IN THE SUPREME COURT OF THE STATE OF FREMONT

WILLIAM ASHPOOL

Petitioner

v.

EDISON INCORPORATED, a

Fremont Corporation,

Respondent

ON WRIT OF CERTIORARI FROM THE COURT OF APPEALS OF THE STATE OF FREMONT NO. 20-1000

BRIEF FOR PETITIONER

 $\label{eq:temperature} Team\,M$ Counsel for the Petitioner

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Questions Presented

- I. Did the appellate court err in affirming the trial court's denial of Ashpool's motion for judgment as a matter of law on the design defect claim under the risk-utility test, when Ashpool presented evidence that Edison foresaw the severity and the likelihood of the injury, and a reasonable alternative design was available at the time the Marconi was manufactured?
- II. Should the duty to retrofit be adopted in the State of Freemont in certain strict liability design defect claims when the manufacturer had knowledge of the design defect before the product left production, but chose not to remedy the defect resulting in numerous car wrecks and injuries to its consumers?

Statement of the Case

I. Statement of Facts

A. William Ashpool

William Ashpool (hereinafter "Mr. Ashpool") is a retired criminal defense attorney turned social worker, who spends a significant portion of his time driving to serve members of the community. R. 3. Driving is a large part of Mr. Ashpool's day-to-day job. *Id.* With the amount of time Mr. Ashpool spent on the road visiting families and conducting home visits, he entered the market for a new car. *Id.* Mr. Ashpool learned of the Edison Marconi and its accompanying Autodrive technology. R. 4. After test driving the car and taking the advice of a salesperson, Mr. Ashpool bought the car. *Id.* Mr. Ashpool's decision to purchase the Edison Marconi was based on the salesperson's statement, "Autodrive would allow [Mr. Ashpool] to simply input a GPS location into the Marconi and enjoy the ride, with *no further action required*." (emphasis added) *Id.*

A month after buying the car, Mr. Ashpool sustained devastating injuries when the Macaroni's Autodrive technology failed to alert him of a standstill brown bear in his path. *Id*. When the accident occurred, Mr. Ashpool was driving the Marconi at approximately 42 milesper-hour ("mph"). *Id*. Mr. Ashpool suffered extensive injuries due to the collision. *Id*. The injuries included a dislocated shoulder, five broken ribs, a broken wrist, a concussion, and whiplash. *Id*. In addition to his injuries, Mr. Ashpool was hospitalized for two and a half weeks. *Id*. Mr. Ashpool's car insurer ruled the Marconi a total loss. *Id*.

Mr. Ashpool filed his action against Edison on January 12, 2020. *Id.* In the complaint, Mr. Ashpool claimed that Edison had "improperly designed the sensors." *Id.* Mr. Ashpool alleged that he suffered various injuries as a result of the vehicle's faulty sensors. *Id.* Due to the

faulty sensors, the sensors were unable to register the brown bear, and in turn did not alert him to remaneuver or stop the vehicle. *Id*.

B. The Edison Marconi

Edison is an automobile corporation registered in the State of Fremont. R. 2. Edison is known for designing luxury and sports electric vehicles. *Id.* In 2017, after conducting a market analysis, Edison released the Marconi to the market. *Id.* With the Marconi's release, Edison entered the highly competitive economy sedan market. *Id.* Edison's market analysis found that consumers in the economy range *placed a higher premium on safety features* and ease of use over cutting-edge technology and performance. (emphasis added) *Id.*

To capitalize on its new target market, Edison included a feature known as "Autodrive." *Id.* Autodrive is a semi-autonomous driving experience where an onboard computer operates the vehicle for the driver so long as the driver keeps two hands on the steering wheel. *Id.* Utilizing twelve sensors on the vehicle, the Autodrive system can analyze the road and surrounding drivers. *Id.* Based on the sensory data received, the Marconi can stop, accelerate, change gears, and maneuver *without* input from the driver. (emphasis added) *Id.* The Marconi is designed such that once the driver inputs his destination via GPS, the vehicle will assess road conditions, speed limits, and traffic lights in real-time. *Id.* From this point on, driver input is minimal, and the vehicle will operate semi-autonomously until arrival at the destination. *Id.*

The vehicle driver has the ability to engage Autodrive whenever the vehicle is stopped or placed in park. R.3. Once Autodrive is engaged, the vehicle can make necessary adjustments using the information it receives from the sensors to adjust for road work, weather conditions, the movement of other vehicles in the vicinity of the Marconi, and *obstructions in the roadway*. (emphasis added) *Id*. Additionally, the Marconi comes with a manual telling the driver to keep

their hands on the steering wheel. *Id.* If the driver removes his hands from the steering wheel, a flashing light will appear on the dashboard, telling the driver to place his hands back on the steering wheel, but Autodrive will not disengage. *Id.* But even with Autodrive engaged, the driver can override Autodrive by placing both hands on the wheel and steer as needed. *Id.*

To ensure customer satisfaction and safety, Edison will update the Autodrive software as needed. *Id.* When Edison releases an update for the Marconi, a notification will appear on the center console each time the vehicle is started until the update has been installed. *Id.* While updates may include new safety features, some are merely cosmetic, such as allowing the driver to change the lights on the sunroof of the vehicle. *Id.* Edison says this allows them to continuously update their vehicles and maintain the highest safety standards, without having to make entirely new vehicles--thereby saving the company money. *Id.*

II. Procedural History

A. The Hayward County District Court

Mr. Ashpool brought a cause of action against Edison on January 12, 2020 in the Hayward County District Court. R. 4. Mr. Ashpool alleged that the failure of the Edison's sensors to recognize a bear in the road caused the accident that left him with extensive injuries and required a lengthy hospitalization. R. 1. The complaint alleged that Mr. Ashpool had suffered various injuries as a result of the vehicle's faulty sensors, which had failed to register the brown bear and alert him of the animal. R. 4. Mr. Ashpool alleged that without the alert, he was unable to remaneuver or stop the vehicle. *Id.* Specifically, Mr. Ashpool alleged that Edison was aware of the problems with the sensors but chose not to fix them. *Id.*

The trial began with a discussion of the Marconi's Autodrive features. R. 4. In performing crash and safety tests required by the National Highway Traffic Safety

Administration ("NHTSA"), Edison learned that the sensors had difficulty identifying stationary objects when the vehicle was driving above 35 mph. R. 4, 5. An expert, presented by Mr. Ashpool, stated that the accident rate was 13% higher when the vehicle was going over 35 mph and a stationary object was present in the vehicle's path. R. 5. On testimony, Errol Reeve, the CEO of Edison, stated that the company originally planned to include extra sensors and proprietary sensor technology that would have assessed stationary objects at higher speeds. *Id.* Reeve's later testified that Edison abandoned the plan due to feasibility and cost concerns. *Id.* The installation of the additional equipment would have increased the cost of the vehicle to consumers by at least \$5,000. 1 *Id.* In concluding, CEO Reeve's informed the jury that Edison had plans to include the additional sensors in future models of its luxury and sports vehicles. *Id.*

