No. 21-2112

IN THE SUPREME COURT OF THE STATE OF FREMONT

William ASHPOOL,

Petitioner,

v.

EDISON INCORPORATED, A FREMONT CORPORATION,

Respondent.

On Writ of Certiorari to the Court of Appeals for the State of Fremont

BRIEF FOR PETITIONER

Team A ATTORNEYS FOR PETITIONER

QUESTIONS PRESENTED

- I. Whether a vehicle's semi-autonomous driving feature is unreasonably dangerous and, thus, defective by design, when it deliberately drives into stationary objects when the vehicle is driving above 35 miles per hour because it lacks additional sensors and proprietary sensor technology.
- II. Whether a narrowly tailored duty to retrofit should be adopted in the State of Fremont in certain strict liability claims as an alternate means of redress for victims when a manufacturer's product implicates human safety, the manufacturer has a continuous relationship with the consumer, and the manufacturer knows of the defect after the product is in the hands of the consumers.

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STATEMENT OF THE CASE

I. STATEMENT OF FACTS

The action is brought due to the design defect of the Edison Marconi Autodrive feature. This product liability action is before the Court under a design defect theory.

Edison developed the Marconi over three years before entering the economy market. R. 2. Internal market analysis showed consumers in this market cared less about the technological advances sought after by the luxury and sport markets Edison normally caters to. R. 2. Economy market consumers preferred safety features commonly found in existing competitors in the market. R. 2. The Marconi's distinguishing feature was the Autodrive semi-autonomous driving technology. R. 2.

The technology is operated through an onboard computer that receives information from twelve sensors that analyze the road and surroundings. R. 2. The sensors mimic human responsiveness except for in a critical situation: when objects are stationary and the vehicle is going over 35 miles per hour (mph). R. 2, 6. This issue could be mitigated only by the driver overriding the Autodrive by either stopping the vehicle or using evasive maneuvers if the obstruction was appreciated in time. R. 3.

Edison knew of this blatant danger to human life during production. R. 5. Yet, the company decided to forego the technology fix to protect its foothold in the economy market it had only just entered. R. 5. The CEO of the company surmised the additional \$5,000 cost was only worthwhile to place on the newer models of the luxury and sport vehicles, not the economy vehicles because the cost would push it out of the market. R. 5. Even though safety features mattered more in the economy class. R. 2. This resulted in twelve known accidents due to the Autodrive failure. R. 5. Each occurred with stationary objects while the vehicle was going over

35 mph. R. 6. The company not only knew about the danger the technology posed but knew accidents had occurred because of it. R. 6. The company reasoned any attentive driver could avoid the hazards by keeping both hands on the steering wheel as advised in the vehicle manual. R. 6.

Edison continuously updates the Autodrive software as technology improves by directly sending the update to the car's computer without prompt from the consumer. R. 3. Edison's vehicles came with the pre-developed feature of creating and sending updates to "continuously update its vehicles and maintain the highest of safety standards." R. 3. A feature further separating Edison from its competitors. R. 3. The continuous updates are mostly to fix safety issues; however, it made a deliberate decision not to update the software to fix the kamikaze effect of Autodrive. R. 3, 7. Edison's model allows them to keep their product in the stream of commerce longer than even a traditional vehicle because it need not make new, safer, vehicles. R. 3.

When Ashpool learned of the Marconi and its technology he was told by the salesperson, "Autodrive would allow [Ashpool] to simply input a GPS location into the Marconi and enjoy the ride, with no further action required." R. 4. There was no attendant warning of the known issues with the technology. R. 4. No warning Edison expected the consumer to maneuver around the malfunctioning Autodrive with evasive measures. R. 4. And no affirmative direction the steering wheel sensor effectively offered as much notification and protection as a check engine light. R. 4.

Ashpool bought the Marconi after the design was on the market for two years. R. 4. It took less than two months of ownership for a catastrophic collision while the vehicle was in Autodrive. R. 4. Ashpool collided into a brown bear in the middle of Route 27 going 42 mph. R.

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4. He suffered from a dislocated shoulder, five broken ribs, a broken wrist, a concussion, and whiplash which required a two and ¹/₂ week hospitalization. R. 4.

The Autodrive malfunctioned while Ashpool had both hands on the steering wheel. R. 2a Brief Clarifications. The malfunction not only caused physical injuries but also a total loss to the Marconi. R. 4. The sensor failure caused immense damage as it had done several times before all while Edison knew of the problem, the risk to human life, but refused to fix it when the manufacturer so easily could have. R. 5.

II. NATURE OF PROCEEDINGS

This products liability action was submitted to the jury after a failed motion for judgement as a matter of law. R. 7. The jury returned a verdict for Respondent, finding no design defect in the Marconi and that the sensors did not cause Ashpool to crash. R. 7. Ashpool renewed his motion for a judgement as a matter of law, which was again denied by the court. R. 7. The only witness Edison presented in its defense was the CEO who appeared to defend Edison's conduct.

Ashpool appealed the verdict of the trial court. R. 7. He argued the trial court committed reversable error in refusing to include jury instructions detailing a post-sale duty to retrofit and in its denial of his renewed motion for judgement as a matter of law. The appeals court reviewed the matter de novo. R. 7. The court determined the Autodrive feature was not unreasonably dangerous when distributed and refused to hold Edison liable for failing to exercise reasonable due care in the Autodrive's design process. R. 12. The court affirmed the lower court's denial of Ashpool's renewed motion for judgement as a matter of law. R. 12. Additionally, the court adopted the post-sale duty to retrofit on manufacturers to hold them accountable for the rapid technological advancements that put their consumer's safety at risk. R. 13. But the court did not remand the case for proper jury instructions to be given. R. 13. Conversely, the court found

harmless error and no manifest injustice in refusing Mr. Ashcroft the right to trial by a properly instructed jury. R. 13. It is why the current action has now commenced. R. 13.

