IN THE
SUPREME COURT
OF THE STATE OF FREMONT

February Term, 2021

No. 21-2112

WILLIAM ASHPOOL,
Petitioner

v.

EDISON INCORPORATED,
a Fremont corporation,
Respondent

On Writ of Certiorari to
the Fremont Court of Appeals

BRIEF FOR PETITIONER

Petitioner O
1234 Rendigs Road,
Fremont, OH 45221

Attorneys for Petitioner

QUESTIONS PRESENTED

I. Under Fremont law, is a semi-autonomous vehicle defective in design when the consumer is extensively injured by a seller's failure to include additional sensors that reduced the probability of the accident at a cost of merely $5,000.00 per vehicle?

II. Whether Fremont should adopt a duty to retrofit where a product implicates human safety, a continuing relationship exists between manufacturer and consumer, and the manufacturer is aware of a defect after the product is in the hands of consumers.

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STATEMENT OF THE CASE

On December 20, 2019, William Ashpool ("Mr. Ashpool")—a fifty-five-year-old social worker who conducts home visits across the country—suffered debilitating injuries including a dislocated shoulder, five broken ribs, a broken wrist, a concussion, and whiplash when the Autodrive feature on his Edison Incorporated Marconi ("Marconi") failed to recognize a brown bear in the middle of the road. R. at 1, 4.

Mr. Ashpool purchased a brand-new Marconi after an Edison Incorporated ("Respondent") salesperson told him "Autodrive would allow him to simply input a GPS location . . . and enjoy the ride." R. at 4. The Marconi "receives information via twelve sensors that can analyze the road and surrounding drivers." R. at 2. When Autodrive is engaged, the Marconi "stops, accelerates, changes gears, and maneuvers without input from the driver."[1] Id. The vehicle's operating manual "emphasizes the importance of attentive driving and keeping one's hands on the steering wheel at all times." R. at 3. If the driver removes his hands from the steering wheel, the dashboard displays a light alerting the driver to place his hands back on the steering wheel. Id. Respondent included no other relevant warnings or mitigating technology. Respondent did not notify customers that pre-release crash and safety tests revealed the difficulty the vehicle's twelve sensors had identifying stationary objects when the vehicle operated at speeds above thirty-five miles-per-hour.[2] R. at 2–3, 5. A month after buying the Marconi, Mr. Ashpool was hospitalized for two-weeks from injuries sustained when Autodrive failed to recognize a brown bear in the middle of the road while operating at forty-two miles-per-hour. R. at 1, 4.

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[1] Autodrive "can make necessary adjustments using the information it receives from the sensors. Autodrive allows the vehicle to adjust for roadwork, weather conditions, the movement of another vehicle in the vicinity of the Marconi, or an obstruction in the roadway." R. at 3.

[2] The duty to warn is not at issue in this case. R. at 14, n.6.

Respondent had two independent bases for knowing the Marconi had difficulty recognizing stationary objects when traveling over thirty-five miles-per-hour. R. at 4–6. Prior to the Marconi's release, federally required testing revealed that the crash rate for accidents increased by *thirteen-percent* when the vehicle operated at "over [thirty-five miles-per-hour] and a stationary object was present in the vehicle's path." R. at 5. Respondent also knew of at least twelve accidents that had occurred under such circumstances in the two years before Mr. Ashpool's accident. R. at 5–6.

Additionally, Respondent knew of two ways to reduce the accident rate. First, prior to the Marconi's release, Respondent made a deliberate decision not to include an additional sensor and proprietary sensor technology that would have assessed stationary objects at higher speeds. R. at 5. Respondent made this decision because the additional equipment would have increased the cost of the vehicle by $5,000.00, removing it from the target market of economy sedan customers. Id. Thus, despite knowing target customers placed a higher premium on vehicle safety and ease of use, Respondent chose to include superfluous features—like a sunroof and eleven-inch touchscreen—instead of the desired safety feature. R. at 2–3. Remarkably, Respondent planned to include the additional safety technology in its luxury and sport vehicles; Respondent's affluent customers, who prefer high performance over safety, would benefit instead. R. at 2, 5. Second, after the Marconi's release, Respondent made a calculated decision not to create and release a known software update that would improve the ability of the existing sensors to detect stationary objects at higher speeds. R. at 7. In the past, Respondent updated the Marconi as technology advanced and new concepts were discovered, "by send[ing] a notification to the owner of the vehicle the next time the vehicle [was] started." R. at 3. The previous updates focused on safety and cosmetic features. Id.

Instead of combatting the risk of injury from the outset or providing a cost-effective safety update, Respondent maintains that the Marconi is safe "because even a moderately attentive driver would avoid the objects if they still had their hands on the wheel and eyes on the road." R. at 5. Notably, there is nothing in the record suggesting Mr. Ashpool's hands were off the wheel or that he was distracted at the time Autodrive failed to detect a brown bear in the road while the vehicle traveled at forty-two miles-per-hour.

Mr. Ashpool brought a products liability claim against Respondent alleging the Marconi was defectively designed. R. at 1. At trial, Mr. Ashpool requested the jury be instructed on Respondent's duty to retrofit. R. at 7. The trial court sustained Respondent's objection to the instruction, and the jury found for Respondent. Id. On the last day of trial, Mr. Ashpool moved for judgment as a matter of law pursuant to Fremont Rule of Civil Procedure 50(a), and after trial pursuant to Fremont Rule of Civil Procedure 50(b). Id. The trial court denied both motions, and Mr. Ashpool appealed. Id. The Fremont Court of Appeals affirmed the denial of Mr. Ashpool's Motion for Judgment as a Matter of Law, adopted the duty to retrofit, and held that it was harmless error to deny the duty to retrofit jury instruction. R. at 12–13. Mr. Ashpool timely appealed to this Court.

SUMMARY OF THE ARGUMENT

Petitioner, William Ashpool ("Mr. Ashpool"), is a fifty-five-year-old dedicated social worker who was injured when a known defect on his Edison Incorporated Marconi ("Marconi') caused his vehicle to collide with a brown bear. During production of the Marconi, Edison Incorporated ("Respondent"), the vehicle manufacturer, knew, through federally required safety tests and real-world collisions, that the lack of additional safety sensors increased the probability of collisions with stationary objects when the Marconi operated at speeds above thirty-five miles-per-hour. After a two-week hospitalization due to extensive injuries he sustained during such a collision, Mr. Ashpool brought this strict products liability action alleging Respondent defectively designed the Marconi. Mr. Ashpool urges this Court to reverse the lower court's denial of his renewed Motion for Judgment as a Matter of Law and to remand with instructions to grant the motion. Additionally, Mr. Ashpool urges this Court to affirm the Fremont Court of Appeals' adoption of a post-sale duty to retrofit, and to remand with instructions to grant a new trial to determine whether Respondent breached the duty.

In line with the foundational policy of strict products liability jurisprudence—consumer protection—this Court should reverse the Fremont Court of Appeals and remand with instructions to grant Mr. Ashpool's renewed Motion for Judgment as a Matter of Law. Respondent defectively designed the Marconi by failing to include additional sensor technology that mitigated against collisions involving stationary vehicles when the Marconi operated at speeds above thirty-five miles-per-hour. Fremont provides redress to injured consumers when a product is defectively designed by applying the risk-utility test from the Restatement (Third) of Torts: Products Liability, as codified by Fremont Rev. Code § 5552.321. At the heart of design defect claims, the risk-utility

test compares the risk of foreseeable harm the product poses with the availability and feasibility of a reasonable alternative design. Under the risk-utility test, this Court weighs six factors:

> (1) whether the severity of injury was foreseeable by the manufacturer; (2) whether the likelihood of injury was foreseeable by the manufacturer at the time of distribution of the product; (3) whether there was a reasonable alternative design available; (4) whether the available alternative design was practicable; (5) whether the available and practical reasonable alternative design would have reduced the foreseeable risk of harm posed by the product; (6) whether the omission of the alternative design rendered the product not reasonably safe.

