove it (and defend against it).

A MANDATORY REQUIREMENT?

States differ on whether evidence of an alternative design is a mandatory element for design defect claims. Some states

require by statute that in order to prevail, a plaintiff must prove a feasible alternative design.¹ In other states, however, the existence of a feasible alternative design is not a mandatory element but is one of the factors to be weighed in a risk-utility balancing test.² The Third Restatement of Torts makes the existence of an alternative design *the* test for design defect claims. It provides that a product is defective in design only when “the foreseeable risks of harm posed by the product could have been reduced or avoided by the adoption of a reasonable alternative design by the seller....” Restatement (Third) of Torts § 2(b). The “reasonable alternative design” test set forth in the Third Restatement has been explicitly adopted or applied by courts in Florida and Iowa.³ While the requirement of an alternative design has been adopted in some form by a majority of states, it still remains a somewhat controversial position, because, as some commentators argue, it places an undue burden of proof on plaintiffs.⁴

“SAFER, FEASIBLE ALTERNATIVE DESIGN”—WHAT IT MEANS

Under the Third Restatement as well as under most states’ formulation of the standard, the essential inquiry is whether the design chosen was a reasonable one from among the feasible choices of which the defendant was aware or should have been aware.⁵ As the Third Restatement recognizes, this is in essence a negligence standard. Restatement (Third) of Torts, § 2, Comment d (“Assessment of a product design in most instances requires a comparison between an alternative design and the product design that caused the injury, undertaken from the viewpoint of a reasonable person. That approach is also used in administering the traditional reasonableness standard in negligence.”).⁶

The phrase “safer, feasible alternative design” can be best understood by an analysis of its parts.

Safer. The term “safer” means that the alternative design would have significantly reduced or prevented the particular plaintiff’s injuries. “Safer” does not mean “safest,” however. Otherwise, the only cars sold would be ones that traveled 20 mph, and the only guns sold would be ones that shot rubber bullets. “Manufacturers are not required to produce automobiles with the ‘strength and crash-damage resistance features of an M-2 Army tank.’ ” *Curtis v. General Motors Corp.*, 649 F.2d 808, 812 (10th Cir. 1981). Indeed, the doctrine of strict tort liability is not intended to be a doctrine of absolute liability.⁷ A manufacturer is not an insurer of its product and has

no duty to make its product accident-proof or incapable of causing injury under any circumstance.⁸ In sum, a manufacturer is not required to design the safest product possible, or even a safer product than the one sold, as long as the design sold was reasonably safe.⁹

Thus, in response to our car manufacturer’s problem—can it offer different car models, even though some models are arguably safer than others?—a manufacturer does not have a duty to manufacture only the safest model available as long as the other models are reasonably safe. For example, in *Curtis v. General Motors Corp.*, 649 F.2d 808 (10th Cir. 1981), defendant General Motors offered several body styles of its 1973 Blazer: a roofless style, one with a canvas top, one with a steel top, and one with a removable fiberglass top. *Id.* at 810. The court noted that even though the evidence (and common sense) showed that the steel top was safer than the fiberglass top—the option the plaintiff chose—a compromise was necessary in order to give consumers choices, and the Blazer was a “special purpose vehicle with off-road capability.” *Id.* at 811. “If there be no compromise and only the very safest can be marketed, there obviously would be no choice for the buyer as the less safe options would be eliminated. This exclusion should not be the result....” *Id.* Instead, the court found that “the utility and purpose of the particular type of vehicle will govern in varying degree the standards of safety to be observed in its design.” *Id.* (internal citations omitted).