SUMMARY OF THE ARGUMENT

This Court should reverse the appellate court's decision affirming the denial of Ashpool's motion for judgment as a matter of law. The Edison Marconi is defective by virtue of being unreasonably dangerous because the danger associated with the Autodrive feature outweighs the utility of the vehicle. The luxury of drivers not having to focus on the road does not outweigh the harm those inside the car and around it faces. Individuals are subjected to severe injury or death in accidents such as the one here caused by the Marconi. The current model of the vehicle cannot identify stationary objects when the vehicle is driving above 35 mph. This renders their Autodrive feature essentially useless. If the Marconi cannot react properly to stationary objects in the road while going at a moderately average speed, a driver cannot rely on the feature and will essentially have to manually drive the car. Although the Autodrive feature may work if an object is not in the road while going below 35 mph, the utility of the car is de minimis compared to the risks it poses.

This Court should adopt the appellate court's decision instituting a duty to retrofit on manufacturers whose product implicates human safety, has a continuous relationship with their consumer, and knows about a defect when the product is in the consumer's hands. Fremont law recognizes that a manufacturer must warn based on knowledge acquired after a product is sold. The appeals court has properly found the need to extend the post-sale duty to warn to a post-sale duty to retrofit. This would only apply in a certain subset of strict liability actions. Motivated by profit, Edison sold and marketed the Marconi knowing it was defectively designed and presented a real danger to its consumers. The Autodrive semi-autonomous driving technology implicates

human safety, the manufacturer has a continuing relationship with their consumer through the in car computer, and it knew of the defect before and after the product was in the hands of the consumer. This standard to retrofit should be adopted because it is a measured approach to a developing problem that requires advances in the law to match the advances in technology.

Therefore, this Court should reverse the judgment of the Court of Appeals for the State of Fremont and conclude that the Marconi's Autodrive feature is unreasonably dangerous under the risk-utility test. Furthermore, this Court should hold that the lower court abused its discretion by failing to remand to the trial court for proper instruction about the duty to retrofit.

ARGUMENT AND AUTHORITIES

Standard of Review. A motion for judgment as a matter of law is reviewed de novo. *Cooper Indus. v. Tarmac Roofing Sys., Inc.*, 276 F.3d 704, 707 (5th Cir. 2002). Judgment as a matter of law is appropriate where "a party has been fully heard on an issue during a jury trial and the court finds that a reasonable jury would not have a legally sufficient evidentiary basis to find for that party on the issue." Fed. R. Civ. P. 50(a)(1). When a party objects to a jury instruction, this Court reviews the court's instruction for an abuse of discretion. *Stutts v. Am. Pop Corn Co.*, 815 F.3d 409, 416 (8th Cir. 2016).

I. EDISON'S FAILURE TO INCLUDE ADDITIONAL SENSORS TO DETECT STATIONARY OBJECTS WHEN THE AUTONOMOUS VEHICLE TRAVELED OVER 35 MILES PER HOUR RENDERED THE PRODUCT DEFECTIVE IN AN UNREASONABLY DANGEROUS CONDITION UNDER THE RISK-UTILITY TEST.

Ashpool brought a products liability claim against Edison asserting a design defect regarding the Marconi Autodrive feature. Strict products liability holds manufacturers accountable when defective products injure consumers. *Green v. Smith & Nephew AHP, Inc.*, 629 N.W.2d 727, 736 (Wis. 2001). The purpose of strict products liability is to embrace the

concept those who reap the profits should bear the cost when defective products harm consumers because the injured persons "are powerless to protect themselves." *Greenman v. Yuba Power Prods., Inc.,* 377 P.2d 897, 901 (Cal. 1963). As a policy matter, strict products liability reflects that the manufacturer is in a better position to guard against hazards. *Id.* at 899. Additionally, the manufacturer can better cover the cost of injury through price increases and the public benefits when manufacturers are discouraged from selling defective products. *Id.*

To prevail on any products liability claim, a plaintiff must establish three elements: (1) the injury was caused by the product; (2) the product, at the time of the injury, was in essentially the same condition as when it left the manufacturer; and (3) the injury occurred because the product was in a defective condition so it was unreasonably dangerous. W. Prosser, *Law of Torts* 671–72 (4th ed. 1970); *cf.* Fremont Rev. Code § 5552.321. The first and second elements of liability are not disputed; thus, the analysis turns on whether the Marconi was defective in an "unreasonably dangerous" condition.

Restatement (Third) of Torts: Products Liability § 2(b) clarifies the standard for proving defectiveness in a design context:

A product ... is defective in design when the foreseeable risk of harm posed by the product could have been reduced or avoided by the adoption of a reasonable alternative design by the seller or other distributor, or a predecessor in the commercial chain of distribution, and the omission of the alternative design renders the product not reasonably safe.

Restatement (Third) of Torts: Prod. Liab. § 2(b) (Am. Law Inst. 1998).

The risk-utility test is the exclusive test for design defect claims. It requires balancing the danger associated with a product with its utility to the consumer. *Sumnicht v. Toyota Motor Sales, U.S.A., Inc.*, 360 N.W.2d 2, 15 (Wis. 1984). A product is considered unreasonably dangerous and thus defective "if the danger associated with the use of the product outweighs the

utility of the product." *Bragg v. Hi-Ranger, Inc.*, 462 S.E.2d 321, 328 (S.C. Ct. App. 1995). Numerous factors must be considered when determining whether a product is unreasonably dangerous, such as: (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 reasonably 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 omitting the alternative design rendered the product not reasonably safe. *Peck v. Bridgeport Machs., Inc.*, 237 F.3d 614, 617 (6th Cir. 2001). Any one factor in the risk-utility analysis should generally not be considered alone; but, the factors should be taken as a whole. *Goodner v. Hyundai Motor Co.*, 650 F.3d 1034, 1040 (5th Cir. 2011).