R. at 9–10 (citing Peck v. Bridgeport Machs., Inc., 237 F.3d 614, 617 (6th Cir. 2001)).

Here, the factors weigh so heavily in favor of Mr. Ashpool that no reasonable juror could have found for Respondent. Mr. Ashpool proved the following facts: (1) Respondent, through federally-mandated testing, knew the Marconi struggled to recognize stationary objects when the Marconi operated in Autodrive at over thirty-five miles-per-hour; (2) Respondent knew that, without additional sensors, the Marconi's accident rate increased by *thirteen-percent* for those types of collisions; (3) Additional sensors existed at the time of the Marconi's release, but Respondent deliberately chose not to include them; (4) Respondent also knew, prior to Mr. Ashpool purchasing his Marconi, of *twelve* vehicular crashes involving faulty sensors and stationary objects when Autodrive operated above thirty-five miles-per-hour; (5) Respondent could have included the additional sensors at a cost of $5,000.00 per vehicle; (6) Respondent admitted that it intended on including the safety feature on future luxury and sports models; and (7) Economy sedan consumers prefer superior safety features at the expense of extravagant technology and high performance, suggesting costs could be cut in other areas to achieve pinnacle safety.

These facts unequivocally tip the scale of the balancing test in favor of Mr. Ashpool. No reasonable jury could have found otherwise. This Court should reverse.

Additionally, this case provides the Supreme Court of Fremont with the opportunity to adopt a three-prong, post-sale duty to retrofit in a narrow class of strict liability design defect cases. As adopted by the Fremont Court of Appeals, the three-prong, post-sale duty to retrofit applies to cases where (1) a product implicates human safety, (2) there is a continuing relationship between manufacturer and consumer, and (3) the manufacturer had knowledge of a defect after the product was in the hands of consumers. R. at 15–16.

This Court should adopt the duty for three reasons. First, the three-prong duty properly balances consumer safety with manufacturers' interests. Second, the duty to retrofit is necessary because traditional negligence theories are insufficient to protect consumers where known defects are likely to jeopardize life and limb. Finally, strict products liability originated in the judiciary and adopting a post-sale duty to retrofit follows that undertaking.

This Court should remand with instructions to grant a new trial on whether Respondent had a duty to retrofit the Marconi, because the Marconi is a motor vehicle, and motor vehicles implicate human safety; Respondent maintains a continuing relationship with Marconi owners by sending unsolicited technology updates to their vehicles; and despite knowing the Marconi had difficulty identifying stationary objects when the vehicle was traveling over thirty-five miles-per-hour, Respondent made a conscious decision not to create and implement an update that would have reduced the crash rate when the Marconi was on Autodrive.

In conclusion, this Court should (1) reverse and remand with instructions to grant Mr. Ashpool's renewed Motion for Judgment as a Matter of Law, (2) affirm the lower court's adoption of the three-pronged duty to retrofit, and (3) remand with instructions to grant a new trial on whether Respondent had a duty to retrofit the Marconi.

ARGUMENT

I. THIS COURT SHOULD REVERSE AND REMAND WITH INSTRUCTIONS TO GRANT MR. ASHPOOL'S MOTION FOR JUDGMENT AS A MATTER OF LAW BECAUSE THE MARCONI FAILS THE RISK-UTILITY TEST, RENDERING IT DEFECTIVE IN DESIGN.

The Edison Marconi ("Marconi") fails the risk-utility test; therefore, the Marconi is defectively designed, and this Court should reverse the Fremont Court of Appeals' decision and remand with instructions to grant William Ashpool's ("Mr. Ashpool") renewed Motion for Judgment as a Matter of Law. The hallmark of strict products liability is consumer protection. See Escola v. Coca Cola Bottling Co., 150 P.2d 436, 443–44 (Cal. 1944) (Traynor, J., concurring) (discussing policy concerns regarding defective products); see also Greenman v. Yuba Power Prods., Inc., 377 P.2d 897, 901 (Cal. 1963) (en banc) (same). Courts achieve this goal by imposing costs of injuries on those entities best suited to redistribute such costs through the line-of-production, namely, manufacturers, such as Edison Incorporated ("Respondent"). Greenman, 377 P.2d at 901.

To prevail on a design defect claim, plaintiffs must prove three elements: (1) the product caused the injury; (2) the product was in the same condition at the time it left the manufacturer's hands and at the time of injury; and (3) "injury occurred because the product was in a defective condition such that it was unreasonably dangerous to the driver." Fremont Rev. Code § 5552.321. Respondent conceded that Mr. Ashpool proved the first two elements. R. at 8. The Restatement (Third) of Torts, as applied in Fremont, categorizes a product as defective in design "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 . . . and the omission of the alternative design renders the product not reasonably safe." Restatement (Third) of Torts: Prod. Liab. § 2(b) (Am. Law Inst. 1998). Under the risk-utility test, this Court weighs six factors:

> (1) whether the severity of injury was foreseeable by the manufacturer; (2) whether the likelihood of injury was foreseeable by the manufacturer at the time of distribution of the product; (3) whether there was a reasonable alternative design available; (4) whether the available alternative design was practicable; (5) whether the available and practical reasonable alternative design would have reduced the foreseeable risk of harm posed by the product; (6) whether the omission of the alternative design rendered the product not reasonably safe.

R. at 9–10 (citing Peck v. Bridgeport Machs., Inc., 237 F.3d 614, 617 (6th Cir. 2001)). The "balancing of risks and benefits . . . must be done in light of the knowledge of risks and risk-avoidance techniques reasonably attainable at the time of distribution." Restatement (Third) of Torts: Prod. Liab. § 2 cmt. a. (Am. Law Inst. 1998). In sum, when a product's dangerous propensity to the consumer outweighs its utility, the product is defectively designed. Bragg v. Hi-Ranger, Inc., 462 S.E.2d 321, 328 (S.C. Ct. App. 1995) (explaining risk-utility test).

The following facts establish that the balancing factors weigh so heavily in favor of Mr. Ashpool that no reasonable juror could have found for Respondent: (1) Respondent, through federally-mandated testing, learned that the Marconi struggled to recognize stationary objects when the vehicle traveled over thirty-five miles per hour; (2) Respondent knew the accident rate of the Marconi increased by *thirteen-percent* for those types of crashes without additional sensors; (3) additional sensors and sensor proprietary technology existed at the time of the Marconi's distribution; (4) Respondent knew of *twelve* vehicular crashes involving faulty sensors and stationary objects when the vehicle traveled above thirty-five miles-per-hour prior to Mr. Ashpool purchasing his Marconi; (5) Respondent could have included the safety feature at $5,000.00 per vehicle; (6) Respondent admitted that it intended on including the safety feature on luxury and sports models in the future; and (7) economy sedan consumers prefer superior safety features at the expense of extravagant technology and high performance, suggesting that costs could be cut in

other areas to achieve pinnacle safety. R. at 2, 4–6. Thus, the Marconi fails the risk-utility test. This Court should reverse.