Similarly, in *Dreisonstok v. Volkswagenwerk*, 489 F.2d 1066 (4th Cir. 1974), the court rejected the plaintiffs’ argument that defendant Volkswagen’s bus, which placed the driver’s seat at the very front of the vehicle in order to make more cargo and passenger space, should have been made like a “mid-sized Ford passenger car.” *Id.* at 1075. The court held that the bus had an entirely “different nature and utility” and that “[s]uch a strait-jacket on design is not imposed [by the law].” *Id.*

Thus, in our car-manufacturer scenario, the manufacturer should be able to provide consumers with an array of models as long as the compromises made in those models are reasonable. While its “mini” may not be as big and heavy and crash-resistant as its four-door passenger sedan, the “mini” is stylish, maneuverable, and gas-efficient—other qualities that are useful and that consumers demand.

When does a manufacturer have the obligation to adopt certain available safety features or designs? A manufacturer is not required to adopt every possible safety device that may have been invented or to adopt “the ultimate” in technology or design. But a manufacturer does have a duty to adopt those safety devices that are reasonable under the circumstances.¹⁰ In *Nicor Supply Ships v. General Motors*, 1993 U.S. Dist. LEXIS 9342 (E.D. La. July 7, 1993), the court found that even though an independent emergency generator system was “not unheard of” when the plaintiff’s ship caught fire, the system did not constitute a reasonable alternative design because it “was not customary in the industry.” *Id.* at *8–9. In *Elliott v. Brunswick Corp.*, 903 F.2d 1505 (11th Cir. 1990), the court held that even though an “experimental propeller guard” was available, it was not a reasonable alternative design for the defendant, a boat manufacturer, where “neither industry custom, nor the pertinent regulations” dictated its use. *Id.* at 1508. Thus, our car manufacturer probably does not have the duty to equip all of its models with 18 airbags, “never-flat” tires, and xenon headlights. Those features have not become standard in the industry or been mandated by any regulation, and without those features, its cars are still reasonably safe.

What happens when a manufacturer offers safety devices to the purchaser as product “options”? Courts differ in opinion. Some courts hold that where a safety device is available to the purchaser and the purchaser knowingly declines to buy it, the manufacturer has fulfilled its duty.¹¹ Courts reason that in such circumstances, the purchaser is the party in the best position to determine the tradeoff between cost and function, and thus the purchaser should bear responsibility for that decision.¹² For example, in *Morrison v. Kubota Tractor Corp.*, 891 S.W.2d 422, 428 (Mo. Ct. App. 1994), the court held that a tractor manufacturer had fulfilled its duty to protect against rollovers when it made the purchaser aware that a rollover-protection system was available for purchase as an option.¹³ Similarly, in *Scarangella v. Thomas Built Buses*, 93 N.Y.2d 655, 661–62 (N.Y. 1999), the court held that a bus manufacturer had fulfilled its duty by offering optional “backup alarms” for its school buses when the purchaser, a school district that had experience buying school buses, was a highly knowledgeable consumer; the risk of harm from the absence of a backup alarm was not substantial; and the school district was in the best position to weigh the risk, given the contemplated use of the bus.

Other courts, however, hold that if such safety options are necessary to avoid an unreasonable risk of harm, the fact that the manufacturer offers them to purchasers does not immunize the manufacturer from liability.¹⁴ Thus, manufacturers must consider whether a certain optional feature should be made standard if, without that feature, the product creates an unreasonable risk of harm.

When does a manufacturer have an obligation to retrofit a previously sold product with new technology? Most courts hold that a manufacturer has no duty to retrofit an existing product with subsequently developed safety features if the product was not defective at the time it was sold.¹⁵ Otherwise, “any safety improvement would then charge a manufacturer with a duty to go out and retrofit and update all products which it had ever sold in its past history.” *Morrison*, 891 S.W.2d at 430. Thus, our car manufacturer probably has no obligation to retrofit with airbags its 1970 models still in operation.