The Court of Appeals for the State of Fremont erred 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 riskutility test. Ashpool presented an abundance of evidence proving that any reasonable jury would find the Autodrive design feature unreasonably dangerous. "If the minds of reasonable men could not differ on whether the risk posed by a product outweighed its utility, or vice versa, then the court could make the appropriate determination as a matter of law." *O'Brien v. Muskin Corp.*, 463 A.2d 298, 307 (N.J. 1983). A court may grant a judgment as a matter of law based on public policy grounds. *Fay v. Grand Strand Reg'l Med. Ctr., L.L.C.*, 771 S.E.2d 639, 642 (S.C. Ct. App. 2015). Therefore, this Court should reverse the holding below and hold, as a matter of law based on public policy, that the Autodrive's design feature was defective without the additional sensors and proprietary sensor technology. The risk of harm to its passengers does not justify the luxury it provides. Without the extra sensors and upgraded technology, the Autodrive feature caused an increased risk of crashing into stationary objects and, consequently, was unreasonably dangerous.

A. Edison Knew of the Likelihood of Injury, and the Severity of Those Injuries, with the Original Autodrive Design Because It Performed Hundreds of Tests Before Distribution Primarily Focusing on the Sensors.

The first two factors the court must analyze are the manufacturer's knowledge as to the risks posed by its chosen design: namely, the likelihood that the product will cause injury, and the severity of those potential injuries. Ashpool successfully meets these two factors because testimony revealed that Edison's own internal testing showed that without the additional sensors, the Marconi had difficulty identifying stationary objects at a speed above 35 mph. This proves that Edison foresaw the likelihood of accidents caused by the Autodrive feature but chose to ignore it.

The risk-utility test focuses on measuring the conduct of the manufacturer and "incorporates an element of foreseeability of risk of harm." *Aubin v. Union Carbide Corp.*, 177 So. 3d 489, 505 (Fla. 2015). It is indisputable that all vehicles, autonomous or not, present an extreme and foreseeable risk of harm. In *Branham v. Ford Motor Co.*, the plaintiff brought a products liability action against the vehicle manufacturer, seeking damages for injuries allegedly sustained in a vehicle roll-over accident. 701 S.E.2d 5, 5 (S.C. 2010). The plaintiff argued there was a design defect in the "handling and stability" that related to the rollover propensity of the vehicle. *Id.* at 10. The defendant selected a riskier design with many disapprovals over the alternative design highly advocated by the vehicle's engineers because it served a "major marketing advantage" on how the defendant promoted this vehicle. *Id.* at 11. The defendant's former vice president testified that the alternative design would have increased the handling and stability of the vehicle, making it less prone to rollovers. *Id.* at 13. The court ruled this evidence

presented a design defect known to the defendant and that the plaintiff produced evidence of a feasible alternative design. *Id.* at 12–13.

The likelihood of injury is evident, as is the probable seriousness of it. Edison performed hundreds of tests with particular focus on the sensors which revealed that the Marconi had difficulty identifying stationary objects when the vehicle was driving above 35 mph which would have resulted in devasting crashes. Ashpool's extensive injuries—a dislocated shoulder, five broken ribs, a broken wrist, a concussion, and whiplash—demonstrates that fact. Further, Ashpool's expert testified 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. Similar to the vice president who testified in *Branham*, the CEO of Edison testified that it original planned to include these additional sensors to the Marconi to fix this problem and avoid future accidents. By foregoing the additional sensors, Edison ensured a high likelihood that the Marconi could cause serious injury. This proved the likelihood of injury was foreseeable to Edison at the time of distribution.

Ashpool not only proved this design defect was well known to Edison but proved that the lack of the additional sensors caused the Marconi to crash into the stationary bear. Edison's prior testing before release proved that a safer alternative design existed during the manufacture of the Marconi; however, it was planned to be used for future models rather than adopted for this present model. The prior test results alone proved that the absence of additional sensors is more likely to cause the vehicle's crash to a stationary object, thus Edison foresaw the risks of this chosen design compared to the alternate design of extra sensor technology.

The first and second factors weighs in favor of finding that the Marconi was unreasonably dangerous.

B. Edison Purposefully Ignored a Reasonable and Safer Alternative Design to the Marconi by Abandoning Its Original Plan and Not Including the Additional Sensors and Proprietary Sensor Technology That Would Have Assessed Stationary Objects at Higher Speeds.

The third factor considers whether there was a reasonable alternative design available. The record itself proves that an alternative design existed with the additional sensors and proprietary sensor technology. Ashpool shows this alternative design was reasonable because Edison originally planned on adding the extra sensors and upgraded technology when it discovered the risks the Autodrive feature caused. Therefore, the third factor weighs in favor of Ashpool.

