Case No. 21-2112

In the

SUPREME COURT IN THE STATE OF FREMONT

WILLIAM ASHPOOL,

Petitioner,

versus

EDISON INCORPORATED, A Fremont Corporation,

Respondent,

On Writ of Certiorari To The

Supreme Court in the State of Fremont

BRIEF FOR THE PETITIONER

Team I

Attorneys for Petitioner

QUESTIONS PRESENTED

- I. Did the appellate court err in affirming the trial court's denial of Mr. Ashpool's motion for judgement as a matter of law on the design defect claim under the risk-utility analysis?
- II. Should the duty to retrofit be adopted in the State of Fremont in certain strict liability design defect claims as was decided by the appellate court?

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Secondary Sources

Douglas R. Richmond, Expanding Products Liability: Manufacturers' Post-Sale Duties to Warn,
Retrofit, and Recall, 36 Idaho L. Rev. 7 (1999)19
Jerry L. Mashaw & David L. Harfst, From Command and Control to Collaboration and
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Lauren Rhue & Anne L. Washington, AI's Wide Open: Premature Artificial Intelligence and
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Restatement (Third) of Torts: Products Liability § 2(b) (Am. L. Inst. 2012)7
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STATEMENT OF THE CASE

Petitioner William Ashpool, (Mr. Ashpool), purchased the Marconi, a semi-autonomous vehicle designed and manufactured by the Respondent, Edison Incorporated, (Respondent), in November 2019. R. at 3-4. During his test drive, Respondent's sales representative told Mr. Ashpool about Autodrive and that it would allow him to get to his destination with "no further action required" once he input the GPS destination. R. at 4. Mr. Ashpool liked the Autodrive feature so much that he purchased the car because of it and used it regularly. *Id*.

On December 20, 2019, Mr. Ashpool suffered a dislocated shoulder, five broken ribs, a broken wrist, a concussion, and whiplash when the Autodrive feature failed to detect a stationary bear sitting in the center of Route 27 when the Marconi was traveling at approximately 42 miles per hour. R. at 4. Mr. Ashpool alleged that Autodrive did not detect the bear, so the vehicle neither adjusted nor stopped on its own as the Autodrive feature otherwise would. *Id*. Further, Mr. Ashpool alleged Autodrive did not alert him of the danger on the display screen or instruct him to override Autodrive by manually braking or maneuvering the vehicle himself. *Id*. The resulting collision rendered the vehicle a total loss and Mr. Ashpool was hospitalized for two and a half weeks to address his extensive injuries. *Id*.

Following the accident, Mr. Ashpool commenced this action against Respondent. R. at 4. Mr. Ashpool's claim was predicated on two theories of liability: (1) strict liability in tort for defective design of the Macroni, and (2) Respondents's breach of the common law duty to retrofit its vehicles after safety flaws are discovered. *Id*.

At trial, evidence was presented that Respondent began designing the Marconi in 2014 and released it in 2017 with the aim of entering the economy sedan market. R. at 2. Market analysis conducted by Respondent showed that consumers in the economy range placed a higher premium on safety features and ease of use than luxury and technology features than its other

customers who purchased high end, luxury models. *Id.* The Marconi includes a feature called Autodrive. *Id.* When the Marconi is in Autodrive mode, the driver inputs their GPS destination into the center console. *Id.* Then, the Marconi Autodrive system operates the vehicle, assessing road conditions, surrounding drivers, speed and traffic regulations, roadway obstructions, construction, and weather and uses that data to stop, start, change gears, and steer with no input from the driver. R. at 2-3. This information is received by twelve sensors on the exterior of the Marconi. R. at 2. The driver must always keep two hands on the wheel and has ability to override the Autodrive system. *Id.* If the driver removes their hands from the wheel, a flashing light appears on the dashboard and instructs the driver to place their hands back on the wheel. *Id.* Additionally, Respondent periodically sends software updates, primarily safety updates, to its customers. R. at 3. The Autodrive software updates are not self-executing; they require the driver to manually accept any update on the car's computer screen. *Id.*

During internal vehicle safety testing, as required by the National Highway Traffic Safety Administration, conducted while the Marconi was in development, Respondent discovered that the sensors had difficulty detecting stationary objects when the vehicle was traveling over 35mph. R. at 4-5. As a result of this deficiency, the Marconi had a 13% higher collision rate when a stationary object was in its path and traveling over 35 mph. R. at 5. Had Respondent used its original design plans that included additional sensors on the exterior of the Marconi, Autodrive would have better assessed stationary objects at higher speeds, and the collision rate would have been reduced. *Id*.

At trial, Mr. Ashpool presented evidence based on a strict liability product design defect claim to prove that at the time of distribution, the Marconi was in unreasonably dangerous condition because it lacked additional sensors. R. at 7. Mr. Ashpool also presented post distribution data that that in the two-year period between the Marconi's release and Mr. Ashpool's accident, Respondent was made aware of twelve other collisions had occurred with stationary objects when the vehicle was traveling over 35 mph. R. At 5. A software update post-

distribution also could have remedied the high collision rate; however, evidence of a software based alternative design was not presented to the jury due to Respondent's objection. R. at 6-7.