Reeve's testified that the vehicle was safe despite the sensor issue due to the fact that "even a moderately attentive driver would avoid the objects if they still had their hands on the wheel and eyes on the road." *Id.* To back his reasoning, Reeve's explained that he felt uncomfortable passing along the expenses of the extra sensors to the consumer because the price of the technology for the sensors was high. *Id.* Mr. Ashpool testified that the lack of the additional sensors made the Marconi unsafe. *Id.* Mr. Ashpool claimed that if Edison wanted to include a semi-autonomous driving feature, which drivers would in turn be unaccustomed to, that Edison should not have cut costs on any form of safety features. *Id.*

The trial court, over objection from Edison, allowed into evidence information regarding twelve accidents that involved stationary objects and drivers going above 35 mph following the release of the Marconi with its new Autodrive feature. R. 5, 6. The jury was informed that each

¹ Reeve's testified that the increase in cost to the consumer would have pushed the vehicle outside the economy range of sedans. *Id*.

of the accidents involved faulty sensors and a stationary object. *Id.* All of the accidents cited occurred within two years leading to Mr. Ashpool's case, and involved stationary objects like a median strip, light pole, or deceased deer. *Id.*

Mr. Ashpool presented evidence that Reeve's was aware of the accidents and the 13% increase in the accident rate found during the testing of the Marconi. *Id.* Reeve's testified that the previous crashes were the fault of the driver. *Id.* He stated, "anyone should be able to see a stationary object in the road and avoid it, even if the vehicle is in Autodrive." *Id.* He reasoned that Autodrive does not take away the driver's ability or responsibility to maneuver the vehicle, and the lack of additional sensors had therefore not caused the prior accidents. *Id.*

In his proposed jury instructions, Mr. Ashpool included a duty to retrofit. 2 Id. Edison objected to the duty to retrofit included in the instructions because the State of Fremont did not recognize a common law duty to retrofit. Id. In response to Edison's objection, Mr. Ashpool informed the court that he planned to introduce evidence Edison knew the sensors were failing, which resulted in numerous accidents, yet despite this knowledge, Edison refused to fix the problem. Id. Additionally, Mr. Ashpool sought to argue that Edison could have created an update for the sensors and sent that to Marconi drivers, but failed to do so, and that the failing sensors is why he crashed. Id. It was also learned that Mr. Reeve knew from the start of creating the Marconi that an additional sensor could potentially impact the collision rate. Id. Although not discovered until after the Marconi was released, Edison discovered a simple software update to the already existing sensors could improve the crash rate. R.6-7. This update would have

² A manufacturer has a duty to take such measures that are reasonably necessary to protect the public from foreseeable harm after a product has been manufactured and sold. If a manufacturer knows of or later becomes aware of the fact that the design of a product causes unnecessary risk of serious injury to the product driver or to the public, the manufacturer must take such reasonable steps under the circumstances that will lessen or prevent the risk of injury. R.6.

required additional hours of work to create and implement, albeit *far less* than the implementation of an entirely new sensor. (emphasis added) R.7.

The trial court sustained Edison's objection. *Id.* Therefore, Mr. Ashpool only presented evidence relating to his allegation that the sensors were defective before they left the manufacture and Edison was liable for failing to fix them. *Id.*

The State of Fremont requires the use of the risk-utility test for design defect claims. *Id.*After the presentation of evidence, Mr. Ashpool moved for a judgment as a matter of law,

pursuant to Fremont Rule of Civil Procedure 50(a)³. *Id.* The trial court denied the motion. *Id.* The

case was submitted to the jury for consideration, where the jury returned a verdict for Edison. *Id.*The jury found that there was no defect in the design of the product and the sensors did not cause

Mr. Ashpool to crash. *Id.* Mr. Ashpool renewed his motion judgment as a matter of law under

Fr.R.Civ.P. 50(b), and the trial court denied his motion. *Id.* Mr. Ashpool's appeal to the Court of

Appeals followed. *Id.*

B. The State of Fremont Court of Appeals

On appeal, Mr. Ashpool argued that the District Court (1) erred in its denial of his renewed motion for judgment as a matter of law, and (2) erred in its refusal to include the duty to retrofit in its jury instructions. *Id.* Thus, the two central questions for the State of Fremont Court of Appeals were (1) whether the District Court erred in denying Mr. Ashpool's renewed motion for judgment as a matter of law, and (2) whether the trial court erred in its refusal to include the duty to retrofit in its jury instructions. R. 7.

³ The language of Fremont's Rule 50(a) is identical to that of Federal Rule of Civil Procedure 50(a).

The State of Fremont Court of Appeals held that (1) the denial of Mr. Ashpool's motion for judgment as a matter of law was appropriate, and (2) the failure to give a jury instruction about the duty to retrofit was a harmless error. R. 12,17.

With respect to the design defect claim, the Fremont Court of Appeals held that the Marconi's Autodrive feature was not unreasonably dangerous at the time of distribution and that Edison could not be held liable for failing to exercise reasonable due care in the design process.

R. 12. The Court of Appeals broke the risk-utility test into two parts that a plaintiff must prove:

(1) the plaintiff must demonstrate that the manufacture foresaw the risks of its chosen design compared to an alternative design, and that the alternative design was practicable, and (2) that the failure to choose this design rendered the product unreasonably unsafe.

The Court first examined the foreseeability, specifically looking at the likelihood and severity of the injury. R. 10. As to the likelihood and severity, the court found "nothing in the inherent design of Autodrive's shortcomings to render the vehicle any more dangerous than a sedan without such advanced technology." R. 10, 11. The Court weighed the first two factors of the risk utility test in favor of Edison. R. 11.

Next, the Court examined the remaining factors of the risk-utility test, which looked at the reasonable alternative design. R. 11. The Court explained that "The mere existence of an alternative design is not enough for the fact finder to determine that a product was defective, however, if the alternative design would not have actually reduced the risk of a collision or would have been infeasible to include." R. 11. The Court found that the Marconi's Autodrive technology did not hinder the vehicle's ability to come to a safe stop when an object was in the road. R. 11. The Court reasoned that instead it placed a "limitation on the safety warning system", where in turn the driver would not be warned beyond what they themselves see. R. 11.

In sum, the Court of Appeals affirmed the decision of the District Court. R. 11.

With respect to the duty to retrofit, the Court of Appeals for the State of Fremont held that the trial court's action in denying the duty to retrofit constituted harmless error because the duty would not have changed the outcome in the lower court. R.13. However, the Court of Appeals did hold that the State of Fremont should adopt the duty to retrofit and impose such liability on its manufacturers. *Id.*

The Court of Appeals began its analysis by noting that the distinction between the duty to retrofit and the design defect was $time^4$. (emphasis added) R.12. The court stated that the duty to retrofit is a separate theory of liability within a design defect claim, and that a plaintiff could argue more than one theory of liability in the same product liability claim. *W.M. Bashlin Co. v. Smith*, 643 S.W.2d 526, 529-30 (Ark. 1982), R.12-3. The court thought that in a world with such rapid technological advancements placed in the hands of everyday consumers, it was imperative that creators of these devices be held accountable for the continued safety of its users. *Id.*

A duty to retrofit is a duty to upgrade or improve a product.⁵ R.15. The court found there is a duty to retrofit where: (1) the 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 the consumers. R.15-6.