A plaintiff who pursues a design defect claim must "point to a design flaw in the product and show how his alternative design would have prevented the product from being unreasonably dangerous." Branham, 701 S.E.2d at 16. A sensible alternative is implicit in weighing the risks and benefits of a design. Barker v. Lull Eng'g Co., 20 Cal. 3d 413, 434 (1978). In Goodner v. Hyundai Motor Co., the plaintiffs filed a products liability action against an automobile manufacturer alleging that the front passenger seat and restraint system had been defectively designed because the seat could recline to an unsafe position that permitted the plaintiff's deceased daughter to be ejected from the vehicle during a car accident even though she was wearing a seatbelt. 650 F.3d at 1039. The court analyzed this issue using the factors for the riskutility test. Id. at 1040. It discussed that "[t]he first factor is a cost-benefit analysis of the utility of the design, here, a seat that can recline, compared to the risk to the users. The evidence did not show a high utility for a seat that can recline more than 45 degrees, and the Goodners' expert testified that a reclined seat significantly increases the risk of ejection." Id. at 1041. The court ruled that even though there may be benefits to a fully reclining seat, a jury would not be unreasonable in concluding that the risks of the design outweigh the benefits. Id. Furthermore, the plaintiffs presented the availability of an alternative design by limiting the seat recline to 45

degrees, a design which other car manufacturers had implemented. *Id.* The court found there was evidence supporting a conclusion there was a safer alternative design to the reclined seat that would not impair the overall usefulness of the seat or car. *Id.*

Just as the seat and seatbelt in *Goodner*, the Marconi had a safer design alternative disregarded by Edison. Edison could include additional sensors and proprietary sensor technology that would have assessed stationary objects at higher speeds but deliberately chose not to. Instead, it released the Marconi into the market with a design that could not detect stationary objects while driving at 35 mph or faster. The deliberate decision allowed Edison to target a specific economy range of sedans, which created more profits. But the decision also placed consumers, such as Ashpool, in grave danger.

Edison failed its consumers when it chose to forgo a safer alternative design simply because it would cost the manufacturer more money. This alternative and advanced technology existed and would have prevented Ashpool's injuries. Companies that prioritize profits over protections for its consumers should be held accountable for the injuries that result.

The third factor weighs in favor of a finding that the Marconi was unreasonably dangerous.

C. The Available Alternative Design Was Practicable Because Edison Admitted That It Planned to Include the Additional Sensors and Upgraded Technology to Future Luxury Models, Rather Than the Current Marconi.

The fourth factor considers whether the alternative design was practicable. This factor weighs against Edison because cost alone does not render a design infeasible. Testimony revealed that including additional sensors and proprietary sensor technology would have assessed stationary objects at a higher speed. Testimony also revealed that Edison elected to abandon the upgrade due to feasibility and cost concerns. Specifically, Edison argued that installing additional equipment would increase the cost of the vehicle to consumers which will push the vehicle outside the economy range of sedans. But Edison's CEO testified that Edison planned to include the additional sensors in future models of its luxury and sport vehicles.

A financially prohibitive design is not an economically infeasible one. A corporation's desire to turn a profit does not transform a defective design into a reasonable one. *Cipollone v. Liggett Grp., Inc.,* 644 F. Supp. 283, 288 (D.N.J. 1986). The record indicates that Edison's main argument of why it could not add extra sensors and proprietary sensor technology was because it was trying to keep the vehicle at a targeted market cost. This does not render the cost of the alternative design greater than the risk and cost of injury.

Alternative designs are economically feasible if the cost would not "render the vehicle so expensive that it's impractical to purchase it." *Goodner*, 650 F.3d at 1044. Feasibility is a "relative, not an absolute, concept." *Boatland of Hous., Inc. v. Bailey*, 609 S.W.2d 743, 746 (Tex. 1980). "The evaluation of the utility of a product also involves the relative need for that product; some products are essentials, while others are luxuries." *O'Brien*, 463 A.2d at 306. In *O'Brien*, the plaintiff was injured diving into a pool and alleged that the vinyl bottom was too slippery and constituted a design defect. *Id.* The trial court ruled for the defendants and the plaintiffs appealed. *Id.* at 301. The appellate court reversed the decision of the lower court and remanded the case with the Supreme Court of New Jersey affirming. *Id.* The court stated that the risk-utility test is focused on "policy ramifications of the product and whether the risk of harm outweighs the usefulness of the product." *Id.* at 306.

An issue in this case is whether the additional sensors that would increase the cost of the vehicle by \$5,000 is considered so expensive that it is impractical to purchase it. The evidence presented proved that the extra cost is not impractical because Edison was already planning on adding the extra sensors to the future models. Furthermore, the Autodrive feature is considered a

luxury rather than an essential as stated in *O'Brien*. As a policy matter, when making a new technology feature never done before, manufacturers should take extra precautions on the safety aspects. Instead, Edison released the Marconi into the market with knowledge of this design defect to capitalize on the desires of its new target market.

While the alternative design may have been expensive, as Edison argued, a reasonable jury could find that the cost was not unreasonable when compared with a flaw in the system that could cause the car to not perform as it was marketed and could cause a significant number of serious accidents and life-changing injuries. Therefore, under the risk-utility test, the Court should find that, while the alternative design was costly, the existing design created an unreasonable risk not fully disclosed to customers. Regardless of the value, the adoption of the alternative design would have effectively eliminated every Marconi flaw and risk.

The fourth factor weighs in favor of a finding that the Marconi was unreasonably dangerous.

D. The Available and Practicable Reasonable Alternative Design of Adding Extra Sensors and Upgraded Technology Would Have Reduced the Foreseeable Risk of Harm Posed by the Product.

The fifth factor considers whether the alternative design would have reduced the foreseeable risk of harm posed by the Autodrive feature. This factor weighs heavily in favor for Ashpool because Edison already acknowledged the danger the original design presented, figured out a solution to fix it and reduce the risk of harm, but deliberately decided to forego the plan to fix the problem because of only one disadvantage to these additional sensors: higher costs.