Mr. Ashpool requested that the trial judge instruct the jury on the duty to retrofit — defined as a manufacturer's continuing obligation to repair defects, even if those defects develop after the sale of the product. R. at 6. Respondent objected, noting that Fremont did not recognize the duty to retrofit. R. at 6-7. The trial judge agreed with Respondent and refused to instruct the jury on the duty to retrofit. R. at 6-7. Thus, only Mr. Ashpool's defective design claim was submitted to the jury. After the presentation of all evidence, Mr. Ashpool moved for judgment as a matter of law (JMOL) under Fr.R.Civ.P. 50(a), which was denied. R. at 7. The jury, subsequently, found for Respondent on the remaining strict liability theory. *Id.* Mr. Ashpool renewed his JMOL motion under Fr.R.Civ.P. 50(b), which was also denied. *Id.*

Mr. Ashpool appealed the failure to grant his duty to retrofit instruction and the denial of his JMOL to the Court of Appeals. R. at 7. The Court of Appeals rejected Mr. Ashpool's JMOL appeal. R. at 18. However, the Court of Appeals adopted the duty to retrofit; therefore, the trial court should have given a jury instruction on the topic. R. at 16. Despite this ruling, the Court of Appeals found that the trial court's failure to instruct the jury on the duty to retrofit was harmless because the jury would not have found for Mr. Ashpool on the duty to retrofit claim. *Id*. Thus, the Court of Appeals refused to remand the case to the trial court for a new trial. *Id*.

This timely appeal followed, and a writ of was certiorari granted. R. at 20.

SUMMARY OF THE ARGUMENT

The Court of Appeals erred in affirming denial of Mr. Ashpool's motion for judgment as a matter of law. In Fremont, a plaintiff must prove three elements to prevail on a design defect claim. Those elements are: 1) the product caused the injury, 2) at the time of the injury, the product was in essentially the same condition as when it left the manufacturer, and 3) the injury occurred because product was unreasonably dangerous, and therefore in a defective condition. Fremont Rev. Code § 5552.321; W. Prosser, Law of Torts 671-72 (4th Ed. 1970). The third element is the only element in dispute in this case. R. at 8. Fremont exclusively uses a six-factor risk-utility test to determine if a product is unreasonably dangerous. *Fickell v. Toyoma Motors Inc.*, 758 XE 821, 830 (Fremont 2014). The six factors are: 1), if the severity of the 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 practicable reasonable alternative design would have reduced the foreseeable risk of harm posed by the product, and 6) whether the omission of the alternative design rendered the product not reasonably safe. *Peck v. Bridgeport Machs., Inc.* 237 F.3d 614, 617-618 (6th Cir. 2001).

The Appellate Court erred in holding for Respondent under the risk-utility test. In addressing foreseeability factors, the Court of Appeals mistakenly held for Respondent because "we find nothing in the inherent design of the Audodrive's shortcoming to render the vehicle any more dangerous than a sedan without such advanced technology." R. at 10-11. This determination incorrectly focused the foreseeability analysis on the Marconi's dangerousness in comparison to other vehicles. A correct analysis would have focused on the foreseeable risks of Autodrive at the point of distribution. *Banks v. Ici Adams*, 450 S.E.2d 671, 673 (Ga. 1994); *Owens v. Allis-Chalmers Corp.*, 326 N.W.2d 372 (Mich. 1982). Respondent knew from crash safety testing that the Marconi had a 13% chance of colliding with a stationary object when it was traveling at or above 35 mph, making Mr. Ashpool's injuries a clearly foreseeable harm. R. at 5. The Court of Appeals also failed to analyze the totality of the circumstances regarding the inclusion of an additional sensor, Ashpool's proposed reasonable and alternative design. The

court only addressed evidence of rising cost concerns, not the market research showing the value consumers place on safety features, that the extra sensor was included in Respondent's additional design plans, and that an extra sensor would not have diminished the utility of the vehicle. R. at 11, 2, 5. Lastly, the Court incorrectly concluded that an additional sensor would not have reduced the collision rate, contradicting evidence from Mr. Ashpool's expert that it would have. R. At 11. Therefore, Mr. Ashpool successfully showed that including an additional sensor was a reasonable and practicable alternative design that would have reduced the 13% collision rate that Respondent knew of prior to the Marconi's distribution. Accordingly, Mr. Ashpool prevails as a matter of law under the risk-utility test and the Court of Appeals erred in affirming denial of his JMOL motion.

The Court of Appeals properly concluded that Fremont recognizes a common law duty to retrofit. Furthermore, the three-part test crafted by the Court of Appeals properly balances concern for human safety with society's strong interest in promoting technological advancement. The test starts from the general proposition that manufacturers *do* have a duty to warn users about inherent product defects, but that manufacturers *do not* have a duty to retrofit the product to eliminate the dangerous defect. However, following the instructive cases of *Noel v. United Aircraft Corp.*, *Braniff Airways*, *Inc. v. Curtiss-Wright Corp.*, and *Bell Helicopter Co. v. Bradshaw*, the Court of Appeals correctly decided that in certain limited circumstances of extreme danger, the duty to retrofit is a natural corollary of the duty to warn. 342 F.2d 232 (3d. Cir. 1964); 411 F.2d 451 (2d. Cir. 1969); 594 S.W.2d 519 (Tex. Civ. App. 1978). The human safety, continuing relationship, and knowledge requirements, imposed by the court of Appeals properly rejected the contention that the creation of a common law duty is not the role of the court. This decision is correct as a matter of law and should be upheld.