With respect to the first factor, the court held there was no question the Marconi implicated human safety because automobiles, by their nature, presented a host of dangers to drivers and pedestrians alike. R.16. Next, the court held there was no continuing relationship between the manufacturer and the consumer in this case because traditionally, courts have not

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⁴ The duty to retrofit asks the fact finder whether the manufacturer is liable for failure to address a problem in design *after* the vehicle left the manufacturer and was in the hands of the consumer. R.12.

⁵ Ostendorf v. Clark Equip. Co., 122 S.W.3d 530, 534 (Ky. 2003).

found a continuing relationship between car manufacturers and drivers, and that any regulation has been controlled by the legislature and other administrative bodies, through the use of recalls. *Id.* Finally, the court held that a jury would likely find Edison had knowledge of a defect in their sensors after the Marconi was in the hands of the consumers because they were aware of twelve other incidents prior to Mr. Ashpool's accident. R.17.

The Court of Appeals ultimately affirmed the trial court's decision based primarily on the belief that they could not determine whether a jury would have found a continuing relationship between Edison and Mr. Ashpool. *Id.* The court reasoned that the software updates and sensors were not required to keep the car safe; rather, they were additional convenience. *Id.*

Judge Irish of the State of Fremont Court of Appeals issued an opinion, dissenting in part and concurring in part. R. 18. Judge Irish concurred as to the risk-utility test but dissented with the majority's application of duty to retrofit in the State of Fremont. *Id.* Judge Irish's two main objections to the application of the duty to retrofit was that (1) the judiciary was not the appropriate place to determine whether the duty should be imposed on manufacturers, and (2) it would be inappropriate to impose a new and arguably greater burden on manufacturers. *Id.*Rather, Judge Irish thought the decision to impose the duty to retrofit should lie with the legislature and other administrative, regulatory bodies. *Id.* Additionally, he thought the current body of law was sufficient to cover any negligence or liability of manufacturers and that this new duty was unnecessary. *Id.*

Standard of Review

A denial of a motion for a judgment as a matter of law is reviewed *de novo*. *First Nat'l Mortgage Co. v. Fed. Realty Inv. Trust*, 631 F.3d 1058, 1067 (9th Cir. 2011). In reviewing a judgment as a matter of law, the evidence must be viewed in the light most favorable to the

nonmoving party, and all reasonable inferences must be drawn in favor of that party. *Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 149-50 (2000). If conflicting inferences may be drawn from the facts, the case must go to the jury. *Howard v. Everex Sys., Inc.*, 228 F.3d 1057, 1060 (9th Cir. 2000). When the claim is that the trial court misstated the factors that must be proved at trial, the reviewing court must view the issue as one of law and review the instruction de novo. See *Snake River Valley Elec. Ass'n v. PacifiCorp*, 357 F.3d 1042, 1052 n.11 (9th Cir. 2004).

Summary of the Argument

First, this Court should reverse the Court of Appeals decision denying Mr. Ashpool's motion for judgment as a matter of law because Mr. Ashpool has met his burden of proof for all six factors of the risk-utility test. The risk-utility test requires the balancing of the danger of a product with its utility to the consumer. *Bragg v. Hi-Ranger, Inc.*, 462 S.E.2d 321, 328 (S.C. Ct. App. 1995).

In determining whether the Marconi's risk outweighed its utility to the consumer, Mr. Ashpool provided evidence for all six factors of the risk-utility test. First, Mr. Ashpool presented evidence that Edison tested the Marconi and was aware of the lack of appropriate sensors while the vehicle was in Autodrive. Edison understood that its product was unable to detect stationary objects while driving at higher speeds, which a reasonable manufacture would have seen as likely to cause severe injuries to drivers. Second, Edison was aware of the likelihood of injury at the time of distribution due to its own internal testing. Therefore, Mr. Ashpool met his burden of proof for the first half or the risk-utility test.

The second half of the risk-utility test ask whether there was a reasonable alternative design. In examining the third factor, there was a reasonable alternative design for appropriate

sensors that Edison was aware of, yet Edison chose to include the faulty sensors in its "safety" vehicle. Fourth, the alternative sensors were practicable because they increased safety, at only a slight increase of cost to the consumer. Next, prior crashes of the Marconi involved the faulty sensors, and the appropriate sensors would have reduced the injuries that subsided from the Marconi being unable to detect stationary objects while in Autodrive. Lastly, consumers purchased the Marconi for its safety features and for its ease and use of Autodrive technology. While marketing the Marconi as a safety vehicle with Autodrive, Edison in turn provided a product that was faulty and unreasonably safe due to the omission of the accurate and reliable sensors. Mr. Ashpool demonstrated that Edison foresaw the risk of its chosen design compared to the alternative design, that the alternative design was practicable, and that the failure to choose the alternative design rendered the product unreasonably unsafe. Thus, Mr. Ashpool has satisfied all six factors of the risk-utility test to show that the product's risk outweighed its utility to the consumer. Therefore, the denial of Mr. Ashpool's motion for judgment as a matter of law should be reversed.

Additionally, the Court of Appeals for the State of Fremont correctly adopted the duty to retrofit because it will better protect consumers in the State. Like the Court of Appeals, this Court should adopt the duty to retrofit because it will ensure the safety of the public and maintain the safety of consumers.

When "it is clear that after such a product has been sold and dangerous defects in design have come to the manufacturer's attention, the manufacturer has a duty [] to remedy these." *Braniff Airways, Inc. v. Curtiss-Wright Corp.*, 411 F.2d 451, 453 (2d Cir. 1969), on reh'g, 424 F.2d 427 (2d Cir. 1970). As the Court of Appeals properly identified, there is a duty to retrofit where: (1) the 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 the consumers. R.15-16.

Mr. Ashpool has demonstrated that Edison knew of the defect prior to the release of the Marconi and has also provided sufficient evidence to meet each duty to retrofit factor. Therefore, this Court should adopt the duty to retrofit rule, find that Mr. Ashpool has satisfied each duty to retrofit factor, and hold Edison liable for its failure to retrofit the Marconi.

Argument

I. This Court Should Reverse the Denial of The Motion for Judgment as a Matter of Law on the Design Defect Claim because the Risk-Utility Test Factors Weigh in Favor of Mr. Ashpool.

The Court of Appeals for the State of Freemont incorrectly affirmed the trial court's denial of Ashpool's motion for judgment as a matter of law on the design defect claim under the risk utility test, because the risk-utility test factors weigh in favor of Mr. Ashpool. This Court should reverse the denial of the motion for judgment as a matter of law on the design defect claim because the risk-utility test factors weigh in favor of Mr. Ashpool.