An alternative design is feasible regarding safety if the evidence shows it eliminates the risk without introducing equal or greater dangers. *Uniroyal Goodrich Tire Co. v. Martinez*, 977 S.W.2d 328, 337–38 (Tex. 1998). As *Branham* instructs, a product is defective in design when

the foreseeable risks of harm posed by the product could have been reduced or avoided by adopting a reasonable alternative design. 701 S.E.2d at 16. In this analysis, the "fundamental question" is "whether [Ford's] failure to adopt a particular design feature proposed by the plaintiff was, on balance, right or wrong." *Id.* In *Uniroyal*, the Texas Supreme Court approved a jury finding of defect against a tire manufacturer where the manufacturer included a warning on the tire and few incidents causing injury were reported. 977 S.W.2d at 337. The evidence supporting the verdict described how similar accidents could occur despite the warning, and an alternative design would have prevented the plaintiff's injury without increasing the risk of impairing the use of the tire. *Id.* The court held the rare occurrence of accidents with the tire could not establish its safety when considered against the alternative design. *Id.*

Edison had the option to provide a safer vehicle that would have prevented the injury Ashpool suffered. The additional sensors and proprietary sensor technology which perceived stationary objects while driving at higher speeds would have enabled the Marconi to avoid the brown bear sitting in the road and would have improved its utility. Yet, Edison deliberately chose not to add the extra sensor and technology to target a specific market, the economy range of sedan purchasers. As in *Uniroyal*, the alternative design evidence strongly suggests the Marconi was unreasonably dangerous because it would have prevented the injury without increasing safety risks.

Edison tested the Marconi and learned the sensors on the vehicle had difficulty identifying stationary objects when the car was driving above 35 mph. The company rushed the product to the market without these much-needed improvements. Ashpool presented overwhelming evidence that Edison's failure to adopt additional sensors and upgraded technology on the Marconi was wrong because it led to a heightened risk of car accidents with stationary objects.

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The evidence presented proved Edison knew of the danger posed by not adding more sensors. Nonetheless, Edison chose not to use the safer alternative design because profit alone, rather than any utility considerations, motivated the decision to abandon its original plan. Therefore, the evidence demonstrates a feasible alternative design existed that would have reduced the foreseeable risk of harm posed by the product.

The fifth factor weighs in favor of a finding that the Marconi was unreasonably dangerous.

E. Without the Additional Sensors and Proprietary Sensor Technology, the Marconi's Autodrive Feature Is Not Reasonably Safe Because of the Increased Risk of Car Accidents with Stationary Objects on the Road.

The sixth factor considers whether omitting the alternative design rendered the Marconi's Autodrive feature not reasonably safe. Ashpool successfully meets this factor by calling an expert to testify to the danger the Autodrive feature created without the additional sensors and upgraded technology.

The danger of the Marconi's capabilities absent the alternative design is unacceptable. If Edison found the additional sensors and proprietary sensor technology system to be unreasonably costly, then the cheaper technology would have had to compensate for these shortcomings. Testimony revealed a 13% higher accident rate with stationary objects on the road without the alternative design. If Edison wanted to include a semi-autonomous driving feature, which drivers are unaccustomed to, Edison should not have cut costs on safety features. Because the Marconi cannot identify and react properly to stationary objects at a speed over 35 mph, it renders its Autodrive feature essentially useless because the driver would have to continue to manually drive the car and could not rely on the feature in fear of a higher risk of an accident. The sixth factor weighs in favor of a finding that the Marconi was unreasonably dangerous because without the additional sensors and proprietary sensor technology, the Autodrive feature is not reasonably safe. Therefore, all six factors weigh in favor of Ashpool.

Ashpool not only offered evidence that the Marconi had a design defect that rendered the vehicle's Autodrive feature defective; he also presented evidence that Edison knew the defect when the Marconi was manufactured. Edison could have successfully marketed the Marconi with the additional sensors and improved technology, the market would have just been smaller. Instead, Edison based its decision solely off of profit. Rather than adopt a readily available alternative design planned to be used on future models, Edison made the wrong decision in prohibiting the additional sensors in the Marconi which caused the vehicle to be unreasonably dangerous. A semiautonomous car that cannot accurately detect road hazards endangers its users. There is no reason to allow manufacturers to escape liability for cutting safety features solely to target a specific market. Therefore, the appellate court erred in affirming the trial court's denial of Ashpool's motion for judgment as a matter of law.

II. THE TRIAL COURT ERRED WHEN IT REFUSED TO INSTRUCT THE JURY THAT EDISON COULD BE LIABLE UNDER A DUTY TO RETROFIT THE MARCONI WITH ADDITIONAL SENSORS AFTER THE VEHICLE LEFT THE MANUFACTURER AND WAS IN THE CONSUMER'S HANDS.

The trial court's refusal to instruct the jury on a duty to retrofit was serious error that produced a manifestly unjust result. A properly instructed jury on the temporal differences between a design defect claim and a post-sale duty to retrofit claim could have reasonably resulted in a different outcome for Ashpool. *See Lunghi v. Clark Equip. Co.*, 200 Cal. Rptr. 387 (Ct. App. 1984) (finding jury could have found a manufacturer was negligent had it been properly instructed because there was evidence that the company knew of the specific risks before the accident and did not conduct a retrofit campaign). The appeals court aptly stated, it isn't manifestly unjust, "if the reviewing court cannot determine that the jury would likely have

come to a different verdict if the requested instruction had been given." *Oliver v. McCord*, 550 XE 625, 634 (Fremont 1996). Reasonable minds could not accept the result as adequate or just. An erroneous jury instruction should be reversed "only where the error affects the substantial rights of the parties." *Blackorby v. BNSF Ry. Co.*, 849 F.3d 716, 720 (8th Cir. 2017) (internal quotation marks omitted). The court denied Ashpool a properly instructed jury which blocked the jury from full consideration of the issues before it, substantially affected his right to redress, and allows manufacturers to escape liability for knowingly risking human life.