A. Respondent's Pre-Distribution Knowledge Gave Notice of Both the Likelihood and Severity of Potential Injuries Arising from Collisions with Stationary Objects when Marconi Vehicles Traveled Above Thirty-Five Miles-Per-Hour

Respondent took no steps to minimize harm, and Mr. Ashpool suffered debilitating injuries as a result—despite Respondent's knowledge of twelve accidents involving stationary objects, faulty sensors, and Marconi vehicles traveling above thirty-five miles-per-hour, and that such accidents were *thirteen-percent* more likely to occur absent additional sensors. Because Respondent knew that the likelihood of injury increased significantly, and it knew the exact type of accident additional sensors would help prevent, these two factors weigh in favor of Mr. Ashpool.

For liability to attach, a manufacturer must foresee both the likelihood that a consumer will be injured by its product and the severity of potential injury at the time distribution. Peck, 237 F.3d at 617. Under strict products liability jurisprudence, "[a] manufacturer has a duty to design its product to avoid an unreasonable risk of harm when the product is used as intended or misused in a reasonably foreseeable manner." Montemayor v. Sebright Products, Inc., 898 N.W.2d 623, 629 (Minn. 2017) (citing Bilotta v. Kelley Co., 346 N.W.2d 616, 624 (Minn. 1984)) (reversing summary judgment for manufacturer to allow jury to decide foreseeability where farm employee climbed inside extruder to clean and other employee turned machine on resulting in amputation of employee's legs). That duty persists even when a manufacturer has provided appropriate warnings about the danger of foreseeable misuse. Lewis v. Am. Cyanamid Co., 682 A.2d 724, 732 (N.J. Super. Ct. App. Div. 1996), aff'd as modified, 715 A.2d 967 (N.J. 1998). Thus, when manufacturers foresee a likelihood of injury from the reasonable misuse of their products, liability

attaches for failure to mitigate or prevent the risk of injury. Johnson v. American Motors Corp., 225 N.W.2d 57, 65 (N.D. 1974).

This Court must evaluate Respondent's conduct and "ask whether it was objectively reasonable to expect the specific danger causing the plaintiff's injury" when determining foreseeability. Montemayor, 898 N.W.2d at 629 (quoting Domagala v. Rolland, 805 N.W.2d 14, 27 (Minn. 2011)). The focus is "whether the possibility of an accident was clear to a person of ordinary prudence" rather than "'the precise nature and manner' of the injury." Id. (quoting Connolly v. Nicollet Hotel, 95 N.W.2d 657, 664 (Minn. 1959)). Collisions constitute a foreseeable misuse of automobiles. Johnson, 225 N.W.2d at 65.

Courts have long recognized the concept of crashworthiness, which commands automobile manufacturers to design their vehicles in a manner reasonably safe for collision; courts endorsed this duty because the likelihood of automobile use resulting in an accident is foreseeable. See e.g., Dawson v. Chrysler Corp., 630 F.2d 950, 956 (3d Cir. 1980) (holding automobile manufacturer strictly liable under New Jersey law for design defect causing injuries sustained in automobile crash); Johnson, 225 N.W.2d at 66 (emphasizing manufacturer's special obligation in designing safe vehicles); but see Holiday Motor Corp. v. Walters, 790 S.E.2d 447, 455 (Va. 2016) (holding sellers have no duty to design crashworthy vehicles under negligence or warranty theory).[3] Thus, "[t]he manufacturer must evaluate the crashworthiness of his product and take such steps as may be reasonable and practicable to forestall particular crash injuries and mitigate the seriousness of others." Buccery v. Gen. Motors Corp., 132 Cal. Rptr. 605, 613 (Cal. Ct. App. 1976) (reversing

[3] Courts adopting the Restatement (Third) of Torts: Products Liability for design defect claims have interpreted the legal standard to be akin to that of negligence claims. Thus, cases analyzing crashworthiness in the context of negligence provide helpful insight into a manufacturer's duty. Mickle v. Blackmon, 166 S.E.2d 173, 186 (S.C. 1969) (citing Larsen v. General Motors Corp., 391 F.2d 495, 502 (8th Cir. 1968)).

judgment for seller where truck was defectively designed due to seller's failure to include a headrest in truck leading to head injury from five mile-per-hour collision). A product's warnings may also provide evidence that the risk of harm was foreseeable to the manufacturer. Erkson by Hickman v. Sears, Roebuck & Co., 841 S.W.2d 207, 211 (Mo. 1992).

According to data retrieved from the United States Department of Transportation, single-vehicle collisions accounted for over fifty-percent of all fatal accidents in the United States in 2018. Fatality Facts 2018: State by State, Insurance Institute for Highway Safety (Dec. 2019), www.iihs.org/topics/fatality-statistics/detail/state-by-state. Specifically, about twenty-percent of all vehicular collisions in 2018 involved fixed objects, including trees, utility poles, traffic barriers, and *animals*. Collisions with fixed objects and animals, Insurance Institute for Highway Safety (Dec. 2019), www.iihs.org/topics/fatality-statistics/detail/collisions-with-fixed-objects-and-animals. In 2018, about one-in-five collision fatalities involved a distracted driver; around 400,000 people were injured by distracted drivers. Transportation Safety: Distracted Driving, Center for Disease Control and Prevention (Dec. 4, 2020), www.cdc.gov/transportationsafety/distracted_driving/index.html.

Respondent had a duty to design the Marconi in a way that would have prevented or mitigated Mr. Aspool's injuries. Required testing gave Respondent notice that the Marconi's sensors had difficulty recognizing stationary objects when the Marconi operated at over thirty-five miles-per-hour. R. at 4–5. Respondent's purpose in testing was to ensure the vehicle had the ability to recognize potential obstacles to "advance[] the goal of minimal driver input." Id. As corroborated by expert testimony, these tests demonstrated that the accident rate for the Marconi increased by *thirteen-percent* when operated above the speed of thirty-five miles-per-hour and with a stationary object in the vehicle's path. R. at 5. Further, Respondent knew twelve accidents

involving stationary objects and Marconi vehicles driving above thirty-five miles-per-hour occurred prior to Mr. Ashpool's purchase. R. at 5–6. Respondent's CEO admitted "the company originally planned to include extra sensors and proprietary sensor technology that would have assessed stationary objects at higher speeds," but chose not to. R. at 5. However, Respondent did provide warnings about paying attention to the road and keeping two hands on the wheel. R. at 3.

Despite testimony that the Marconi was safe without the additional sensors, Mr. Ashpool's vehicle collided with a brown bear. R. at 1. Mr. Ashpool's uncontradicted testimony indicated he heeded the warning from Respondent and had both hands on the steering wheel when the vehicle crashed. R. at 1–2. Respondent produced no evidence that Mr. Ashpool was distracted while driving, but even if he was, automobile manufacturers can foresee distracted driving—especially when they advertise "minimal driver input." See R. at 4–5.

Respondent foresaw both the likelihood and severity of injury for a single-vehicle collision under the precise circumstances injuring Mr. Ashpool. Accordingly, no reasonable juror could have weighed these factors in favor of Respondent.

B. The Marconi is Defectively Designed Because Respondent Failed to Include Additional Safety Sensors or Sensor Proprietary Technology at an Expense of $5,000.00 Per Vehicle to Protect Consumers like Mr. Ashpool

The inclusion of additional sensors at a slight expense of $5,000.00 constitutes a reasonable alternative design that the law required Respondent to implement.