The competing factors to be weighed under a risk-utility balancing test invite the trier of fact to consider the alternatives and risks faced by the manufacturer and to determine whether in light of these the manufacturer exercised reasonable care in making the design choices it made.

Miller v. Ingersoll-Rand Co., 148 F. App'x 420 (6th Cir. 2005).

Under the risk-utility test, the court must balance the danger associated with a product with its utility to the consumer. *Bragg* at 321. A product is deemed unreasonably dangerous and thus defective if "the danger associated with the use of the product outweighs the utility of the product." *Id.* To determine if a product's risk outweighs its utility to the consumer, the court must balance six factors. The factors are (1) whether 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. *E.g.*, *Peck v. Bridgeport Machs.*, *Inc.*, 237 F.3d 614, 617 (6th Cir. 2001).

In this case, the danger associated with the use of the product outweighed the utility of the product. Mr. Ashpool met his burden of proof in regard to all six factors of the risk-utility test. Consequently, judgment as a matter of law is appropriate because Mr. Ashpool has met his burden under the risk-utility test. Therefore, the judgment of the Court of Appeals for the State of Fremont should be reversed.

A. Edison Foresaw the Severity and the Likelihood of Mr. Ashpool's Injury due to its Required Testing Completed During the Manufacturing of the Marconi.

The Fremont Court of Appeals incorrectly denied judgment as a matter of law on the design defect claim because it incorrectly weighed the first two factors of the risk-utility test in favor of Edison and not in favor of Mr. Ashpool.

To determine if a product's risk outweighs its utility to the consumer, the first two of the six factors analyze the manufacturer's knowledge at the time of distribution of the product. *E.g.*, *Peck*, 237 F.3d 614-617. The first factor asks whether the severity of the injury was foreseeable by the manufacturer. *Id.* The second factor asks whether the likelihood of the injury was foreseeable by the manufacturer at the time of distribution of the product. *Id.*

1. Edison Foresaw the Severity of the Injury.

Edison was aware of the severity of injury that could have occurred with the Marconi's faulty sensors in regard to high speeds and stationary objects. A manufacturer has a duty to design against reasonably foreseeable hazards. 63A Am.Jur.2d *Products Liability* § 953, at 129 (1997). To show that the manufacturer acted unreasonably based on the foreseeability of harm, the plaintiff must show the manufacturer knew or should have known of the risk posed by the product design at the time of manufacture. 63A Am.Jur.2d *Products Liability* § 942, at 120 (1997). The plaintiff has the burden to prove that the purpose and manner of his use of the product was foreseeable by the manufacturer. *Thibault v. Sears, Roebuck & Co.*, 395 A.2d 843, 847, 118 N.H. 802, 809 (N.H., 1978). This requirement is predicated on the manufacturer's duty to design his product reasonably safely for the uses which he can foresee. *Id.*⁶

One of the most prominent cases regarding products liability and the foreseeability of the severity of injury stems from the California Court of Appeals. In *Grimshaw v. Ford Motor Co.*, the plaintiff brought an action against Ford after suffering severe and permanent disfiguring burns after a rear-end accident that was intensified due to a design defect. 119 Cal.App.3d 757 (Ct.App.1981). In *Grimshaw*, the plaintiff presented evidence that the defendant knew that the vehicle at issue had a fuel tank and rear structure that would expose consumers to serious injury or death in a 20 to 30 mile-per-hour collision. *Id.* There was also evidence that the defendant could have corrected the design defect at a slight cost but decided not to after a cost benefit analysis showed that it was more profitable to not correct the defect. *Id.* at 384. The plaintiff presented evidence that Ford deferred from correcting the design defect even after being informed that the vehicle's fuel tank ruptured at low speed rear impacts. *Id.* at 384-85. Ford was

⁶ "Foreseeability of use, however, extends beyond the consumer's actual use of the product; for example, a failure to read or follow instructions for product use may not be fatal to the plaintiff's case if he can show that such failure was reasonably foreseeable." *Id.*

aware that the low speed impacts would result in "significant risk or injury or death of the occupants by fire" after conducting a "cost-benefit analysis balancing human lives and limbs against corporate profits." *Id.* at 384-86.

In examining whether the severity of the injury was foreseeable by Edison at the time of the distribution of the Marconi, the Restatement (Third) of Torts Products Liability is relevant. The Court of Appeals cites to the Restatement (Third) of Torts Products Liability § 2 cmt. a. (1998) ("[F]or the liability system to be fair and efficient, the balancing of risks and benefits in judging product design . . . must be done in light of the knowledge of risks and risk- avoidance techniques reasonably attainable at the time of distribution."). R. 10.

Under comment *m*, the comment states that the plaintiff bears the burden of establishing that the relevant manufacturing community knew or should have known of the particular risk, and further, that a manufacturer is not liable for unforeseeable harms. Restatement (Third) of Torts Products Liability § 2 cmt. m (1998). However, the comment goes on to state that sellers bear a "responsibility to perform responsible testing... to discover risks and risk-avoidance measures that such testing would reveal." *Id*. Moreover, sellers will be "charged with knowledge of what reasonable testing would reveal." *Id*.

As the Court of Appeals states, "The only pre-distribution evidence indicating any foreseeability of injury was Marconi's own internal testing." R. 10. As the Court of Appeals applied comment *a* to the case at bar, it is worth exploring comment *m*. Comment *m* states that sellers have a responsibility to perform reasonable testing on their products. Restatement (Third) of Torts Products Liability § 2 cmt. m (1998). Test should be conducted to discover risks and risk-avoidance measures that the testing would reveal. *Id.* Prior to the release of the Marconi, Edison performed "numerous" crash and safety test that were required by the National highway

Traffic Safety Administration. R. 4. Specifically, Edison "performed hundreds of tests with particular focus on the sensors placed around the vehicle." R. 4, 5. Edison conducted the hundreds of tests focused on the sensors to ensure that if the vehicle was in Autodrive, the vehicle would recognize potential obstacles and adjust accordingly. R. 5. All of this was done to advance Edison's goal of minimal driver input. *Id.* The test proved that the sensors had difficulty identifying stationary objects when the vehicle was driving above 35 mph. *Id.* Edison's own CEO testified that Edison had planned to include the extra sensors and proprietary sensor technology that would assess stationary objects at higher speeds, but chose to abandon the plan due to feasibility and cost concern. *Id.*

As comment *m* states, manufactures have a responsibility to not only perform reasonable testing, but also will be charged with what reasonable testing would reveal. Restatement (Third) of Torts Products Liability § 2 cmt. m (1998). With the testing, Edison was aware that the Marconi would not stop for stationary objects when driving at higher speeds while in Autodrive. Edison was aware that its product was unable to detect stationary objects while driving at higher speeds, which a reasonable manufacture would have known was likely to cause severe injuries to drivers. In sum, the severity of the injury was forceable by Edison, and the first factor of the risk-utility test is met.