A. Fremont Should Impose a Continuing Duty on Manufacturers to Retrofit Products That Threaten Human Safety.

This Court should adopt the duty to retrofit as adopted below. The lower court established a modest adaptation to several sister court's established duty to retrofit. The court implemented a duty "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. Ashpool is advocating for this Court to adopt the lower court's incremental adaptation of Fremont's existing post-sale duty to warn. The lower court's approach does not adopt a duty so broad manufacturers inadvertently become the insurer of its consumers and is so narrow it will affect a small subset the industry only. The three elements are instrumental to ensuring this duty is kept to only those manufacturers who invite additional scrutiny because of their self-imposed relationship with a consumer. They ensure this duty will only apply in certain strict liability cases and are essential for ensuring the duty is not too onerous on manufacturers. The Supreme Court of the State of Fremont acknowledges the manufacturers fiscal concerns in approving the duty as adopted below.

1. The lower court's approach strikes the appropriate balance between the fiscal and practical policy concerns of manufacturers and the need to protect consumers in rapidly developing industries that hold themselves apart from their competitors through special relationships with the consumer.

Common-law continuing duties have incrementally expanded despite fervent manufacturer opposition because courts have held life more valuable than profit. This Court should continue the trend by adopting a duty to retrofit. The lower court's tailored approach is a reasonable balance of consumer expectations and the policy concerns of the manufacturing industry. A reasonable consumer assumes when a manufacturer places new, highly specialized, technology on the market, the manufacturer implies it is safe. Given the active role manufacturers play in cultivating these expectations, it should not be able to escape accountability, and thus a continuing duty when products are not safe. Courts are consummately careful when crafting any expansion of liability when new fact situations arise due to technological advancements, as the appeals court did here. Highly specialized manufacturers whose product implicates a risk to human life already must retrofit. *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). This Court should join this movement towards increased consumer protection and hold industry leaders accountable.

Manufacturer's post-sale continuing duties will not be any more onerous than those that currently exist for those with special relationships. In specialized industries, this duty has been recognized in several courts when the case contains facts showing "(1) a continued relationship with the user, especially when the relationship pertains to safety; and (2) a manufacturer's retention of control over a product lacking newly developed safety features." Michael L. Matula, *Manufacturers' Post-Sale Duties in the 1990s*, 32 Tort & Ins. L.J. 87, 121 (1996). The lower court's standard safeguards the policy that safety advances and features do not make older

models defective for purposes of a post-sale duty to retrofit. Conversely, the lower court pointedly asserts manufacturer's product execution is not without fault when it places a defective product on the market and correspondingly evolve technology due to *known* accidents. R. 16; *see Bell Helicopter Co. v. Bradshaw*, 594 S.W.2d 519, 533 (Tex. Civ. App. 1979) (indicating Bell knew the older model rotor was potential cause of accidents); *cf. Crowston v. Goodyear Tire & Rubber Co.*, 521 N.W.2d 401, 407 (N.D. 1994) (clarifying foregoing law does not allow manufacturers to ignore post-sale knowledge about product is contrary to prevailing strict liability principles). Here, the lower court adopted an approach which balances industry's practical concerns with consumer expectations to hold manufacturers accountable when they know of life-threatening dangers their products pose. The lower court's approach should be adopted because it will not be too onerous on manufacturers.

Accordingly, the approach taken by the lower court holds industry trailblazers accountable when their products are defective without stifling innovation. Consumers seek specific manufacturers based upon their expectations of the company and its specialization. Those expectations are likely derived from how the manufacturer has held itself apart from its competitors. Consumer expectations come directly from the promises marketed to their consumer base, but sometimes those promises fall short, as they did for Ashpool. Courts have held innovators and market disruptors accountable for the past 75 years when they knew their products were defective and they had a special relationship with their customer base. *See Noel v. United Aircraft Corp.*, 342 F.2d 232 (3d Cir. 1964) (holding the manufacturer had a duty to repair or recall based on a continuing relationship). In emphasizing the continuing relationship between the manufacturer and the customer, courts haves substantially tailored the duty to retrofit to those manufacturers who already hold themselves to a higher level of accountability to

their consumer base. Those consumers implicitly have a higher level of trust and expectation because of that special relationship offered by the manufacturer. Courts have found this persuasive for holding these manufacturers accountable. *See Bell Helicopter Co. v. Bradshaw*, 594 S.W.2d 519 (holding the continuous controlling relationship between the manufacturer and consumer created an assumed duty to remedy defects). Accordingly, this Court is aligned in adopting a duty to retrofit tailored to a mere subset of manufacturers.

The three elements will require a fact intensive analysis and ensure liability is extended only to those manufacturers who hold themselves out by cultivating additional ties to their consumer base. Only a small subset of manufacturers will have the fiscal and practical capability to have a continuous or controlling relationship with their consumer. This attribute is likely a motivating factor for consumers who engage with their product from the outset. This Court, in adopting a duty to retrofit, is acknowledging a different level of accountability is required when a heightened relationship exists. Accountability beyond that expected from the typical manufacturer placing a product in the stream of commerce. A level of accountability consonant with the heightened level trust from consumers who undoubtably have a limited understanding of the technology that makes the manufacturer unique and desirable. This imbalance in the scales of knowledge breeds a dangerous situation where the uneven hand of information tips the scales in the manufacturers favor whenever problems arise that implicate human life. These problems are even more dangerous because of customer's inherent trust in their products and compounded by customer's characteristic lack of developed understanding for the new technology. Understanding only the manufacturer would have. A position which underscores manufacturers are best situated to remedy the issue through a continuing duty to retrofit. Ultimately, the duty to retrofit is best articulated when a discrete set of factors are met to limit who will be reached.