The Court of Appeals, however, erred in refusing to remand the case to the trial court. The trial court, by failing to instruct the jury on the duty to retrofit, committed a manifestly unjust error. Respondent's ability to implement safety upgrades via software, and the companies frequent use of its upgrade ability, constituted evidence of a continuing relationship between users of the Marconi and Respondent. In this case, no reasonable jury could conclude otherwise. Thus, Mr. Ashpool should have the opportunity to present his case to a jury. Specifically, to a jury that has been properly instructed on the duty to retrofit. Such a jury would be unable to rule against Mr. Ashpool, based on the law and the facts of this case; therefore, reversal and remand is warranted. Mr. Ashpool respectfully requests that the Court of Appeals refusal to remand his case for a new trial be reversed.

ARGUMENT

I. <u>The risks of the Marconi outweigh its utility, entitling Mr. Ashpool to judgment as a</u> matter of law.

A. Standard of Review.

An appeal from a denial of a motion for judgment as a matter of law made pursuant to Fr.R.Civ.P. 50(a) and renewed pursuant to Fr.R.Civ.P. 50(b) is reviewed *de novo*. *Williams v*. *Nashville Network*, 132 F.3d 1123, 1130 (6th Cir. 1997) (internal citations omitted). The evidence is viewed in the light most favorable to the nonmoving party. *Id*. A plaintiff is entitled to a motion for judgment as a matter of law when the court finds that a reasonable jury would not have a legally sufficient evidentiary basis to find for the defendant on that issue. *Id*. at 1131.

B. <u>The risk-utility analysis determines that a product is unreasonably</u> <u>dangerous when a reasonable alternative design would have reduced the</u> <u>foreseeable risks of harm.</u> In Fremont, a plaintiff prevails on a strict liability design defect claim when 1) the product caused the injury, 2) at the time of the injury, the product was in essentially the same condition as when it left the manufacturer, and 3) the injury occurred because product was unreasonably dangerous, and therefore in a defective condition. Fremont Rev. Code § 5552.321; William Prosser, *Law of Torts* 671-72 (4th Ed. 1970).

A product is considered defectively dangerous when the foreseeable risks of harm the product posed could have been reduced by the adoption of a reasonable alternative design, and thus omission of that design renders the product unreasonably safe. *See Restatement (Third) of Torts: Products Liability § 2(b)* (Am. L. Inst. 2012). To determine whether a product has an unreasonably dangerous design, Fremont uses the risk-utility test exclusively. *Fickell v. Toyoma Motors Inc.*, 758 XE 821, 830 (Fremont 2014). Under the risk-utility test, a product is considered unreasonably dangerous when its dangers outweigh its utility. *Branham v. Ford Motor Co.*, 701 S.E.2d 5, 13 (S.C. 2010) (citing *Bragg v. Hi-Ranger*, 462 S.E.2d 321, 328 (S.C. Ct. App. 1995)); *see also Armentrout v. FMC Corp.*, 872 P. 2d 175, 182 (Colo. 1992).

The court uses a multi factor test focused on the manufacturer's choices in the design process to determine whether the product is unreasonably dangerous. *See Banks v. Ici Ams.*, 450 S.E.2d 671, 673 (Ga. 1994). The six factors are: 1), if the severity of the 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 practicable reasonable alternative design would have reduced the foreseeable risk of harm posed by the product, and 6) whether the omission of the alternative design rendered the product not reasonably safe. *Peck v. Bridgeport Machs., Inc.* 237 F.3d 614, 617-18 (6th Cir. 2001).

The first and second factors focus on the foreseeability of the severity and likelihood of the injury to the manufacturer at the time of the product's distribution. *Peck*, 237 F.3d at 617. The plaintiff must present evidence that at the time of distribution, the manufacturer could

reasonably foresee both the likelihood of the injury and the severity of the injury. *Banks*, 450 S.E.2d at 673. Every product has some degree of risk, and these factors focus the inquiry on the degree of reasonableness of the manufacturer's design choices given risks that are foreseeable. *See generally Owens v. Allis-Chalmers Corp.*, 326 N.W.2d 372 (Mich. 1982). This is not to say that a manufacturer has a duty to completely eliminate all risk, but to remedy unreasonable and foreseeable risks of their specific products. *Id.* at 375.