As the Georgia Supreme Court recognized, "the reasonableness of choosing from among various alternative product designs and adopting the safest one if it is feasible is considered the 'heart' of design defect claims . . . ." Banks v. Ici Ams., 450 S.E.2d 671, 674 (Ga. 1994) (quoting O'Brien v. Muskin Corp., 463 A2d 298, 306 (N.J. 1983)). The core questions concerning availability and practicality of reasonable alternative designs include whether the alternative

design was economically and technologically feasible. Id. at 674–75. Feasibility is a relative notion: "The more scientifically and economically feasible the alternative was, the more likely that a jury may find that the product was defectively designed." Boatland of Houston, Inc. v. Bailey, 609 S.W.2d 743, 746 (Tex. 1980) (internal citations omitted). A showing that a product's risks could easily or cheaply be diminished weigh heavily in favor of finding the product defective. See id. (affirming jury verdict for seller where alternative design for kill-switch was not feasible at the time of distribution). However, the alternative design must not create additional product dangers of equal or greater magnitude, or destroy the utility of the product. See Genie Industries, Inc. v. Matak, 462 S.W.3d 1, 7 (Tex. 2015) (reversing jury verdict for consumer where alternative design for aerial lift would have diminished the lifts ability to operate in tight areas).

Here, inclusion of additional sensors on the Marconi constitutes a reasonable alternative design that Respondent was obligated to implement. Respondent's CEO testified that the original plan was to "include extra sensors and proprietary sensor technology that would have assessed stationary objects at higher speeds"— precautions that would have made Mr. Ashpool's crash less likely to occur. R. at 4–5. He also testified that Respondent intended to include the additional sensors in the luxury and sports vehicles it was releasing in the future. R. at 5. Respondent's CEO testified that installing the extra sensors would cost consumers about $5,000.00, which would put the Marconi outside the target market of economy sedan consumers. R. at 2, 5. However, Respondent knew that economy sedan consumers "placed a higher premium on safety features . . . over cutting edge technology and high performance favored by their typical high-end customers." R. at 2. Nowhere in the record did Respondent introduce testimony that it could not forego certain high-end features or technology in the Marconi to ensure the safety of its consumers, something that consumers expect, and the law mandates Respondent provide.

1. A reasonable alternative design for the Marconi was available because additional sensor technology existed at the time of distribution

The existence of additional sensors at the time of distribution indicates that Respondent failed to implement an available alternative design, rendering the Marconi defective.

This Court must consider "whether there was a reasonable alternative design available" in the risk-utility balancing test. Peck, 237 F.3d at 617. To demonstrate availability, a plaintiff may introduce evidence that the proffered design "was in actual use or was available at the time of manufacture." Boatland, 609 S.W.2d at 746 (internal citations omitted). This evidence "depicts the available scientific knowledge and the practicalities of applying that knowledge to a product's design." Id. (internal citations omitted); see also Baley v. Fed. Signal Corp., 982 N.E.2d 776, 796 (Ill. App. Ct. 2012) (explaining availability does not require literal building of the alternative design but rather considers the "technological possibilities viewed in the present state of the art") (internal quotations omitted); accord Adamo v. Brown & Williamson Tobacco Corp., 900 N.E.2d 966, 968 (N.Y. 2008) (potential for designing safer alternative product sufficient); but see Casey v. Toyota Motor Engineering & Mfg. North America, Inc., 770 F.3d 322, 334 (5th Cir. 2014) (patent for airbag design insufficient evidence for existent alternative design under Texas law). State of the art evidence—for example, a showing that another manufacturer uses an alternative design—may evidence the availability of that design. Champion v. Great Dane Ltd. Partn., 286 S.W.3d 533, 541 (Tex. App. 2009) (citing Honda of Am. Mfg., Inc. v. Norman, 104 S.W.3d 600, 607 (Tex. App. 2003)); see also Baley, 982 N.E.2d at 746 (actual use by other manufacturers relevant to availability of alternative design); Riley v. Ford Motor Co., 757 S.E.2d 422, 427 (S.C. Ct. App. 2014) (manufacturer's use of proposed alternative design in prior vehicles demonstrated feasibility) (reversed on other grounds).

The technology to incorporate additional sensors in the Marconi was available at the time Respondent placed the vehicle onto the market. Respondent's CEO testified that the company had originally planned to include the technology in the Marconi. R. at 5. Further, the CEO testified that such technology would be included in future luxury and sport models, demonstrating that the state-of-the-art technology was available in the industry. Id. As further indicated by the CEO's testimony of his reluctance to incorporate the technology into the Marconi due to the cost to the consumer, the technology was both developed and available for placement in the Marconi at the time of its distribution. See R. at 5. Even presuming the technology was never actually built, the record is clear that the technology was available. See id.

Technology to incorporate additional sensors in the Marconi was available to Respondent at the time of the Marconi design. This factor weighs overwhelmingly in favor of Mr. Ashpool.

2. It was practicable for Respondent to include additional sensors on the Marconi because $5,000.00 is a reasonable cost when a vehicle places life and limb in jeopardy

Products—that by their very nature implicate human safety—must be designed as safely as possible. Respondent consciously chose profits over people by failing to include additional sensors in the Marconi based on the $5,000 cost.

This Court must weigh whether the alternative design proffered by plaintiff was practicable. Peck 237 F.3d at 617. Practicality is determined by whether the cost of the alternative design is economically feasible. See Norman, 104 S.W.3d at 607 (requiring plaintiff to introduce evidence of cost of alternative design). "More specifically, this inquiry asks whether the increased costs (lost dollars, lost utility, and lost safety) of altering the design—in the particular manner the plaintiff claims was reasonably necessary to the product's safety—would have been worth the resulting safety benefits." Branham v. Ford Motor Co., 701 S.E.2d 5, 16 (S.C. 2010) (internal

citations omitted); see also Riley, 757 S.E.2d at 427 (cable systems costing $9.00 per door instead of $4.25 per door proof of economic feasibility). Though plaintiff is not required to introduce the exact cost of an alternative design, plaintiff must introduce sufficient evidence proving "that any increase in cost would not materially affect the desirability of the product in light of the benefit derived." Bifolck v. Philip Morris, Inc., 152 A.3d 1183, 1202 (Conn. 2016). Other practicality considerations include "appearance and aesthetic attractiveness of the product; its utility for multiple uses; the convenience and extent of its use . . . ; and the collateral safety of a feature other than the one that harmed the plaintiff." Banks, 450 S.E.2d at 675 n6. Manufacturers may consider consumer preferences when determining practicality. See Goodner v. Hyundai Motor Co., Ltd., 650 F.3d 1034, 1041 (5th Cir. 2011) (stating manufacturer could consider consumer's preference for car seats with greater ability to recline under Texas law).

Here, implementing additional sensors in the Marconi was practicable. Respondent's CEO testified that the cost of additional sensors would be about $5,000.00 per vehicle. R. at 5. Though he testified that this cost would be borne by the consumer and take the vehicle out of the economy sedan market, evidence in the record points to the contrary. See id. The Marconi included various bells and whistles Respondent could have excluded in favor of making the vehicle safer. See R. at 2–3. For example, the Marconi came equipped with a sunroof with various settings for the lights and an eleven-inch screen displaying the driving route. See id. Even assuming the $5,000.00 increase would be borne by consumers, Respondent knew economy sedan consumers preferred premium safety features at the expense of high-performance or bougie technology. R. at 2. Respondent did not produce evidence that additional sensors would hinder the safety, appearance or aesthetic attractiveness of the product, its utility for multiple uses, the convenience and extent

of its use, or any other factor relating to the vehicle's practicality. Most significantly, the additional sensors would have improved the vehicle's safety, rather than hindering it. R. at 5.