Feasible. Evidence of a safer alternative design, by itself, is not sufficient to impose liability on a manufacturer; a manufacturer has no duty to adopt an alternative design that is not feasible.¹⁶ “Feasibility” includes not only the determination that the product was technologically feasible at the time of manufacture but also that it was economically feasible, useful, and desirable to consumers.¹⁷ If the proposed alternative design would render the product so expensive as to price it out of the market, the existing design, on balance, may be considered reasonable.¹⁸ In addition, if the proposed alternative design would impose an equal or greater risk of harm, it is not reasonable.¹⁹

Further, a proposed alternative design cannot destroy the utility of the original product.²⁰ If a product has a special design due to its unique features or utility, a manufacturer need only consider alternatives compatible with that special design.²¹ Thus, in *Delvaux v. Ford Motor Co.*, 764 F.2d 469, 475 (7th Cir. 1985), the court held that a “manufacturer is not negligent for not providing his convertibles with steel roofs, because a convertible is designed as a roofless car.” Additionally, in *Felix v. Akzo Nobel Coatings*, 692 N.Y.S.2d 413 (N.Y. App. Div. 1999), the court held that the defendant’s flammable lacquer sealer was not defective even though a safer, water-based sealer was available because the two sealers were functionally different: The flammable sealer was quick-drying and resulted in a harder, scratch-resistant surface, while the water-based sealer was

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slow-drying and resulted in a softer finish. Further, there was a “vast difference in price between the two products.” *Id.* at 414.

In *Rose v. Brown & Williamson Tobacco Corp.* (N.Y. Supreme Court), the plaintiffs argued that the defendant cigarette manufacturers negligently designed their higher-tar “regular” cigarettes and should have sold only their allegedly safer, “ultra light” cigarettes. Jones Day partner Steve Kaczynski argued that in the plaintiffs’ proposed world of alternative designs, consumers would be forced to sacrifice cheeseburgers, sports cars, and doughnuts for veggie burgers, minivans, and bran muffins. Such is “not the real world” and not the law, he pointed out. The New York appellate division agreed.²² It held that the plaintiffs had not proved their design defect claim because their proposed alternative design—light cigarettes—did not have the same “functionality” or “utility” as regular cigarettes and there was no evidence that consumers would have accepted them.²³

WHAT EVIDENCE IS ADMISSIBLE TO PROVE ALTERNATIVE DESIGN?

Evidence of a safer, feasible alternative design is generally elicited through the testimony of expert witnesses. Evidence of the custom in the manufacturer’s industry, the technological state of the art of the particular product, consumer acceptability, and compliance with government regulations may all be considered in determining whether a proposed alternative design should have been adopted. While a prototype of an alternative design is not necessary, an expert who testifies that a product could have been designed differently but who has never made or seen the proposed alternative design—and therefore has no idea of its feasibility, utility, or cost—does not make out a *prima facie* case that a safer, feasible alternative design was available.²⁴

Plaintiffs often attempt to use evidence of a defendant’s subsequent repairs or design changes as proof that an alternative design was available. Under Federal Rule of Evidence 407, however, evidence of changes made to a product after an injury occurs is excluded if that evidence is used to prove a defendant’s negligence or to prove a “defect” in a product or in the “product’s design.” For example, in *Padillas v. Stork-Gamco, Inc.*, 2000 U.S. Dist. LEXIS 14373 (E.D. Pa. Oct. 2, 2000), the plaintiff was injured while cleaning a chicken-

processing machine. Following the injury, the plaintiff’s employer modified the machine by installing additional metal guarding on the rotating blade, which the plaintiff argued was admissible to prove a safer alternative design. The court, however, excluded the evidence under Rule 407, finding that “there is essentially no difference between admitting evidence of subsequent remedial measures for the purpose of proving a defect in design and for proving the existence of an alternative design.” *Id.* at *9.

Prior to a 1997 amendment to Rule 407, there was a conflict of authority as to whether Rule 407 applied in product liability actions. The amendment clarified that the exclusion of evidence of subsequent remedial measures applied equally to strict product liability actions and, specifically, to design defect claims.²⁵ The Rule applies to any kind of post-accident change, repair, or precaution, including changing policies and procedures,²⁶ putting new warnings on products,²⁷ conducting disciplinary hearings,²⁸ making design changes,²⁹ or modifying manuals or regulations.³⁰ A defendant’s remedial measures taken *prior* to the injury do not fall within the scope of excluded evidence.