The third and fourth factors address whether another alternative design was available to the manufacturer at the time of distribution and further, whether this alternative was practicable. *Peck*, 237 F.3d at 617. The risk-utility test focuses on the availability of an alternate design at the time of the product's distribution, not on advancements in technology or other alternatives made available afterwards. *Gregory v. Cincinnati Inc.*, 538 N.W.2d 325, 326 (Mich. 1995); *see also Branham*, 701 S.E.2d at 17. Once a plaintiff presents evidence that an alternate design was available, they must prove the alternate design was practicable. *Peck*, 237 F.3d at 617. This analysis involves assessing how the alternate design impacts the price, utility, and safety of the product. *Branham*, 701 S.E.2d at 16. The policy aim of these two factors is to create a reasonable limit to the amount of safety features manufacturers are required to outfit their products with. *See Bragg*, 462 S.E.2d at 328. Certainly, the amount of safety features for any given product is boundless, and these two factors serve as a limit to only require manufacturers to design their products safely to the extent that is technologically possible to make so without compromising the marketability of the product. *Banks*, 450 S.E.2d at 675 (citing *Rix v. General Motors Corp.*, 723 P.2d 195, 202 (Mont. 1986).

For example, *Peck v. Bridgeport Machs, Inc.* illustrates how the mere existence of a possible safety enhancing feature does not necessarily mean the alternate design is available or practicable under the risk-utility test. 237 F.3d at 618. In that case, the plaintiff brought action against a manufacturer for injuries sustained while working on a lathe designed and sold by the defendants. *Id.* at 616. The plaintiff's expert witness testified that a lever shift mechanism would

have prevented the accident. *Id.* at 618. However, the expert had never designed a lathe with the proposed lever shift mechanism and the mechanism was not present on any other lathes at the time. Further, the defendant's expert postulated that even if the lever shift mechanism were feasible to incorporate, it would likely increase the cost of the lathe by 15%. *Id.* at 618. For that reason, the court held that a plaintiff cannot establish a prima facie case by simply presenting evidence of the possibility of an alternate design if they are unable to establish the alternative design is feasible, useful, and cost effective under the risk-utility test. *Id.* (citing *Prentis v. Yale Mfg. Co.*, N.W.2d 176, 186 (Mich. 1982)).

Contrastingly, in *Branham v. Ford Motor Co.*, the plaintiff presented adequate evidence of a reasonable and practicable alternative design. 701 S.E.2d at 13-14. In that case, a vehicle passenger was injured when their Ford Bronco II rolled over. *Id.* at 8. The passenger argued, under a risk-utility analysis, that a MacPherson suspension was a reasonable and practicable alternative design to the selected Twin I-Beam suspension by lowering the vehicle's overall center of gravity. *Id.* at 9-10. Even though the Twin I-Beam carried significant consumer recognition for marketing purposes, was already a part of Ford's supply chain, and allowed Ford to use already made components from its other product lines, the court found that evidence presented about the MacPherson suspension was enough to survive a directed verdict because it would not compromise the other features of the Bronco and would not increase costs. *Id.* at 11-13.

The fifth and sixth factors address the final inquiry posed by the risk-utility test: would a reasonable alternative design in fact lower the risk of foreseeable harm, and therefore without it, is the product unreasonably dangerous? *Peck*, 237 F.3d at 617-618. This is not to say that the alternative design would have rendered the product completely risk free, but that the identified foreseeable risks that caused the plaintiff's injury would have been reduced. *Banks*, 450 S.E.2d at 675. Situated within the realm of tort law that encourages manufactures to create products that are as safe as feasibly possible, the heart of the risk-utility inquiry is predicated upon the

existence of a reasonable and practicable design. *Banks*, 450 S.E.2d at 674; R. at 11. As such, when it exists, it is expected a manufacturer adopts the risk-reducing choice to avoid consumer injury. *Banks*, 450 S.E.2d at 675. Succinctly, manufacturers must be held liable when they fail to make a risk-reducing choice that was available to them during the design and manufacturing process. *Id*.

C. Inclusion of an additional sensor would have reduced the foreseeable risk of collisions with stationary objects, therefore, the Marconi Autodrive was in unreasonably dangerous and therefore defective condition.

It is not disputed that Mr. Ashpool's injuries were caused by the Marconi and that the condition of the Marconi was essentially the same as when it left Respondent's hands. Therefore, the first two elements of the products liability claim are satisfied. R. at 8; Fremont Rev. Code § 5552.321. Thus, the only remaining element in dispute is whether Mr. Ashpool's injuries occurred because the Marconi was in a defective condition such that it was unreasonably dangerous to Mr. Ashpool. This requires an analysis under the risk-utility test to determine whether the risks of the Marconi's Autodrive function outweighed its utility.

First, the severity and likelihood of Mr. Ashpool's injuries were foreseeable by Respondent at the time of the product's distribution in 2017, satisfying the first and second factors of the risk-utility test. The Court of Appeals made an incorrect comparison to find in favor of Respondent on these factors. The majority opinion states, "we find nothing inherent in auto drive's short comings to render the vehicle any more dangerous than a sedan without any such technology." R. at 10-11. Foreseeability does not hinge on a relative dangerousness compared to other products on the market, but whether the risks and severity of those risks for this vehicle were foreseeable at the time of the vehicle's distribution. *Banks*, 450 S.E.2d at 673. Respondent had internal data indicating that the sensors had difficulty detecting stationary objects when the Marconi was traveling over 35 mph. Respondent had specific data showing that this fault resulted in collisions at a rate 13% higher than when there were no stationary objects in

its path, and the addition of another sensor would have reduced this chance of collision. The Autodrive function, therefore, caused a clear risk of collision with a stationary object when the vehicle was at moderate to high speeds. Respondent had adequate data from its own internal testing to know that the Marconi's collisions with stationary objects were foreseeable. Ultimately, this was validated by post distribution data, indicating that twelve vehicles had crashed with stationary objects when traveling above 35 mph. Further, though Respondent contends that a human driver's ability to override Autodrive made these collisions unforeseeable, they fail to address that its own sales representatives marketed the Marconi to Mr. Ashpool as an autonomous technology that would require no input from him. Respondent did not warn drivers that they would often have to override Autodrive to avoid colliding with stationary objects. Thus, it is not logical to infer that the presence of a human driver would have reduced the 13% collision rate. The correct inference is that because Respondent instructed drivers to provide no input to the Marconi aside from a GPS destination that this collision rate would remain the same post-distribution, only this time, putting human lives at risk.