Adopting a duty to retrofit for limited manufacturers will not lead to innovation stagnation. While manufacturers lament any expansion of liability breeds reluctance among manufacturers to remedy defects with newer and safer products, this has not proved true. Their argument has proved weak in the eyes of history and is not an adequate reason not to adopt a duty to retrofit. The Court only has to look so far as the facts here where the premise of the claim is a semi-autonomous self-driving vehicle. Society is yet to see the parade of terribles associated with adopting a common law duty to retrofit as the world continues to innovate. It is socially desirable as these innovations come to pass that manufacturers are held accountable. The Second Circuit found the duty to be "clear [when] 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 or, if complete remedy is not feasible, at least to give users adequate warnings and instructions concerning methods for minimizing the danger." *Braniff Airways*, 411 F.2d at 453. The duty to warn has already been adopted in the State of Fremont as indicated by the lower court's opinion and adopting a duty to retrofit is only the next logical step. R. 15.

2. A continuing duty to retrofit relies on the same well-established policy rationales as do the duty to warn and the duty to test.

The duty to retrofit rests upon the same bedrock principles as the duty to warn, the duty to test and strict liability in general. Strict products liability reflects the policy that (1) the manufacturer is in a better position to guard against hazards; (2) the manufacturer can better defray the cost of injury through price increases; and (3) the public benefits when manufacturers are discouraged from selling defective products. *Greenman*, 377 P.2d at 899. These underlying principles are consistent with why so many states have adopted the duty to warn either through common law, statute, or adopted jury instructions. Manufacturer's post-sale duty to warn is the most developed of all post-sale liability theories and is well established law throughout the

United States. Most of the Midwestern states, including Iowa, Wisconsin, Minnesota, Kansas, North Dakota, Michigan, and Ohio, have adopted this duty. As many as 30 state supreme courts, federal and state appellate courts, and legislatures have decided that such a duty should be imposed on manufacturers. The most recently adopted Restatement recognizes an expansive post-sale duty to warn. Restatement (Third) of Torts: Prod. Liab. §§ 10, 11 (Am. Law Inst. 1998).

The State of Fremont readily adopted the Restatement's post-sale duty to warn section to protect consumer safety. *Shane v. Smith*, 657 XE 720, 725 (Fremont 1989). This rationale follows the lower court's reasoning behind adopting a continuing duty to retrofit. The doctrinal bedrock of the manufacturer's continuing duty to warn is the commitment to remedying the asymmetry between knowledge held by the manufacturer and the consumer. This follows the reasoning for adopting a continuing duty to retrofit. It is much more likely that the manufacturer will have the information and resources available to realize when a product has become untenably safe. It is patently unreasonable to expect reasonable consumers to avoid unknown pitfalls of products marketed to them as safe. Manufacturers are in the best position to remedy issues that implicate human safety and society has an established expectation they will make all reasonable efforts to fix known issues. Manufacturers systematically calculate costs related to identified defects in their product lines including litigation costs, costs to retrofit, and potential punitive damage payments.

Fixing known issues is a cost contemplated in the normal course of business as are the costs which may be incurred for not fixing the issue. When companies analyze the probability of litigation success against the cost of lost life, they inherently are placing more value on their bottom line than human life. This is especially troublesome when their product essentially places

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the value of human life in direct competition with the manufacturer's bottom line. When the product puts human life in the hands of a profit seeking manufacturer, that manufacturer should take their superior position seriously. The majority of courts agree and thus have adopted the duty to warn. This premise is the underlying reason these manufacturers must retrofit when these inherent dangers become known, especially when human life is in their hands. If a manufacturer is on notice it must retrofit, it can embrace this responsibility in the ordinary course of business and cost contain. It will encourage further self-regulation, increased discernment before releasing things into the stream of commerce, and consumers will enjoy a heightened level of protection. Manufacturers can protect public confidence in their products instead of forcing their consumers into costly litigation already factored into their bottom line.

Courts have found the need to protect consumers compelling and is the foundation of the duty to warn despite the costs that manufacturers claim will hinder industry growth. The costs associated with the duty to warn have not proved to kill growth, innovation, or safety. Often relatively inexpensive devices have been deemed necessary to protect consumer safety at common law despite industry hostility to implementing new safety devices. This case proves no different. The auto manufacturers are some of the most egregiously hostile to any safety addition such as seatbelts, safety glass, and airbags because they feared these safety upgrades would undercut their profits. The fear that consumers will not pay more for added safety features is a tall tale told by the industry to oppose safety regulation and oversight. *Id.* To the contrary, time has proven, safety features are held in the highest regard. This should no longer be a persuasive point in modern jurisprudence.

3. Adopting a duty to retrofit provides victims an alternative avenue for adequate redress of certain strict liability claims and is not a duplicitous remedy.

This Court should adopt the duty to retrofit because separating the duties temporally offers consumers another avenue for redress not contemplated by a prima facie design defect claim. *See Hernandez v. Badger Constr. Equip. Co.*, 34 Cal. Rptr. 2d 732 (1994) (indicating "[f]ailure to conduct an adequate retrofit campaign may constitute negligence apart from the issue of defective design."). Courts have agreed, it is socially desirable for victims to have several avenues for redress when manufactures place products in the stream of commerce fully knowing they contain defects that implicate human safety. *Lunghi*, 200 Cal. Rptr. 387. Victims should not go unremedied while the courts fail to hold bad actors accountable.