2. Edison Foresaw the Likelihood of the Injury at the Time of the Distribution of the Marconi.

Edison completed test prior to the distribution of the Marconi that informed the company of the likelihood of injury. Edison was aware of the likelihood of injury due to the testing it completed prior to putting the Marconi on the market. The fact that a machine is dangerous per se is an insufficient basis to demonstrate the likelihood of an injury. *Gregory v. Cincinnati Inc.*, No. 198382, 1999 WL 33453911 (Mich.Ct.App. Feb. 23, 1999). Instead, many courts

require statistical evidence to demonstrate the likelihood of an injury resulting from use of a machine. *Id.*

The United States Court of Appeals for the Sixth Circuit addressed the second factor of the risk-utility test in *Paul v. Henri-Line Mach. Tools, Inc.* 557 F. App'x 535 (6th Cir. 2014). In *Paul*, the plaintiff alleged that an overhead gantry milling machine that had been manufactured and designed by the Defendant was responsible for her husband's death. *Id.* The plaintiff did not produce any statistical evidence to demonstrate the second factor of the risk-utility test, regarding the likelihood of an injury resulting from use of the machine. *Id.* at 540. On the contrary, the evidence that the plaintiff presented stated that there was no evidence that would indicate that the machines were known to or did cause serious injuries. *Id.* The Sixth Circuit found that there had never been a reported incident of a person suffering an injury while using one of these machines. *Id.* Moreover, there are no reported incidents involving any overhead gantry milling machine, regardless of the manufacturer. *Id.* The Sixth Circuit held that the plaintiff had not met her burden in regard to the second factor of the risk-utility test. *Id.*

Unlike the plaintiff in *Paul*, Mr. Ashpool has met his burden of proof by providing evidence that Edison was aware of the likelihood of risk at the time of distribution of the Marconi. The CEO of Edison informed the court that the company had performed numerous required crash and safety tests. R. 4. From the test, Edison was fully aware that the sensors had difficulty identifying stationary objects while the vehicle was going over 35 mph and a stationary object was present in the vehicle's path. Unlike the plaintiff in *Paul*, Mr. Ashpool presented statistical evidence to meet his burden. Mr. Ashpool presented evidence that Mr. Reeve was aware of the twelve accidents involving stationary objects and drivers going over 35 mph and the 13% increase in the accident rate during the production of the Marconi. R. 5, 6. While Mr.

Reeve's did not deny the that he was aware of the incidents and the increase in the accident rate, he contended that the crashes were the fault of the drivers. By Mr. Reeve's not denying that he was aware of the statistical evidence regarding the likelihood of the crashes at the time of manufacturing the Marconi, Mr. Ashpool has met his burden of proof to under the second factor of the risk-utility test.

In sum, Edison was aware of the likelihood of injury at the time of distribution of the Marconi, and the second factor of the risk-utility test is met.

B. Edison's Failure to Include the Additional Sensors on the Marconi Rendered the Product Unreasonably Dangerous for the Purpose of the Risk-Utility Test.

An alternative production practice is practical and feasible only if the technical, medical, or scientific knowledge relating to production of the product, at the time the specific unit of the product left the control of the manufacturer or seller, was developed, available, and capable of use in the production of the product and was economically feasible for use by the manufacturer. Mich. Comp. Laws § 600.2946(2). Technical, medical, or scientific knowledge is not economically feasible for use by the manufacturer if use of that knowledge in production of the product would significantly compromise the product's usefulness or desirability. *Id*.

In exploring the Sixth Circuit's application of the risk-utility factors, the Sixth Circuit has ruled that "A plaintiff may offer proof of the risk-utility factors by way of export testimony.

Istvan v. Honda Motor Co., 455 F. App'x 568 (6th Cir. 2011).

1. Mr. Ashpool Proved that a Reasonable Alternative Design was Available.

There was a reasonable alternative design available at the time that the Marconi was put on the market. "It often is not possible to determine whether a safer design would have averted a particular injury without considering whether an alternative design was feasible. The essential

inquiry, therefore, is whether the design chosen was a reasonable one from among the feasible choices of which the manufacturer was aware or should have been aware." 2 Am.L.Prod.Liab., supra at § 28:14, p. 28.

In *Hollister v. Dayton Hudson Corp.*, the plaintiff was severely burned when the shirt she was wearing ignited upon contact with a hot electric burner on her apartment stove. 201 F.3d 731 (6th Cir. 2000). The plaintiff sued Dayton Hudson Corporation, a Minnesota based owner of the department store where the plaintiff purchased the shirt. *Id.* The plaintiff claimed that the shirt's design rendered it unreasonably dangerous. *Id.* One of the issues the Sixth Circuit faced was whether the plaintiff had presented evidence that a reasonable alternative design was available. *Id.* at 738. The plaintiff presented evidence of test conducted by an expert witness, who found that the fabric was significantly more flammable than other fabrics. *Id.* However, there was no evidence as to the availability of an alternative fabric when the shirt was manufactured, the cost of the shirt with such fabrics, or the effect of a fabric change upon the shirt. *Id.* The expert witness merely suggested that the weight of the fabric should have been heavier. *Id.* Moreover, the expert witness admitted "that he could not articulate the exact effect on flammability of the changes" to which he proposed. *Id.* at 739. In sum, the Sixth Circuit found that the expert witness did not present a "proposed alternative design" with any specificity. *Id.*

Unlike the plaintiff in *Hollister*, Mr. Ashpool presented a "proposed alternative design" with specificity. In *Hollister*, there was no evidence as to the availability of an alternative fabric. In fact, the expert witness testified that he was unaware as to the availability of an alternative fabric, the cost of such fabric, or how the fabric would affect the product. On the contrary, at trial in the case in bar, Mr. Ashpool's expert explained that if the additional sensors that Edison was aware of had been included in the Marconi, the 13% collision chance would have been reduced.

In response, Edison acknowledged the additional sensors as an alternative design. Therefore, Edison was aware of the alternative design, and Mr. Ashpool has shown an alternative design with "specificity" by showing the design that Edison was already aware of and chose to neglect in manufacturing the Marconi. Therefore, a reasonable alternative design was both available, and presented with specificity. Thus, the third factor of the risk-utility test is met.

2. The Available Alternative Design was Practicable.

The proposed alternative design was practicable because it was necessary for safety regarding the use of the Autodrive technology. Evidence that a proposed alternative design would increase production costs may be offset by evidence that product portrayal and marketing created substantial expectations of performance or safety, thus increasing the probability of foreseeable harm. Restatement (Third) of Torts Products Liability § 2 cmt. f (1998).