Second, the inclusion of additional sensors was a reasonable and practicable alternative design, satisfying the third and fourth factors of the risk-utility test. At trial, both parties presented evidence that adding an additional sensor to the Marconi was an option available to Respondent prior to the distribution of the vehicle. In fact, Respondent's initial design plans included additional sensors and technology that would have reduced this risk, but Respondent chose to abandon the plan despite the known collision rate and consumer data indicating its target market placed a higher premium on safety features than other customers. Inclusion of additional sensors was practicable for several reasons. First, the additional sensors did not compromise the utility of the product by interfering with other aspects of the Marconi's design. Respondent presents no evidence that additional sensors would have compromised any of the other existing sensors or other functions of the Marconi. In fact, evidence suggests that additional sensors not only would make the Marconi safer, but would improve ease of use for the driver. An

additional sensor would have decreased the amount of driver input required, enhancing the Marconi's utility. Second, there is no evidence to suggest that the addition of more sensors would compromise other safety features, and the additional sensors would in fact, improve the overall safety of the vehicle by reducing the 13% collision rate. Regarding price, although Respondent's CEO testified that additional sensors would have increased the price of the Marconi by \$5,000, pricing it out of the economy sedan range, no other evidence nor market analysis was presented to validate this prediction. Further, given the consumer data that indicated increased safety and ease of use was top priority for the economy sedan market, it is reasonable to infer consumers would have been willing to pay an increased price for a reduction in the stationary object collision rate. Lastly, the additional sensors are no different than the sensors already included on the Marconi, meaning they were clearly an available option to Respondent. Thus, the relatively simple addition of a thirteenth sensor was a reasonable, practicable alternative design, and no reasonable jury could conclude otherwise.

Finally, the inclusion of additional sensors would have reduced the foreseeable risk of collision with stationary objects, thus omitting them rendered the Marconi not reasonably safe. The addition of an extra sensor was shown to reduce 13% collision rate, according to Ashpool's expert. Respondent concedes that the additional sensor would have reduced the collision rate. Omission of the additional sensor made the vehicle unsafe. The only explanation Respondent offered as to why an additional sensor was not included was cost concerns. Respondent does not refute that an extra sensor could have better detected stationary objects. When confronted with a stationary object that the vehicle cannot detect and adjust for in Autodrive, the operator of the Marconi must manually override the auto drive feature and make their own adjustments. Respondent's intention with the Autodrive feature was to limit input from the user to the greatest extent possible. The product was marketed as autonomous, as evidenced by the sales representative's statements to Mr. Ashpool during his test drive. Mr. Ashpool purchased the Marconi because of this feature. Mr. Ashpool did not expect to have to override the system, and

had every reason to believe that the car would protect him from colliding with stationary objects when traveling at a moderate speed. Therefore, putting the vehicle into the stream of commerce and selling the Autodrive feature as an autonomous driving experience clearly creates an unreasonable danger. Without the additional sensors, the Marconi was unreasonably unsafe. Respondent failed to make a reasonable, risk-reducing choice, and put Mr. Ashpool's safety at risk. At present, Mr. Ashpool remains uncompensated for Respondent's failure to reduce the foreseeable risks of harm of the Marconi's Autodrive feature.

Mr. Ashpool urges the court to reverse the appellate court decision denying him judgment as a matter of law because his claim prevails under a risk utility analysis. Respondent's own internal testing showed that this decision resulted in a collision rate of 13% with stationary objects when the vehicle was traveling above 35 mph. Despite the fact that an additional sensor was a low-cost option that was easily practicable and would have increased both the safety and utility of the Marconi, attributes Respondent knew were of highest priority to its target customer, Respondent chose to reduce the number of sensors to reduce costs. The sales representative who sold Mr. Ashpool the Marconi described the vehicle as an autonomous driving experience, making a collision with a stationary object highly foreseeable as he was unprepared to override the system and maneuver on his own. The high collision rate with stationary objects was a clearly foreseeable risk that rendered the vehicle unreasonably dangerous, and instead of choosing to adopt a reasonable and practicable alternative design, Respondent chose to cut costs. Respondent must be held accountable for this safety reducing choice, and therefore Mr. Ashpool urges the court to reverse the denial of his motion for judgment as a matter of law.

II. The Court of Appeals properly found that the duty to retrofit exists in Fremont. The Court of Appeals, however, erroneously concluded that the trial court's error was harmless.