Evidence of subsequent remedial measures is not excluded absolutely under Rule 407, however. It is admissible if offered for another purpose, such as “proving ownership, control, or feasibility of precautionary measures, if controverted, or impeachment.”³¹ Thus, the exceptions to Rule 407 have the potential to swallow the rule. A defendant may consider whether to stipulate that an alternative design was “feasible” in order to gain the benefit of Rule 407. For example, in *Gauthier v. AMF, Inc.*, 788 F.2d 634, 638 (9th Cir. 1986), the defendant argued that evidence of subsequent remedial measures should have been excluded because it conceded that certain safety devices were technologically and economically feasible but contended that the safety risk was nonetheless too small to warrant the tradeoff of consumer frustration, increased complexity of the product, and risk of consumer efforts to disconnect the safety device. The Ninth Circuit agreed and held that the trial court’s admission of subsequent design changes was prejudicial error that warranted a new trial. Moreover, where evidence of subsequent remedial measures is admitted solely to impeach the

testimony of the manufacturer's expert as to the availability of an alternative design, the defendant should request the trial court to give an appropriate limiting instruction.³²

In sum, manufacturers don't have to make injury-proof products, and our car maker doesn't have to produce only Humvees. The pre-sale design choices they make, however, should be reasonable. Further, manufacturers should understand how post-sale design repairs may affect them in litigation. ■

AMANDA S. JACOBS

1.216.586.1168

asjacobs@jonesday.com

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¹ See, e.g., N.J. Stat. Ann. § 2A:58C-3(a)(1); Ohio Rev. Code Ann. § 2307.75(F); Mich. Comp. Laws § 600.2946(2).

² See, e.g., *Carmical v. Bell Helicopter Textron*, 117 F.3d 490, 495 (11th Cir. 1997) (applying Georgia law).

³ *Scheman-Gonzalez v. Saber Mfg. Co.*, 816 So. 2d 1133 (Fla. Dist. Ct. App. 2002); *Wright v. Brooke Group Ltd.*, 652 N.W.2d 159, 162 (Iowa 2002).

⁴ See Note, "Just What You'd Expect: Professor Henderson's Redesign of Products Liability," 111 Harv. L. Rev. 2366-2372-74 (1998) (discussing criticisms of the Third Restatement's reasonable alternative design requirement).

⁵ *Lancaster Silo & Block Co. v. Northern Propane Gas Co.*, 427 N.Y.S.2d 1009, 1016 (N.Y. App. Div. 1980); *Carmical*, 117 F.3d at 495.

⁶ See also *Voss v. Black & Decker Mfg. Co.*, 59 N.Y.2d 102, 108 (N.Y. 1983) (test for design defect in New York is whether "a reasonable person would conclude that the utility of the product did not outweigh the risk").

⁷ See, e.g., *Nesselrode v. Executive Beechcraft, Inc.*, 707 S.W.2d 371, 375 (Mo. 1986).

⁸ See, e.g., *Townsend v. General Motors*, 642 So. 2d 411, 415 (Ala. 1994).

⁹ *Kern v. General Motors Corp.*, 724 P.2d 1365, 1367 (Colo. Ct. App. 1986).

¹⁰ *Morrison v. Kubota Tractor Corp.*, 891 S.W.2d 422, 426 (Mo. Ct. App. 1994); *Westinghouse Elec. Corp. v. Nutt*, 407 A.2d 606, 609 (D.C. 1979).

¹¹ *Biss v. Tenneco, Inc.*, 409 N.Y.S.2d 874, 876 (N.Y. App. Div. 1978); *Anderson v. P.A. Radocy & Sons, Inc.*, 865 F. Supp. 522, 531 (N.D. In. 1994) ("a party cannot be liable for failing to equip its products with an optional device that the employer of the plaintiff knowingly rejected").