Respondent's unsubstantiated concerns about the cost of additional sensors did not render the alternative design impractical. Consequently, this factor weighs in favor of Mr. Ashpool.

C. Additional Sensors on the Marconi Reduced the Risk of Harm by Thirteen-Percent, and Respondent's Refusal to Install Them Renders the Marconi not Reasonably Safe

Without additional sensors, the Marconi was unreasonably dangerous, because any driver using Autodrive at a speed above thirty-five miles-per-hour had a thirteen-percent increased risk of accidents involving stationary objects.

This Court must weigh "whether the available and practicable reasonable alternative design would have reduced the foreseeable risk of harm posed by the product . . . and . . . whether the omission of the alternative design rendered the product not reasonably safe." Peck, 237 F.3d at 617; accord Certainteed Corp. v. Fletcher, 794 S.E.2d 641, 644 (Ga. 2016). An alternative design need not "definitely or completely . . . [prevent] the damage; Rather . . . the alternative design [must be] significantly less likely to cause the accident than the chosen design, or . . . the alternative design [must have] significantly reduced the plaintiff's damages." Marable v. Empire Truck Sales of Louisiana, LLC, 221 So.3d 880, 895 (La. Ct. App. 2017) (citing Thomas v. Sport City, Inc., 738 So.2d 1153, 1154 (La. Ct. App. 1999)). Further, "[t]he requirement that an alternative design be capable of preventing the injury essentially asks whether [a manufacturer's failure to include a] safety device was a substantial factor in bringing about the plaintiff's injuries." Bernard v. Ferrellgas, Inc., 689 So.2d 554, 560 (La. Ct. App. 1997). Thus, the inquiry is whether, but-for Respondent's failure to include additional sensors, Mr. Ashpool's injuries would have been reduced or avoided. See id.

A manufacturer has a duty to design a vehicle that is reasonably fit to withstand the impact of collisions because such accidents are a foreseeable misuse of vehicles. See Elsasser v. Am. Motors Corp., 265 N.W.2d 339, 341 (Mich. Ct. App. 1978) (breach of implied warranty of fitness and negligence). As the California Supreme Court—a pioneer in the field of products liability—noted "[i]t is common knowledge that automobiles are operated at times at a speed of approximately 60 miles an hour, and manufacturers of automobile tires must reasonably anticipate that automobiles will be driven at times at such speeds." Nebelung v. Norman, 96 P.2d 327, 330 (Cal. 1939) (discussing foreseeability in context of design defect claim). All but two states have average speed limits above thirty-five miles-per-hour on rural interstates, urban interstates, and other limited access roads for both cars and trucks. National Motorists Association, State Speed Limit Chart (Jan. 2021), www.motorists.org/issues/speed-limits/state-chart/. Even if most roads had speed limits at or below thirty-five miles-per-hour, the Fifth Circuit has recognized that disobeying speed limits is a foreseeable misuse of an automobile. See LeBouef v. Goodyear Tire & Rubber Co., 623 F.2d 985, 989 (5th Cir. 1980) (affirming judgment for plaintiff where defectively designed tires led to deadly accident despite driver traveling at over 100 miles per hour in violation of speed limit under Louisiana law).

The risk of harm to Mr. Ashpool while traveling at forty-two miles-per-hour when the vehicle operated in Autodrive was reasonably foreseeable. Additional sensors on the Marconi would have reduced the risk of harm to plaintiffs such as Mr. Ashpool, and without such sensors, the Marconi is unreasonably dangerous. Mr. Ashpool presented undisputed evidence that Respondent's CEO knew additional sensors would reduce the risk of harm: (1) Mr. Ashpool demonstrated that Respondent's CEO knew about the thirteen-percent increased risk of accidents involving stationary objects at speeds above thirty-five miles-per-hour; and (2) Mr. Ashpool

demonstrated that Respondent's CEO knew about twelve accidents concerning faulty sensors and a stationary object where drivers were traveling above thirty-five miles-per-hour before he purchased the Marconi. R. at 6. Respondent was obliged to design a vehicle reasonably fit for collisions—even when those collisions result from careless driving—a fact not alleged or proved here. Respondent's failure to mitigate against the risk of harm from this collision constituted unreasonable behavior: Mr. Ashpool followed the speed limit and Respondent's instruction to keep two hands on the steering wheel. R. at 1–2. In fact, no evidence points to any driver misconduct. See id. Under those circumstances, Respondent was well-aware of the increased risk of harm its chosen design created and, despite Respondent's testimony to the contrary, the Marconi was not reasonably safe for foreseeable automobile collisions.

These final two factors—as well as the previous four factors—weigh in favor of Mr. Ashpool. Accordingly, this Court should reverse and remand with instructions to grant Mr. Ashpool's renewed Motion for Judgment as a Matter of Law.

II. THE STATE OF FREMONT SHOULD ADOPT A THREE-PRONG, POST-SALE DUTY TO RETROFIT FOR STRICT LIABILITY DESIGN DEFECT CLAIMS

When a manufacturer knows a product "he places on the market . . . [will] be used without inspection for defects," the manufacturer is strictly liable when the product "proves to have a defect that causes injury to a human being." Greenman, 377 P.2d at 900. Strict liability ensures "that the costs of injuries resulting from defective products are borne by the manufacturers . . . rather than by the injured persons who are powerless to protect themselves." Id. at 901. The manufacturer is responsible "whether or not it is negligent" because "public policy demands that responsibility be fixed wherever it will most effectively reduce the hazards to life and health inherent in defective

products that reach the market." East River S.S. Corp. v. Transamerica Delaval, Inc., 476 U.S. 858, 866 (1986); Escola, 150 P.2d at 440 (Traynor, J., concurring).

Accordingly, courts have imposed various post-sale duties on manufacturers. For example, the Michigan Supreme Court has adopted the post-sale duty to warn. Comstock v. Gen. Motors Corp., 99 N.W.2d 627, 634 (Mich. 1959). Within the duty to warn, some courts have held that manufacturers have a duty to test their products. Kociemba v. G.D. Searle & Co., 707 F.Supp. 1517, 1527 (D. Minn. 1989). Additionally, courts have imposed a duty to retrofit where the product involved is in a specialized market and implicates human safety. See Noel v. United Aircraft Corp., 342 F.2d 232, 237 (3d Cir. 1964) (holding manufacturer liable where it knew continued use of product, without safety device, endangered public and failed to act); see also Braniff Airways, Inc. v. Curtiss-Wright Corp., 411 F.2d 451, 453 (2d Cir. 1969) (where product involves human safety, manufacturer has duty to remedy or, where not feasible, warn about design defects that implicate human safety).

Here, the Fremont Court of Appeals adopted the duty to retrofit in cases where: (1) a product implicates human safety; (2) there is a continuing relationship between manufacturer and consumer; and (3) the manufacturer had knowledge of a defect after the product was in the hands of consumers. R. at 15–16. This Court should affirm the adoption of the duty to retrofit for three reasons. First, the three-prong test strikes the right balance between consumer safety and manufacturers' interests. Second, traditional negligence theories are insufficient to protect consumers where manufacturer inaction, in response to known defects, creates a likelihood of serious injury or death. Finally, the judiciary has crafted and molded the doctrine of strict products liability and adopting a post-sale duty to retrofit follows that undertaking.