A. Standard of Review

This court reviews a trial court's refusal to grant a jury instruction for an abuse of discretion. *Bell v. State*, 303 So.3d 22, 26 (Miss. Ct. App. 2020). An abuse of discretion is a "definite and firm conviction that the trial court committed a clear error of judgment." *Hisrich v. Volvo Cars of North America, Inc.*, 226 F.3d 445, 449 (6th Cir. 2000) (citing *Bowling v. Pfizer, Inc.*, 102 F.3d 777, 780 (6th Cir. 1996)). The jury instructions, viewed in their entirety, must "adequately inform the jury of relevant considerations and provide a basis in law for aiding the jury." *King v. Ford Motor Co.*, 209 F.3d 886, 897 (6th Cir. 2000) (internal citations omitted). Finally, even if the trial court's decision is erroneous, this court will not grant a new trial unless the jury would likely have come to a different decision, had the instruction been given. *Oliver v. McCord*, 550 XE 625, 634 (Fremont 1996). Thus, this court must find the failure to give the instruction is manifestly unjust. *Id.*

B. <u>The Court of Appeals correctly decided that Fremont should recognize the duty to</u> <u>retrofit a dangerous product.</u>

The Court of Appeals correctly decided that a manufacturer's duty to retrofit a dangerous product flows naturally from the duty to warn; the duty to warn is recognized in Fremont. *See Shane v. Smith*, 657 XE 720, 725 (Fremont 1989). The extension of an existing legal duty is a question of law for the courts. *Gregory*, 538 N.W.2d at 330; *accord Tabieros v. Clark Equipment Co.*, 944 P.2d 1279, 1296-97 (Haw. 1997) (noting that the creation of a new legal duty requires careful judicial assessment). The duty to retrofit is "a duty to upgrade or improve a product," when a dangerous defect is discovered after the initial sale of the product. *Ostendorf v. Clark Equipment Co.*, 122 S.W.3d 530, 533 (Ky. 2003). Generally, courts have refused to find that the duty to warn encompasses a duty to retrofit a dangerously defective product. *See generally Talarico v. Skyjack, Inc.*, 191 F. Supp.3d 394 (M.D. Pa. 2016) (applying Pennsylvania law); *Adams v. Genie Indus., Inc.*, 929 N.E.2d 380 (N.Y. 2010); *Loredo v. Solvay America, Inc.*, 212

P.3d 614 (Wyo.2009); *Ahlberg v. Chrysler Corp.*, 481 F.3d 630 (8th Cir. 2007) (applying Iowa law); *Wicker ex rel. Estate of Wicker v. Ford Motor Co.*, 393 F. Supp.2d 1229 (W.D. Okla. 2005); *Bragg v. Hi-Ranger, Inc.*, 462 S.E.2d 321 (S.C. Ct. App. 1995); *Patton v. Hutchinson-Rich Mfg. Co.*, 861 P.2d 1299 (Kan. 1993).^[1]

The general rule, that no duty to retrofit exists, should not be interpreted as a categorical bar on the potential existence of the duty to retrofit. Courts have found it axiomatic that, in certain circumstances, often those involving an extreme risk to "human safety," a manufacturer does have a duty to rectify a design defect that is discovered after the sale of the product. Braniff Airways, Inc., 411 F.2d at 453 (finding this proposition so uncontroversial that it did not require the adoption of a bright line rule); see also Noel, 342 F.2d at 236 (focusing on the threat to "human safety" posed by an air disaster); Gregory, 38 N.W.2d at 334-35 (refusing to create the duty based on the facts of the particular case but noting that in certain circumstances the imposition of the duty may be justified). Similarly, when a court discerns a continuing relationship between the manufacturer and the user of the product, the ongoing relationship gives rise to a duty to retrofit should a defect become known during the relationship. See Bradshaw, 594 S.W.2d at 531-32; accord O'Keefe v. Boeing Co., 335 F. Supp. 1101, 1130 (S.D.N.Y. 1971); Lally v. Printing Mach. Sales & Serv. Co., 572 A.2d 1187, 1189 (N.J. Super. Ct. App. Div. 1990). In the circumstances of a continuing relationship, the manufacturer assumes the duty of making necessary safety upgrades; thus, the fundamental policy of protecting human safety justifies extending the duty to warn into a full-blown duty to retrofit. See Bradshaw, 594 S.W.2d at 531-32; see also Lally, 572 A.2d at 1189 (citing Feldman v. Lederle Labs., 479 A.2d 374, 388-89 (N.J. 1984)).

The Court of Appeals crafted an effective test for the application of the duty to retrofit. The three elements of the court's test properly synthesize the existing case law, both for and against the imposition of the duty, while also taking into consideration the paramount concern for the safety of consumers in our increasingly complex society. R. at 15-16. The test should be adopted by this court.