In *Hansen v. Baxter Healthcare Corp.*, the Supreme Court of Illinois discussed the difference in products liability cases where a manufacturer develops and markets its product as a safety device. ⁷ 764 N.E. 2d 25 (Ill. 2002). In this case, a hospital patient died when the unintentional disconnection of an intravenous catheter connecting device caused a fatal air embolism. *Id.* at 428. The plaintiff, an estate administrator for a hospital, claimed that the device was unreasonably dangerous due to a design defect. *Id.* at 423-24. The defendant argued that the risk-utility test was not appropriately applied to the medical device because it was simple, and its risk were well known to the medical community. *Id.* at 436. The court disagreed with the defendant, finding that the danger presented by the medical device was "not obvious, nor was the mechanism simple." *Id.* at 437. In this case, the medical device was developed and marketed as a safety device. *Id.* Therefore, the Illinois Supreme Court concluded that evidence of the existence

⁷ The Supreme Court of Illinois first used the expression "risk-utility" in *Hansen*. *Id*.

of any alternative, safer design for the medical device was sufficient in finding unreasonable dangerousness under a risk-utility analysis for a product that was marketed as a safety device. *Id.* at 436.

Here, Edison invented the Marconi to appeal to consumers who placed a higher premium on safety features and ease of use. R. 2. Edison incorporated Autodrive as a semi-independent driving experience for its consumers to provide this desired safety and ease. R. 2. In Autodrive, an onboard computer operated the vehicle so long as the driver keeps both hands on the steering wheel while the vehicle is in drive. R. 2. Edison further focuses on safety by including a manual in the Marconi that "emphasizes the importance of attentive driving and keeping one's hands on the steering wheel at all times." R. 3. Adding even more to its safety component, Edison continuously updates the Autodrive software in the vehicle as technology advances and new concepts are discovered. R. 3. The updates that were automatically sent to the vehicle when it started were mostly updates for safety purposes, with a small number of updates merely being for cosmetic purposes. R. 3. With Edison clearly putting safety as a top priority in the Marconi, it is striking that the company chose not to attach the additional sensors which would have reduced the risk that it was aware of. Therefore, the alternative design was practicable due to the fact that Edison marketed the Marconi as a quality safety vehicle. Thus, the fourth factor of the risk-utility test is met.

3. The Available and Practicable Reasonable Alternative Design Would Have Reduced the Foreseeable Risk of Harm Posed by the Product.

If the appropriate sensors had been placed in the Marconi when it was placed on the market, the rate of accidents with standing objects while using Autodrive would have declined. "A product is defective in design when the foreseeable risks of harm posed by the product could have been reduced by the adoption of a reasonable alternative design, and the omission of

the alternative design renders the product not reasonably safe." Restatement (Third) of Torts, § 2(b).

In Berrier v. Simplicity Mfg., Inc., the Third Circuit discussed whether an alternative design would have reduced the foreseeable risk of harm posed by a product. 563 F.3d 38 (3d Cir. 2009). In Berrier, a child was injured when her grandfather backed over her foot while using a riding mower that lacked "back-over" protection. *Id.* The mower came equipped with warnings and instructions printed in bold black letters. *Id.* However, the mower was not equipped with any "no mow in reverse" device nor any kind of roller barrier at the rear of the machine. *Id.* At trial, the plaintiffs presented evidence of an alternative design that consisted of roller-guards on the back of the mowing deck. *Id.* The proposed design created a barrier that greatly reduced the risk of any "foreign object" slipping under the deck as the mower backed up. *Id.* Both an engineer for the defendant and the plaintiff's expert witness testified that roller-barriers significantly reduced injuries associated with mower accidents. Id. 533-54. More so, the defendant had previously asked the Outdoor Power Equipment Institute to adopt the design based on testing it had conducted that supported the effectiveness of the roller-barrier in preventing back-over injuries. Id. With this, the Third Circuit found that the alternative design both existed, and more importantly it significantly reduced the risk of harm posed by the mower. *Id.*

Like the alternative design in *Berrier*, the alternative design that Edison could have used in the Marconi would have reduced the forceable risk of harm posed by the vehicle. In *Berrier*, the expert witness for the plaintiffs and an engineer for the defendant both testified that the proposed alternative design would have significantly reduced injuries like the one that occurred in the case. Like the alternative design in *Berrier*, the alternative design for the Marconi's sensors would have significantly reduced the possibility of harm from the faulty sensors.

According to Mr. Ashpool's expert, the accident rate was 13% higher when the vehicle was going over 35 mph and a stationary object was present in the vehicle's path. Edison was fully aware that the sensors it used in the Marconi would not notify the driver of standing objects while moving over 35mph. Yet, Edison chose to use the faulty sensors anyway. In turn, the CEO of Edison stated that the company had planned to include the additional sensors in future models of its luxury and sport vehicles. If Edison would incorporate the sensors into its luxury vehicles to detect standing objects but chose not to include the sensors in a lower end vehicle that it marketed with Autodrive technology, Edison was negligent in claiming the vehicle had Autodrive technology. If the sensors did not work to detect standing objects, then in sum Autodrive did not work. By admitting that it planned to use the alternative sensors in future models, Edison was likely aware that the additional sensors would have reduced the risk of accident from standing objects while moving over 35 mph in Autodrive. Thus, the fifth factor of the risk-utility test is met.

4. The Omission of the Alternative Design Rendered the Product Not Reasonably Safe.

Edison marketed the Marconi as a safety vehicle, and thus, the omission of the appropriate sensors to detect standing objects while the vehicle was in Autodrive rendered the Marconi not reasonably safe. Strict liability has been justified on fairness grounds because the product containing a hidden manufacturing defect that causes harm disappoints the consumer's or user's reasonable expectations with regard to safety. *Bragg* at 324.

In *Branham v. Ford Motor Co.*, the Supreme Court of South Carolina discussed the importance of car manufactures to design and manufacture safe vehicles. 701 S.E.2d 5 (S.C. 2010). In *Branham*, a passenger brought a products liability action against Ford Motor Company after sustaining injuries from a Bronco II roll-over accident. *Id.* After the roll-over accident

occurred, the plaintiff presented evidence regarding the number of rollover accidents of the Bronco II and explained that the rate was greater than other vehicles in its class. *Id.* at 21. The plaintiff used this evidence to show that the Branco II was unreasonably dangerous. *Id.* In turn, Ford argued that many of the accidents "may have been attributable to inexperienced or impaired drivers." *Id.* In this case, Ford recognized the tendency of the Bronco II to roll over, but yet again blamed the roll-over data on inexperienced drivers. *Id.* The Supreme Court of South Carolina did not accept Ford's argument regarding the roll-over data and the causes for the accidents. *Id.* According to the Court, a car manufacturer must design and produce vehicles that are not in a defective condition unreasonably dangerous to the user. *Id.* Cars are designed with utility and safety in mind, and careless driving is a foreseeable reality by manufacturers. *Id.* The court reasoned that Ford had a duty to design and manufacture the Bronco II as a reasonably safe vehicle. *Id.*

Like the defendant in *Branham*, the CEO of Edison blamed the accidents caused by the design defect on the drivers of the Marconi and refused to admit that the vehicle was not reasonably safe. In *Branham*, the manufactures were aware that the Branco II had a tendency to roll over. Like the manufactures in *Branham*, the manufactures for Edison were aware of the faulty sensors and the harm that could occur in Autodrive when the vehicle was supposed to be at its safest standard. The sensors were unable to notify the driver of stationary objects when the driver was moving at a high speed. Edison marketed the Marconi as a safety vehicle with advanced Autodrive technology. Instead of a high quality and safe vehicle, Edison put an unsafe vehicle on the road where drivers depended on the safety of the vehicle to get them from place to place. Mr. Ashpool was a long-time attorney turned social worker who required a safe vehicle to get him from house visit to house visit. In buying the Marconi, Mr. Ashpool believed Edison that

the vehicle was safe and would "practically drive itself." In reality, the Marconi was unable to notify its driver of the simplest of danger: a stationary object. What makes the Marconi truly unsafe is the fact that Edison's manufactures were fully aware that the vehicle could not perform what it was on the market to do, yet Edison put the Marconi on the market anyway so it could receive a profit from buyers seeking safety. Therefore, Mr. Ashpool has met his burden in regard to whether the omission of the alternative design rendered the Marconi not reasonably safe.