A. A Three-Prong, Post-Sale Duty to Retrofit Strikes the Right Balance Between Consumer Safety and Manufacturers' Interests

The duty to retrofit properly balances concerns for consumer safety with manufacturers' interests. "A duty to retrofit is a duty to upgrade or improve a product." Ostendorf v. Clark Equip. Co., 122 S.W.3d 530, 533 (Ky. 2003). "Because any duty imposed is one of public policy and depends on the facts of the individual case, the question of imposing . . . a [post-sale duty to retrofit] is one of law." Gregory v. Cincinnati Inc., 538 N.W.2d 325, 330 (Mich. 1995). Courts that have declined to adopt the duty to retrofit rest the decision on the "onerous" or "unreasonable" burden that such a duty would place on manufacturers. Gregory, 538 N.W.2d at 334; Ostendorf, 122 S.W.2d at 536. However, the three-prong test adopted by the Fremont Court of Appeals addresses these concerns by imposing the duty on a narrow class of sellers who manufacture products likely to put life and limb in jeopardy; the three-prong test requires (1) the product to implicate human safety, (2) a continuing relationship between manufacturer and consumer, and (3) knowledge of the defect after the product was in the hands of consumers. R. at 15–16.

1. Where a product implicates human safety, a duty to retrofit helps achieve the main goal of products liability—consumer protection

The first prong, which requires the product to implicate human safety, cuts to the core of products liability. In fact, even courts that have chosen not to adopt the duty to retrofit have emphasized that concerns about human safety—not present in the cases before them—might compel the duty in other cases. See Gregory, 538 N.W.2d at 334–35 (courts "that have imposed a duty to repair . . . have been reserved for extraordinary cases . . . in which the potential danger is severe and widespread . . . ."); see also Ostendorf, 122 S.W.3d at 534 ("the few cases finding a duty to retrofit often involve products that directly implicate human safety . . . .").

For example, in Noel, the manufacturer knew a line of propellers tended to rotate "at a rate greater than its maximum capacity," and that, in some instances, the pilot would be able to fix the issue by "feathering." Noel, 342 F.2d at 234. However, if the pilot failed to control the propellers, there was a "strong likelihood of disintegration of the engine and its component parts." Id. The district court found that the manufacturer was aware of both the issue and the danger, yet did not consider updating the design for over eight years. Id. at 237. Ultimately, the Third Circuit held the manufacturer liable because it was "aware that absent some type of controlled mechanism, continued use of [the propellers] endangered the public, and that despite [such] awareness . . . [the manufacturer] permitted the development of an effective safety device adaptable to [the propellers] to lag behind similar development for other [products]." Id.; see also Braniff Airways, 411 F.2d at 453 (where product involves human safety, manufacturer has duty to remedy or, where not feasible, warn about design defects that implicate human safety); Downing v. Overhead Door Corp., 707 P.2d 1027, 1033 (Colo. App. 1985) (same). Even where a product implicates human safety, some "[c]ourts have been unwilling to impose such an onerous duty except where there is . . . [a] controlling relationship between the manufacturer and the owner of the machine." Gregory, 538 N.W.2d at 334–35.[4]

2. The "continuing relationship" requirement relieves manufacturers from the burden of tracking down consumers they cannot identify

Requiring a "continuing relationship" between manufacturers and consumers before imposing the duty to retrofit alleviates one of the most significant concerns—whether the

[4] A non-exhaustive list of factors to consider in determining whether a product implicates human safety includes whether a person operates the product; whether a person is somehow attached to the product (i.e. buckled or strapped in); how quickly a person can distance themselves from the product if it becomes dangerous (i.e. a helicopter versus a ride-on lawn mower versus a cell phone); whether a person would likely experience serious injury or death if they lost control of the product; and whether external forces might render the product dangerous (i.e. nature, third parties, etc.).

manufacturer has the necessary information to contact product owners. See Patton v. Hutchinson Wil-Rich Mfg. Co., 861 P.2d 1299, 1316 (Kan. 1993) ("Notification by a manufacturer to all prior purchasers of a product may be extremely burdensome, if not impossible."); see also Kozlowski v. Jon E. Smith's Sons Co., 275 N.W.2d 915, 924 (Wis. 1979) ("It would place an unreasonable duty upon these manufacturers if they were required to trace the ownership of each unit sold . . . ."); Lynch v. McStome & Lincoln Plaza Assoc., 548 A.2d 1276, 1281 (Pa. Super. Ct. 1988) ("The clear effect of imposing such a duty would . . . subject [the manufacturer] to the onerous, and oftentimes impossible, duty of notifying each owner . . . .").

Whether a continuing relationship exists is a question of fact. No jurisdiction provides a list—exhaustive or non-exhaustive—of factors to consider when determining whether such a relationship exists. In Noel, the Third Circuit found a nine-month continuing relationship between the manufacturer and the owner of the plane from "the delivery of the propeller system . . . [until] the plane crash." Noel, 342 F.2d at 241. In finding such a relationship, the court emphasized that the manufacturer's "field service department advised [the plane owner] with regard to the maintenance, overhaul and operation of the propeller system and supplied [the owner] with service bulletins supplementing manuals of instruction." Id. By way of contrast, in Gregory, the Michigan Supreme Court did not find a continuing relationship where "[t]here were only two postmanufacture service calls . . . effected by service technicians, not safety representatives or sales persons;" the manufacturer forwarded mail; and the manufacturer provided price quotes for servicing the helicopter. Gregory, 538 N.W.2d at 336. As evidenced by Noel and Gregory, it is insufficient for the manufacturer to merely *know* who the affected customers are; the fact-finder

must evaluate all of the evidence to determine whether a continuing relationship exists.[5] Imposing the duty to retrofit on a manufacturer who has knowledge that identifiable customers, with whom the manufacturer maintains a continuing relationship, may be affected by a known defect, serves to uphold the principles underlying products liability.

3. Requiring manufacturers to have knowledge of the defect after the product is in the hands of consumers aligns with prevailing products liability principles

Interpreting "products liability law to allow manufacturers to ignore post-sale knowledge about dangers associated with their product is . . . contrary to prevailing [products liability] principles." Crowston v. Goodyear Tire & Rubber Co., 521 N.W.2d 401, 407 (N.D. 1994). The cornerstone of the Michigan Supreme Court's holding in Comstock involved knowledge of the defect: "we believe a . . . duty to give prompt warning exists *when a latent defect* which makes the product hazardous to life becomes *known to the manufacturer* shortly *after the product has been put on the market*." Comstock, 99 N.W.2d at 634 (emphasis added); see also Patton, 861 P.2d at 1314 ("We reason that a manufacturer who was unaware of a hazard at the time of sale and has since acquired knowledge of a life-threatening hazard should not be absolved of all duty to take reasonable steps to warn the ultimate consumer who purchased the product."). Notably, "[w]arnings and repairs are properly viewed not as different obligations but simply different points on a continuum of post-sale precautions." Gregory, 538 N.W.2d at 349 (Levin, J., dissenting in part) (internal quotations omitted). Although, "warning provides a convenient characterization of the manufacturer's post-sale obligations, the manufacturer's responsibility may range from

[5] A non-exhaustive list of factors to consider in determining whether a continuing relationship exists includes whether the manufacturer and consumer interacted o communicated after the product was purchased; which party initiated such interaction or communication; whether such interaction or communication created an expectation on the part of the consumer; whether the interaction or communication came at an extra cost to the consumer; and how often the manufacturer and consumer interacted or communicated after the product was purchased.

providing the buyer with a corrective device, to the simple sending of a letter." Id. (internal quotations omitted). Thus, "[t]he nature of the defect will dictate the appropriate remedy: a defect that may result in a few minor injuries may only require a warning, whereas a defect that may result in serious injury or death may require more." Ostendorf, 122 S.W.2d at 536.