First, the court eliminates the potential threat of frivolous lawsuits by limiting the duty to retrofit to products implicating human safety. R. at 15. A product capable of implicating human safety is a product that could cause great loss of life, or even a great possibility of the loss of life. *See Noel*, 342 F.2d at 236. For example, the likelihood of fatal casualties is particularly acute when a plane suffers a catastrophic defect. However, planes are certainly not the only product capable of producing catastrophic loss of life; therefore, the court, by not limiting the duty to the aviation industry, properly granted future courts the flexibility to handle unique cases with unique factual circumstances. Car crashes, for example, frequently produce fatalities and thus implicate human safety. *See generally* Jerry L. Mashaw & David L. Harfst, *From Command and Control to Collaboration and Deference: The Transformation of Auto Safety Regulation*, 34 Yale J. on Reg. 167 (2017). The human safety prong both limits the boundaries of the duty to retrofit and delineates the vital fear at the core of the duty–death by inherently dangerous product, often an inherently dangerous form of transportation.

Second, the Court of Appeals properly added a continuing relationship requirement. R. at 15. Courts, even those courts that have rejected the application of the duty to retrofit, look for a relationship nexus between the manufacturer and the intended user. For example, in *Gregory*, the Michigan Supreme Court foresaw a situation where the continuing relationship between manufacturer and customer created a duty to retrofit; however, the court determined that the facts of the case did not prove the existence of the continuing relations. 538 N.W.2d at 336. Certain products, often transportation related products, come with an industry norm of manufacturer servicing that continues for the life of the product. *See e.g., Bradshaw*, 594 S.W.2d at 531-32; *see also* Lauren Rhue & Anne L. Washington, *AI's Wide Open: Premature Artificial Intelligence and Public Policy*. 26 B.U. J. Sci. & Tech. L. 353, 361-64 (2020) (discussing Boeing's disastrous 737 Max). Therefore, in these cases, where the manufacturer periodically asserts control of the product, it is reasonable to require that the manufacturer make necessary safety corrections. This element serves a prudential limiting function; indeed, it ostensibly bars most suits premised on the duty to retrofit. Thus, the Court of Appeals' reasoning reflects a sober reflection on the serious implications of creating a new duty, much like the Hawaii Supreme Court in *Tabieros*. 944 P.2d at 1296-97.

Third, the Court of Appeals wisely created a knowledge element. R. at 16. As the court pointed out, the duty to retrofit is aimed at a different harm than a standard products liability suit. R. at 12. The defect became known *after* the product entered use with the consumer; therefore, the duty to retrofit cause of action is not a superfluous expansion of a defective design claim, instead it is a totally separate issue deserving of a remedy. R. at 12-13. Again, this requirement will only be met in certain, limited, circumstances. Presumably, knowledge of a defect can only really come to the attention of a manufacturer after a series of incidents involving the product. *See Bradshaw*, 594 S.W.2d at 526 (noting a history of failures); *O'Keefe*, 335 F. Supp. at 1116-117 (pointing to a prior catastrophic accident with the same cause). Once the manufacturer has knowledge that an inherently life-threatening product, such as a plane or a car, has a defect that severely threatens the public, it is not unreasonable to require action. The duty to warn serves a vital purpose, but in the case of a life-threatening defect, that a manufacturer is aware of, the duty

to warn is not enough. Indeed, the duty to retrofit, in an instance of extreme danger caused by a subsequently identified defect, seems less an imposition and more an obligation.^[2]

Finally, the dissenting opinion in the Court of Appeals incorrectly claims that courts do not have the power to establish a duty. R. at 18. Instead, the dissent would leave the imposition of the duty to retrofit to a legislature or regulatory agency. That is an abdication of judicial responsibility. The dissent expresses support for the duty to warn, but then fails to recognize that the duty to warn is itself a judicially created duty. See Comstock v. General Motors Corp., 99 N.W.2d 627, 634 (Mich. 1959) (collecting cases). Despite the dissent's contention, the clear national consensus is that the creation of a new common law duty is very much the role of the courts. See e.g., Humble Sand & Gravel, Inc. v. Gomez, 146 S.W.3d 170, 181-82 (Tex. 2004). Furthermore, the dissent confuses a recall campaign (properly the place of a legislature or administrative agency) with a remedy for damages suffered (the place of the court). Mr. Ashpool does not ask that the court issue a recall. Instead, he merely seeks to recover damages for the defendant's breach of a legal duty. This has been, un-controversially, the province of the courts since at least the famous case of MacPherson v. Buick Motor Co., 111 N.E. 1050 (N.Y. 1916). The recall issue is separate from this claim; this claim is merely an action for damages, a remedy for a harm caused by the failure of the defendant-manufacturer to heed a commonsense legal duty.

The Court of Appeals correctly extended Fremont's duty to warn to encompass a duty to retrofit when human safety is at stake. The court's test is measured and appropriate and should be adopted by this court. The creation of a new legal duty is the rightful power of the judicial system.

C. <u>The Court of Appeals erred in finding that the trial court's failure to instruct the</u> jury on the duty to retrofit was harmless; the failure was manifestly unjust and <u>must be reversed.</u>

This court will overturn the refusal to grant a jury instruction only when it believes that the jury would have come to a different conclusion had the instruction been given. *Oliver v. McCord*, 550 XE 625, 634 (Fremont 1996). The Court of Appeals correctly concluded that the Marconi was a product that implicated human safety. R. at 16. Additionally, the Court of Appeals properly determined that Respondent was aware of the Marconi's flaws. R. at 17. However, in this case, the Court of Appeals incorrectly found the trial court's error harmless because Mr. Ashpool failed to establish that a continuing relationship existed between himself and the defendant. R. at 16-17. This decision must be reversed.