In sum, Mr. Ashpool has shown the foreseeability of the likelihood and severity of injury, as well as a reasonable and practicable alternative design. Thus, Mr. Ashpool has proved his burden in providing evidence to weight all fix factors of the risk-utility test in his favor.

Therefore, the denial of judgment as a matter of law should be reversed.

II. The Duty to Retrofit should be adopted in the State of Fremont in certain strict liability design defect claims because it will protect the welfare of the public.

The Supreme Court of the State of Fremont should adopt the duty to retrofit in certain strict liability design defect claims because it will protect the welfare of the public and will only be applied in certain limited circumstances.

Once "it is clear that after such a product has been sold 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*, *Inc.*, 411 F.2d at 453.

Here, Edison became aware of defects in its sensors' design after conducting crash safety tests with the NHTSA. When Edison became aware of these design defects, it decided not to rectify the defects due to supposed "cost" considerations. However, it was determined that a simple software update could have rectified the sensor defects, but Edison still chose not to perform these software updates simply because "it would have required additional hours to

create and implement." Therefore, Edison had a duty to retrofit because it was aware of the design defects in its sensors, and did not remedy the defect, nor did it provide any warning to its consumers, thus, Edison is liable to Mr. Ashpool because of its failure to retrofit.

Additionally, a continuing duty arises between a manufacturer and its consumers depending on the type of danger posed, the manufacturer's knowledge, and the time in which the manufacturer knew, should have known, or actually learned of a possible problem. *Gregory v. Cincinnati, Inc.*, 538 N.W.2d 325, 330 (Mich. 1995). Generally, however, these factors must exist while the product was in the control of the manufacturer. *Id.*

In this case, the Marconi poses a sever danger to the public in the form of numerous car wrecks; Edison had knowledge of the defect with the Marconi's sensors from its testing with the NHTSA prior to production of the Marconi; and Edison actually learned of the sensor defect problem *prior to* the Marconi's release. Even further, all these factors existed while the Marconi was in Edison's control. Thus, the application of the duty to retrofit in the case will be limited to this case alone because the defective sensor condition existed at the time the Marconi was manufactured and was within Edison's control.

A. Adoption of the Duty to Retrofit Will Protect the Welfare of the Public and Only Apply in Limited Circumstances.

The State of Fremont should adopt the duty to retrofit because it will protect the welfare of the public, especially when human lives are at stake, and it will only apply in limited circumstances where a special relationship exists between the manufacturer and the owner of the machine.

A duty to retrofit is a duty to upgrade or improve a product. *Ostendorf v. Clark Equip.*Co., 122 S.W.3d 530, 534 (Ky. 2003). When "it is clear that after such a product has been sold 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, Inc.*, 411 F.2d at 453.

In *Braniff Airways*, the court held there was sufficient evidence of the defendant's negligence to take the case to the jury. *Id.* at 453. There, the defendant manufacturer produced airplane engines and increased the horsepower of the engine from 3250 to 3400. *Id.* This horsepower increased caused the cylinder temperatures to increase, thereby aggravating the scuffing problem and greatly affecting the reliability of the engine---which can lead to cylinder barrel separation. *Id.* There was evidence the defendant knew of the scuffing and temperature problems nearly eight months before the crash but took no effective action to remedy the problem. *Id.* Thus, the court reasoned that the manufacturer has a duty either to remedy these problems or, if complete remedy is not feasible, at least to give users adequate warnings and instructions concerning methods for minimizing the danger. *Id.*

Similar to how the defendant in *Braniff Airways* failed to remedy their plane engine malfunctions and failed to give warning to their consumers, here too, Edison failed to remedy their sensor issues and failed to provide proper warning to their consumers. Edison became aware of the potentially faulty sensors during their testing period prior to the release of the Marconi. Mr. Reeve's even testified at trial that he knew more sensors would better assess stationary objects at speeds higher than 35 mph. However, Edison chose not to include more sensors to properly identify objects in the road purely because it would have increased the cost of the vehicle by \$5,000 and pushed the Marconi outside the economy sedan market. Further, Reeve's testified he did not believe the sensors were necessary to keep the vehicle safe because "moderately attentive drivers could avoid objects if they still had their hands on the wheel and

eyes on the road." Mr. Reeves' defense essentially states that Edison was aware of the potential failure of their sensors to properly identify objects in the road and decided to disregard the safety of their consumers because they wanted to make a profit. Edison was so focused on its bottom line that even when it learned it could drastically reduce the failure of its sensors with a simple software update to the vehicle, they chose not to because it would require "additional hours to create and implement." Not only would a simple update to the already existing sensors improve the crash rate, but it would also have cost "far less" than the implementation of an entirely new sensor.

Additionally, Edison knew Mr. Ashpool's gruesome wreck was not a one-off occurrence. Edison was aware of twelve other car wrecks prior to Mr. Ashpool's wreck that dated back almost two years. Mr. Reeve's testified at trial that he knew of the twelve previous crashes but brushed it off as the driver's fault because they should have been paying attention to the road instead of trusting the Autodrive technology. The same Autodrive technology that Mr. Ashpool was led to believe would allow him to "simply input a GPS location and enjoy the ride, with no further action required."