In determining that such a duty exists, "[c]ommentators and courts have . . . [considered] the type of danger posed [by the product], the manufacturer's knowledge, and the time in which the manufacturer knew, should have known, or actually learned of a possible problem." Gregory, 538 N.W.2d at 330. Some courts have held manufacturers liable where they were "aware that absent some type of [safety mechanism], continued use of [the product] endangered the public, and that despite [such] awareness . . . [the manufacturer] permitted the development of an effective safety device adaptable to [the product] to lag behind similar development for other [products]." Noel, 342 F.2d at 237. Similarly, other courts have held that after a manufacturer sells a "product where human safety is involved . . . and dangerous defects in design have come to the manufacturer's attention, the manufacturer has a *duty* either *to remedy* these or, if complete remedy is not feasible, at least to give users adequate warnings and instructions concerning methods for minimizing the danger." Braniff Airways, 411 F.2d at 453 (internal quotations omitted) (emphasis added); see also Bell Helicopter Co. v. Bradshaw, 594 S.W.2d 519, 531–32 (Tex. Civ. App. 1979) (holding helicopter manufacturer liable where it regained control of helicopter and sold it without replacing parts it knew were unreasonably dangerous).

A "defect that may result in serious injury or death may require more" than a warning. Ostendorf, 122 S.W.2d at 536. As such, the post-sale duty to retrofit is a logical extension of the post-sale duty to warn where products implicate human safety, a continuing relationship exists

between manufacturer and consumer, and the manufacturer has knowledge of the defect after the product is in the hands of consumers.

B. Traditional Negligence Theories Are Insufficient To Protect Consumers Where Manufacturer Inaction In Response To Known Defects Creates A Likelihood Of Serious Injury Or Death

Manufacturers should be strictly liable for failing to retrofit their products because traditional negligence theories do not adequately protect consumers where products implicate human safety. To the extent some courts have held that imposing a duty to retrofit "is superfluous in light of existing negligence and product liability doctrines," those courts fail to adequately consider the hallmark of strict products liability—consumer safety. Ostendorf, 122 S.W.3d at 535. Generally speaking, "[p]ost-sale claims may give plaintiffs advantages not available in typical product liability cases." Michael L. Matula, Manufacturers' Post-Sale Duties in the 1990s, 32 Tort & Ins. L.J. 87, 87 (1996). Specifically, the post-sale duty to retrofit provides consumers with an avenue for redress when manufacturers, with whom the consumers have a continuing relationship with, willfully choose not to improve a product they know is likely to cause harm.

As a matter of public policy, the duty to warn is toothless without a requirement for manufacturers to retrofit their products. In Comstock, the manufacturer knew, "immediately following" the release of a car, there were issues "resulting in sudden brake failures." Comstock, 99 N.W.2d at 630. Instead of warning car owners, the manufacturer created two "separate kits for replacement of the defective parts." Id. at 631. Dealerships "were [then] instructed to make repairs on the power brake system at [the manufacturer's] expense whenever [the affected vehicles] came into the shops." Id. In holding that the manufacturer had a post-sale duty to warn, the Michigan Supreme Court glossed over the fact that the manufacturer had retrofitted the brake systems in the affected cars. Id. at 634. However, car owners would not have been adequately protected if the

manufacturer had not voluntarily assumed a retrofitting campaign. In other words, warning customers that a known design defect rendered the brakes in their cars likely to fail would have been insufficient to adequately protect them. "A modern automobile equipped with brakes which fail without notice is as dangerous as a loaded gun." Id. at 632. Thus, the "nature of [the cars would have been] such that [the cars were] reasonably certain to place [life] and limb in peril . . . ." MacPherson v. Buick Motor Co., 111 N.E. 1050, 1051 (N.Y. 1916). If the manufacturer had not voluntarily assumed a retrofitting campaign, it would not be outside the bounds of reason to infer that the Michigan Supreme Court would have imposed a duty to retrofit. See Comstock, 99 N.W.2d at 634 (citing Gerkin v. Brown & Sehler Co., 143 N.W. 48, 53 (Mich. 1913)) (noting that manufacturer who has knowledge of a product that "contains concealed dangers" has a bare minimum duty to "*at least* . . . warn[] the ignorant consumer . . . of the hidden danger . . . .") (emphasis added). The post-sale duty to retrofit furthers the goals of products liability where the duty to warn is insufficient because the defective products implicate human safety.

C. The Judiciary Crafted and Molded the Doctrine of Strict Products Liability and Adopting A Post-Sale Duty To Retrofit Follows That Undertaking

Courts that have declined to impose the post-sale duty to retrofit on the grounds that such a decision is best left to administrative agencies or state legislatures have disregarded the origins of product liability jurisprudence. See Ostendorf, 122 S.W.3d at 534 ("[A] duty to retrofit is properly the province of an administrative or legislative body."); see also Patton, 861 P.2d at 1316 ("The decision to expand a manufacturer's post sale duty beyond implementing reasonable efforts to warn ultimate consumers who purchased the product of discovered latent life-threatening hazards unforeseeable at the point of sale should be left to administrative agencies and the legislature.").

In the 1960s—and "in the tradition of judicial innovation,"—California and New Jersey courts "inaugurated a new era in the law of products liability" as judges "sought to use tort law as a tool for consumer protection." George W. Conk, Is There A Design Defect In The Restatement (Third) Of Torts: Products Liability?, 109 Yale L.J. 1087, 1092 (2000); see Henningsen v. Bloomfield Motors, 161 A.2d 69, 77 (N.J. 1960) (when manufacturer markets products to consumer, manufacturer's duty runs directly to consumer); Greenman, 377 P.2d at 900 ("A manufacturer is strictly liable in tort when an article he places on the market, knowing that it is to be used without inspection for defects, proves to have a defect that causes injury to a human being."). Manufacturers' duties have also originated in the judiciary. See Comstock, 99 N.W.2d at 634 (post-sale duty to warn); see also Kociemba, 707 F.Supp at 1527 (duty to test); Hernandez v. Badger Constr. Equip. Co., 34 Cal. Rptr. 2d 732, 754 (Cal. Ct. App. 1994) (post-sale duty to retrofit).

The judiciary's role in crafting products liability jurisprudence is supported by updates the American Law Institute ("ALI") has made to the Restatement. "Section 402 [of the Restatement (Second) of Torts] ratified a body of product-defect case law emerging from state courts . . . ." Conk, 109 Yale L.J. at 1092. Similarly, when constructing Section 10 of the Restatement (Third), Liability of Commercial Product Seller or Distributor for Harm Caused by Post-Sale Failure to Warn, the ALI acknowledged that "a growing body of decisional . . . law imposes such a duty." Restatement (Third) of Torts: Prod. Liab. § 10 cmt. a (Am. Law Inst. 1998). Finally, in response to judicial decisions holding "that, in certain narrow instances, a manufacturer may have a duty to recall or retrofit a product, the ALI included" Section 11, Liability of Commercial Product Seller or Distributor for Harm Caused by Post-Sale Failure to Recall Product, in the Restatement (Third). Kenneth Ross, Am. Bar. Ass'n, Post-Sale Duty to Warn 39 (2004). Though the Restatement

(Third) does not explicitly discuss the duty to retrofit, the Reporter's Note acknowledges that there is a split between courts as to whether such duty exists. Restatement (Third) of Torts: Prod. Liab. § 11 reporters' note cmt. a (Am. Law Inst. 1998). Judicial adoption of a duty to retrofit is proper not only because it would follow decades of case law fashioning and molding responsibilities and duties for manufacturers in the products liability realm, but also because it would further the heart of products liability—consumer safety.