Respondent maintained a continuing relationship with Marconi drivers. A continuing relationship exists when the manufacturer assumes responsibility for updating or servicing a product, even after the sale has been made. *See Bradshaw*, 594 S.W.2d at 531-32. Generally, this scenario arises in two ways: (1) the manufacturer regains physical possession of the product at some point during the relationship, or (2) the manufacturer retains the ability to force the improvements. *See* Douglas R. Richmond, *Expanding Products Liability: Manufacturers' Post-Sale Duties to Warn, Retrofit, and Recall,* 36 Idaho L. Rev. 7, 49-50 (1999) (categorizing cases where a continuing relationship has been found). For example, in *Bell Helicopter*, the manufacturer operated a series of service stations; the defective helicopter was routinely brought to these stations for maintenance and the fatal defect could have been fixed during anyone of these routine visits. 594 S.W.2d at 530-31. Conversely, in *Gregory*, the user was unable to establish a continuing relationship because the manufacturer only made two service calls over 30

years. 538 N.W.2d at 336. Additionally, the attending technicians were not safety personnel, they were merely repairmen and not trained to assess the safety of the product. *Id*.

Respondent's software updates constitute evidence of a continuing relationship. As the Court of Appeals notes, the Marconi is not a normal car, it is a semi-autonomous vehicle. R. at 16. However, the Court of Appeals wrongly ignored their own assessment and determined that the relationship between a Marconi driver and Respondent was no different than the normal dealer-driver relationship. R. at 16. This is incorrect, the unique technology that makes the Marconi special also makes the vehicle much closer to a plane than a normal car. Therefore, *Noel, Braniff Airways*, and *Bell Helicopter* are instructive. Much like the helicopter in *Bell*, the Marconi is a specialized product and the manufacturer maintains a substantial interest in the product past the time of sale. The continuous updates could not be interpreted as mere convenience by a jury; Respondent itself acknowledges that they contained important safety updates. R. at 3. The updates are akin to the helicopter blade in *Bell*, or to the defective engine in *Noel*. Similarly, much like in *Bell*, Respondent retains the ability to force the user to accept the safety upgrades. Nothing prevents the company from demanding that the user upgrade the safety features before engaging the semi-autonomous autopilot feature.

Respondent's relationship with Marconi users is far more substantial than the one that existed in *Gregory*. These updates are not just "repairs," they are critical safety features. R. at 3. Again, the airplane comparison is apt, as the Court of Appeals notes the Marconi can be driven without engaging the semi-autonomous controls. R. at 17. Theoretically, an airplane can fly with a single working engine and one malfunctioning engine; however, the mere fact it is possible to survive a fatal defect does not relieve the manufacturer of liability. No one would tolerate an airplane manufacturer, aware of a faulty auto-pilot system, who refused to fix the auto-pilot bug

because the pilot can just fly manually. *See e.g., In re Boeing 737 MAX Pilots Litigation*, No. 1:19-CV-5008, 2020 WL 247404 (N.D. III. Jan. 16, 2020) (discussing just such a suit). Mr. Ashpool purchased the Marconi because of its semi-autonomous capabilities. R. at 4. Respondent was aware the safety sensors of the Marconi needed improvement. Respondent admits that they had the ability to update the software, in fact, Respondent routinely did offer software updates to customers. R. at 16-17. Respondent actively maintained a continuing relationship with the Marconi users; Respondent assumed responsibility for repairing a known safety fault. Based on the facts of this case, no reasonable jury could find otherwise.

Respondent and Mr. Ashpool were engaged in a continuing relationship. Thus, the jury should have been instructed on Respondent's duty to retrofit. The failure to give the instruction was manifestly unjust. Indeed, by denying the request to give the instruction, the trial court prevented Mr. Ashpool from even presenting evidence on the duty to retrofit. R. at 6. Had Mr. Ashpool been allowed to present his evidence, no reasonable jury would disagree that Respondent had a duty to retrofit the Marconi. Respondent shirked that duty and now Respondent is attempting to avoid its legal responsibility for Mr. Ashpool's injuries. By failing to give the instruction the trial court left the jury ignorant of the law, thus the jury was simply unable to render an accurate verdict, Mr. Ashpool has suffered a manifest injustice. *See Sanders v. Bain*, 722 So. 2d 386, 388 (La. Ct. App. 1998). The Court of Appeals finding of harmless error must be reversed, and Mr. Ashpool should be granted a new trial so that he may properly present his claim that Respondent had a duty to retrofit the Marconi with the proper safety sensors.

CONCLUSION

The Court of Appeals erroneously denied Mr. Ashpool's motion for Judgment as a Matter of Law. The Court of Appeal's erroneous ruling deprived Mr. Ashpool of compensation for his injuries and should be reversed. The Court of Appeals properly concluded that Fremont does recognize the duty to retrofit. However, the Court of Appeals committed reversible error by failing to remand this case to the trial court, with instructions that the jury be informed that Fremont recognizes a duty to retrofit. This decision must be reversed, and Mr. Ashpool must be allowed to present his claim to the jury.