¹² *Wagner v. Int'l Harvester Co.*, 611 F.2d 224, 231 (8th Cir. 1979) ("the purchaser may be in the best position to make the cost-benefit analysis implicit in the principles of general negligence"); *Morrison*, 891 S.W.2d at 428.

¹³ *Accord, Biss*, 409 N.Y.S.2d at 876; *Wagner*, 611 F.2d at 231; *Butler v. Navistar Int'l Transp. Corp.*, 809 F. Supp. 1202, 1209 (W.D. Va. 1991).

¹⁴ *Turney v. Ford Motor Co.*, 94 Ill. App. 3d 678, 683 (Ill. App. Ct. 1981) (noting that it is not a defense for the manufacturer that plaintiff's employer chose not to purchase safety features as options; manufacturer cannot delegate its duty to produce a reasonably safe product).

¹⁵ *Habecker v. Copperloy Corp.*, 893 F.2d 49, 54 (3d Cir. 1990) (applying Pennsylvania law); *Ostendorf v. Clark Equipment Co.*, 122 S.W.3d 530, 534 (Ky. 2003); *Morrison*, 891 S.W.2d at 429-30.

¹⁶ *Westinghouse Elec. Corp.*, 407 A.2d at 611.

¹⁷ *Loitz v. Remington Arms Co. Inc.*, 177 Ill. App. 3d 1034, 1046 (Ill. App. Ct. 1988).

¹⁸ *Micallef v. Miehle Co.*, 39 N.Y.2d 376, 386 (N.Y. 1976).

¹⁹ *Uniroyal Goodrich Tire Co. v. Martinez*, 977 S.W.2d 328, 337 (Tex. 1998).

²⁰ *Id.*

²¹ *Curtis v. General Motors Corp.*, 649 F.2d 808, 811-12 (10th Cir. 1981) (applying Colorado law); *Delvaux v. Ford Motor Co.*, 764 F.2d 469, 474 (7th Cir. 1985) (applying Wisconsin law).

²² See *Rose v. Brown & Williamson Tobacco Corp.*, 855 N.Y.S.2d 119 (N.Y. App. Div. 2008). The jury, however, only partially agreed, rendering a verdict for R.J. Reynolds but against Philip Morris and Brown & Williamson.

²³ *Id.* at 122-26. See also *Clinton v. Brown & Williamson Holdings, Inc.*, 498 F. Supp. 2d 639, 648-49 (S.D.N.Y. 2007) (holding that plaintiff's proposed alternative designs—cigarettes with no tar or nicotine—were "simply not functional equivalents" to the cigarettes plaintiff smoked).

²⁴ *Peck v. Bridgeport Machines, Inc.*, 237 F.3d 614, 618 (6th Cir. 2001) (applying Michigan law).

²⁵ See Fed. R. Evid. 407 advisory committee's note. Prior to the 1997 amendments, Rule 407 only explicitly excluded evidence of subsequent remedial measures as "proof of negligence or culpable conduct."

²⁶ See, e.g., *Wilkinson v. Carnival Cruise Lines, Inc.*, 920 F.2d 1560, 1568-69 (11th Cir. 1991).

²⁷ See, e.g., *In re Joint E. Dist. & S. Dist. Asbestos Litig. v. Armstrong World Indus., Inc.*, 995 F.2d 343, 346 (2d Cir. 1993).

²⁸ See, e.g., *Maddox v. City of Los Angeles*, 792 F.2d 1408, 1417 (9th Cir. 1986).

²⁹ See, e.g., *Alexander v. Conveyors & Dumpers, Inc.*, 731 F.2d 1221, 1229-30 (5th Cir. 1984).

³⁰ See, e.g., *Mills v. Beech Aircraft Corp.*, 886 F.2d 758, 763-64 (5th Cir. 1989).

³¹ Fed. R. Evid. 407.

³² See *Hopkins v. Duo-Fast Corp.*, 123 Idaho 205 (Id. 1993).