III. THIS COURT SHOULD REMAND WITH INSTRUCTIONS TO GRANT A NEW TRIAL ON WHETHER RESPONDENT HAD A DUTY TO RETROFIT THE MARCONI

Because a plaintiff may use "more than one theory of liability . . . in matters involving products liability," this Court should remand with instructions to grant a new trial so that the fact-finder may weigh the evidence to determine whether Respondent had a duty to retrofit the Marconi. See W.M. Bashlin Co. v. Smith, 643 S.W.2d 526, 529 (Ark. 1982) (noting that products liability plaintiff may proceed on two independent theories). Even where a jury does not find that any "of the mechanical design features [at] issue . . . constitute[] a defect," the jury can "still . . . find that [the manufacturer's] knowledge of the injuries caused by the[] features imposed a *duty to warn* of the danger, and/or a *duty to conduct an adequate retrofit campaign*."[6] Lunghi v. Clark Equip. Co., 200 Cal. Rptr. 387, 392 (Cal. Ct. App. 1984) (emphasis added).

Respondent had a duty to retrofit the Marconi because (1) it is a product that implicates human safety, (2) Respondent maintained a continuing relationship with Marconi owners, and (3) Respondent had knowledge of the issue after the Marconi was in the hands of customers.

[6] The duty to warn is not at issue in this case. R. at 14 n.6.

A. As the Fremont Court of Appeals Noted, a Vehicle, like the Marconi, Is a Product Implicating Human Safety

The Marconi, a motor vehicle, implicates human safety. "Road traffic crashes are a leading cause of death in the United States." Road Traffic Injuries and Deaths—A Global Problem, Centers for Disease Control (Dec. 14, 2020), www.cdc.gov/injury/features/global-road-safety/index.html. In fact, in 2018, there were 36,560 deaths nationwide. Persons Fatally Injured in Motor Vehicle Crashes, 1967–2018, U.S. Dep't of Transp. Fed. Highway Admin. (Nov. 27, 2019), www.fhwa.dot.gov/policyinformation/statistics/2018/fi210.cfm. Collisions caused by road debris or stationary objects in the road have also led to deaths. Between 2011 and 2014, there were an estimated 243,413 debris-related crashes, with "576 fatal crashes . . . result[ing] in 616 deaths nationwide over the study period." Brian C. Teft, The Prevalence of Motor Vehicle Crashes Involving Road Debris, United States, 2011 – 2014, AAA Foundation for Traffic Safety (Aug. 2016), www.aaafoundation.org/wp-content/uploads/2017/12/RoadDebris_REPORT_2015.pdf at 6. In 2018, motor vehicle accidents involving animals accounted for 190 deaths. Collisions with fixed objects and animals. Semi-autonomous vehicles are not immune from the dangers presented on roadways. At least two individuals have died as a result of semi-autonomous vehicles failing to detect objects in the roadway. See Alyssa Newcomb, Tesla's Autopilot Under Investigation After Fatal Crash, ABC News (June 30, 2016), www.abcnews.com/Technology/teslas-autopilot-investigation-fatal-crash/story?id=40260498 (fatal accident where Autopilot failed to differentiate between white trailer and sky); see also Soo Youn, Tesla sued for 'defective' Autopilot in wrongful death suit of Florida driver who crashed into tractor trailer, ABC News (Aug. 1, 2019), www.abcnews.com/Technology/tesla-sued-defective-autopilot-wrongful-deathsuitflorida/story?id=64706707 (fatal accident where Autopilot failed to detect tractor trailer on roadway). Tesla, the largest manufacturer of semi-autonomous vehicles in the United States, describes the semi-

autonomous feature as "Autopilot." Autopilot, Tesla, www.tesla.com/autopilot. A study by the Insurance Institute for Highway Safety revealed that the use of the word "'Autopilot' signals to drivers that they can turn their thoughts and eyes" away from the road. New studies highlight driver confusion about automated systems, Insurance Institute for Highway Safety (June 20, 2019), www.iihs.org/news/detail/new-studies-highlight-driver-confusion-about-automated-systems.

Here, Respondent holds the Marconi out as being capable of operation without human input through its Autodrive feature.[7] The name "Autodrive" likely "signals to drivers that they can turn their thoughts and eyes away from the road." Id. As a semi-autonomous vehicle that "must be equipped with the ability to readily react and respond to roadway conditions just as a human would," the Marconi is a product that implicates human safety. R. at 16.

B. Respondent Maintains a Continuing Relationship with Marconi Owners By Continuously Updating the Vehicle's Technology

Respondent maintains a continuing relationship with Marconi owners by "continuously updat[ing] the Autodrive software as technology advances and new concepts are discovered." R. at 3. When a safety or cosmetic update is available, Respondent "sends a notification to the owner of the vehicle the next time the vehicle is started." Id. Respondent uses this cost-effective method because it allows Respondent "to continuously update its vehicles and maintain the highest of safety standards, without having to make entirely new vehicles." Id. By sending unsolicited and easy-to-install updates, Respondent creates an expectation on the part of the vehicle owner that

[7] Autodrive "receives information via twelve sensors that can analyze the road and surrounding drivers. The onboard computer receives the sensory data to control the vehicle . . . without input from the driver." R. at 2. After the driver inputs their destination in the navigation system, "[t]he driver's input . . . is minimal, and the vehicle operates semi-autonomously until arrival at the destination." Id. Importantly, "Autodrive allows the vehicle to adjust for road work, weather conditions, the movement of another vehicle in the vicinity of the Marconi, or *an obstruction in the roadway*." R. at 3 (emphasis added).

Respondent will continuously update the owner's car with the latest technologies at no extra cost. In doing so, Respondent maintains a continuing relationship with Marconi owners.

C. Respondent Knew the Marconi Had Difficulty Identifying Stationary Objects When the Vehicle Was Traveling Over Thirty-Five Miles-Per-Hour

Federally mandated pre-release crash and safety tests revealed that the Marconi "sensors had difficulty identifying stationary objects when the vehicle was driving above" thirty-five miles-per-hour. R. at 4–5. Expert testimony revealed that "the accident rate [when the Marconi was on Autodrive] was thirteen-percent higher when the vehicle was going over [thirty-five miles-per-hour] and a stationary object was present in the vehicle's path." R. at 5. Respondent knew it could reduce the crash rate by "includ[ing] extra sensors and [improved] proprietary sensor technology," but "abandoned the plan due to feasibility and cost concerns." Id. This choice paved the way for "approximately twelve accidents involving stationary objects and drivers going above" thirty-five miles-per-hour in the months following the Marconi's release. R. at 5–6. Despite knowing its product placed customers in danger when customers used Autopilot at over thirty-five miles-per-hour, Respondent chose not to act.

This Court should remand with instructions for a new trial to determine whether Respondent had a duty to retrofit, because the Marconi is a product that implicates human safety; Respondent maintained a continuing relationship with Marconi owners; and Respondent made a deliberate decision in declining to create and implement an update that would reduce the crash rate when the Marconi was on Autopilot.

CONCLUSION

For the foregoing reasons, this Court should reverse the Fremont Court of Appeals' decision and remand with instructions to grant Mr. Ashpool's renewed Motion for Judgment as a Matter of Law. Additionally, this Court should uphold the adoption of the duty to retrofit and remand with instructions to grant a new trial to determine whether Respondent had a duty to retrofit the Marconi.

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