Further, the duty to retrofit will only apply in limited circumstances where a special relationship exists between the manufacturer and the owner of the machine. "Commentators and courts have found post-manufacture or continuing duties to arise in a variety of circumstances depending on the type of danger posed, the manufacturer's knowledge, and the time in which the manufacturer knew, should have known, or actually learned of a possible problem." *Gregory v. Cincinnati, Inc.*, 538 N.W.2d at 330. Generally, however, these factors must exist while the product is in the control of the manufacturer. *Id.* This is most appropriately deemed a post-manufacture duty stemming from a defect at the *point of manufacture*. (emphasis added) *Id.*

Here, we have just the case, where Marconi poses a severe danger to the public in the form of car wrecks; Edison had knowledge of the defect with the Marconi's sensors from its testing with the NHTSA prior to production of the Marconi; and Edison actually learned of the sensor defect problem *prior to* the Marconi's release. Further, all factors existed while the Marconi was in Edison's control. This is an extraordinary case where the potential danger of the Marconi is severe and widespread, like airplane safety. This is not a case where the postmanufacture duties would be extended beyond the underlying point of manufacture defect at the time of release due to improvements in technology. Rather, this is a case where the manufacturer knew of the defect prior to and at the time of release. Thus, the application of the duty to retrofit here will not "extend beyond the underlying premise of a point-of-manufacture defection" because it is limited by the fact that the defective sensor condition existed at the time the Marconi was manufactured and was well within Edison's capability to rectify prior to distribution of the Marconi. *Id.*

If the duty to retrofit is not applied in this case, Edison will continue to produce knowingly faulty sensors that result in numerous car wrecks, serious injuries to their consumers, damage to property, and kill animals. If this Court does not adopt the duty to retrofit and require Edison to update their vehicle sensors, even more Edison Marconi's will be out on the road with the potential to wreak unknown havoc on society and countless lives could be lost. Therefore, this Court must adopt the duty to retrofit rule because left unchecked, manufacturers like Edison will continue to knowingly produce faulty products that endanger human lives, even when a simple update could improve the crash rate.

B. How the Duty to Retrofit Would Apply to This Case If Adopted.

After applying all duty to retrofit factors outlined by the Court of Appeals for the State of Fremont, the Supreme Court of the State of Fremont should find that all factors have been satisfied and held that Edison had a duty to retrofit the Marconi because the Marconi implicated human safety, there was a continuing relationship between Edison and Mr. Ashpool, and Edison knew of the sensor defect after the Marconi was in the hands of Mr. Ashpool.

As outlined by the Fremont Court of Appeals, there is a duty to retrofit where: (1) the 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 the consumers. *Id.* at 15-6. A duty to retrofit is a duty to upgrade or improve a product. *Ostendorf*, 122 S.W.3d at 534. When it is clear that after such a product has been sold and dangerous defects in design have come to the manufacturer's attention, the manufacturer has a duty to remedy these. *Braniff Airways, Inc.*, 411 F.2d at 453.

First, the Fremont Court of Appeals properly found that the Marconi implicated human safety. Automobiles are dangerous machines, the use of which...may be regulated with a view to public safety. *Kroll v. Nevada Indus. Corp.*, 191 P.2d 889, 893 (Nev. 1948). Vehicles were designed to transport a multitude of items, including humans. Since the Marconi is a vehicle, albeit a semi-autonomous vehicle, and was designed for humans to operate and ride in, the Marconi implicates human safety. The Fremont Court of Appeals correctly identified that not only are human drivers' lives at stake, but the lives of pedestrians alike. As such, the Marconi implicates human safety.

Second, when examining the second factor of the duty to retrofit, it becomes more difficult to determine whether there is a continuing relationship between Edison and Mr.

Ashpool. Although courts have not typically found a continuing relationship between car manufacturers and drivers, we are now presented with an entirely different situation. Until recently, semi-autonomous cars have been nonexistent, and as such, courts have not considered the continuing relationship between semi-autonomous car manufacturers and their customers. Courts should now consider whether semi-autonomous car manufacturers have a continuing relationship with their customers. Edison's continued relationship with its customers is evidenced by its own admission that it continued to provide software updates to the Marconi.

In *Bell Helicopter Co. v. Bradshaw*, 594 S.W.2d 519 (Tex. Civ. App. 1979), the court held that defendant Bell had assumed the duty to improve upon the safety of its helicopter by replacing its old tail rotor blade system with a new tail rotor system, and that once Bell assumed this duty, it had an obligation to complete the remedy. *Id.* at 531-32. Bell Helicopter, the defendant became aware that its old tail rotor system had a history of in-flight fatigue fracture failures. *Id.* at 526. Bell then created a new tail rotor blade that substantially increased the useful life of the blades and increased the damage tolerance of the blades. *Id.* at 527. Once the new blade system was developed, Bell notified all of its helicopter owners of the new blade availability and recommended the owners upgrade to the new blades—which the FAA later required. *Id.* The court reasoned that because Bell assumed the duty to improve upon the safety of its helicopter by replacing the old blades, it had an obligation to complete the replacement by using reasonable means available to cause the blades' replacement. *Id.* at 532.

Like *Bell Helicopter*, where Bell continued to improve and replace its blades, here too,
Edison continued to update the Autodrive software as new technology advanced through the use
of updates. However, unlike in *Bell Helicopter* where Bell provided notice and warning of their
old faulty blades to their consumers when it became aware of such problems, here, Edison did

not provide any notice to its customers of the potential inability of its sensors to properly identify stationary objects when moving in excess of 35 mph. Similar to *Bell Helicopter*, Edison became aware of the failure of its product, yet unlike Bell, Edison chose not to remedy the problem or provide any notice to its consumers. The court in *Bell Helicopter* found a continuing relationship between Bell and its consumers because Bell continuously improved and replaced its rotary blades. Similarly, Edison continuously improved the software in the Marconi through the use of updates, most of which were for safety purposes, but some allowed for cosmetic changes—such as changing the lights on the sunroof of the vehicle. Edison admitted at trial that they provided software updates to the Marconi in the past allowing the company to continuously update their vehicles to maintain safety standards and avoid having to make entirely new vehicles, which like *Bell Helicopter*, created a continuous relationship between manufacturer and consumer.

Therefore, since Edison continues to provide software updates for their consumers to maintain "high" safety standards and avoid having to make entirely new vehicles, Edison has a continuing relationship with its consumers.

Third, Edison had knowledge of a defect in the Marconi's sensors after the product was in the hands of its consumers. Not only did Edison know of the sensor defect after the Marconi was already in the hands of its consumers, but it also knew of the defect *before* it even released the Marconi. Prior to the Marconi's release, Edison performed crash and safety tests as required by the NHTSA, and learned that the Marconi's sensors had difficulty identifying stationary objects when the vehicle was driving above 35 mph. Under such circumstances, there was a 13% increase in collisions. Thus, Edison knew of the defect in its product, the Marconi, after it was in the hands of its consumers.

Therefore, the Court should conclude that the Marconi implicates human safety because human's ride in the vehicle; there is a continuing relationship between Edison and its consumers because it continues to send software updates to the Marconi vehicle to maintain safety standards and allow for cosmetic alterations; and that Edison knew of the defect after the Marconi was in the hands of the consumers because it knew of the defect prior to the Marconi's release through its required testing by the NHTSA. As such, the Court should rule that Edison had a duty to retrofit the Marconi with either adequate sensors or provide a software update, and its failure to retrofit the Marconi caused the car wreck between Mr. Ashpool and the stationary bear.

Conclusion

For the foregoing reasons, Petitioner, William Ashpool, respectfully request that this

Court reverse the decision of the Court of Appeals for the State of Fremont because (1) the

petitioner has met his burden of proof for all six factors of the risk-utility test, and thus, judgment
as a matter of law is appropriate, and (2) the duty to retrofit should be adopted in the State of

Fremont in certain strict liability design defect claims because it will protect the welfare of the

public and maintain the safety of consumers.