Manufacturers argue if the defect existed at sale, the plaintiff has already proved a prima facie design defect claim under strict liability and thus an additional post sale remedy is unnecessary. This argument has limited value because there are several reasons a plaintiff needs additional remedies beyond design defect and the continuing duty to retrofit is appropriate. Post-sale duty cases will be less technical and less expensive to litigate than traditional design defect cases. The knowledge requirement safeguards post-sale and post-accident remedial measures admissibility when they likely would not be in a design defect case. If the state has a statute of repose which places a temporal limit on the manufacturer's liability for their defective product, the knowledge requirement would assist in holding the most egregious manufacturers accountable. Adopting a duty to retrofit as specified by the lower court does not adopt an absolute duty to retrofit with the knowledge requirement. Where many design defect claims would be defeated with a "state of the art" defense, the knowledge requirement in the adapted duty to retrofit would likely negate the defense. The foregoing approach is a measured approach,

and it acknowledges the changing expectations of society. The three elements ensure manufacturers affected by this liability change sell products in a small and distinct market. This Court should adopt the duty to retrofit and protect consumers from bad actors who know the risk their products pose to human life. This decision should be made by the courts because the risk to life is too great to wait for the legislature to wade through the notoriously fierce opposition to safety measures by the auto manufacturing industry.

4. The Court need not wait for the legislature or other administrative agency to adopt a duty to retrofit when consumer safety is at risk.

Courts have common lawn authority to adopt a continuing duty to retrofit and it should not wait for the legislature to act. By adopting this duty in specialized markets, courts recognize the technology placed in the marketplace pose new risks to consumer safety, risks often not mitigated by legislative or executive regulations. Through history, the judiciary has responded to this gap in consumer protection by placing appropriate harnesses on the unbridled risks of new industries. Courts have incrementally expanded manufacturer's continuing duties since the industrial revolution, it should be no different now in the technological revolution. *See Comstock v. Gen. Motors Corp.*, 99 N.W.2d 627 (Mich. 1959). Several courts in various states have adapted continuing common law duties for manufacturers to include updating and retrofitting their products to make them reasonably safe for operators. *See Gracyalny v. Westinghouse Elec. Corp.*, 723 F.2d 1311, 1316 (7th Cir. 1983) (confirming manufacturers may have a duty to remedy defects discovered after its product had been marketed). When human safety is implicated courts have found ample reason to hold manufacturers liable for putting profits over people.

This Court should adopt the elements crafted by the lower court because they parallel elements adopted by other courts. *Compare Readenour v. Marion Power Shovel*, 719 P.2d 1058

(Ariz. Ct. App. 1986) (discussing manufacturer knowledge as necessary for adopting a duty to retrofit), *with Downing v. Overhead Door Corp.*, 707 P.2d 1027, 1033 (Colo. App. 1985) (discussing the danger to human safety triggering a duty to retrofit), *and Hodder v. Goodyear Tire & Rubber Co.*, 426 N.W.2d 826, 833 (Minn. 1988) (discussing a manufacturer's continuous relationship with consumer). Many courts have acknowledged there are certain factual situations where a duty to retrofit may be appropriate, especially where there is "some special, controlling relationship between the manufacturer and the owner of the machine," and the "potential danger is severe." *Gregory v. Cincinnati Inc.*, 538 N.W.2d 325, 335 (Mich. 1995). Similarly, other courts apply common law post-sale retrofit duties when manufacturers have either regained control of the defective product after learning of the dangers posed or they had a continuous relationship which ensured the owner or operator made the necessary improvements. This Court is justified in adopting a duty to retrofit which will only be applied when the fact intensive analysis provides each element is met.

These court made, common law, rules are all nuanced adaptations of the duty to warn. The duty to warn was largely adopted across the United States through common law. This Court should adopt the duty to retrofit and should not wait for the legislature to address the issue because special interests have no place in the judicial system. Waiting for a robust body of consumer protection law to incentivize manufacturers, especially highly specialized manufacturers, to take greater care in the testing and design stages of development is not in the consumer's best interest. The judicial system is the most appropriate place to establish a new gloss on existing continuing duty law. The judiciary will not be persuaded by the specialized industry lobbyists who often persuasively influence legislative outcomes. The inherent delay associated with legislative decision making and the inadvertent compromise that comes with bill

passage is especially concerning as technology continues to develop at rapidly accelerated rates. Consumers will continue to enter the marketplace, unprotected. All the while, manufacturers receive a disproportionate amount of protection because the judiciary has refused to adopt protections that the legislature has been influenced not to adopt themselves.

Logically trade associations and industry professionals advocate for legislatively enacted duties because they can directly influence what that duty looks like. They are amply motivated to influence legislators to create illusory laws which have little financial and practical consequence. By adapting the existing common law continuing duty that exists in the State of Fremont, this Court will ensure consumers are adequately protected from the special interests which naturally proliferate in the legislative and administrative process. Manufacturers should be discouraged from releasing technologies on the market before they are safe for consumption. This Court should adopt a duty to retrofit in an acknowledgement of the danger and need for regulation particularly with state-of-the-art technology placed on the market by profit-motivated corporations.

B. The Trial Court Committed Harmful Error Because a Jury Could Have Found Edison Liable Under a Duty-to-Retrofit Theory.

Ashpool was denied the benefits of an independent fact finder who could have found a duty to retrofit the Marconi's known danger. R. 17. The appellate court acknowledges that when adopting a new duty, it remands to the trial court for further proceedings in conformance with their decision. R. 16. The appeals court erred in its handling of the post-sale retrofitting issue by not submitting the case back to trial under its decision to impose a new duty. "[A] linchpin of a successful claim [is] the use of a jury instruction that recognizes that such a duty to [retrofit] does exist." John F. Kennedy & Laurens Brock, *Postsale Duty to Warn, Retrofit, and Recall*, 31 WTR Brief 14, 16 (2002). This Court should remedy this error and reverse in part and remand

back to the trial court so Ashpool may receive the benefits of the fact finder deliberating over facts any reasonable person could see are applicable in imposing the new duty to retrofit. In applying the three factors adopted by the lower court to the facts, they show a retrofit: 1) is technologically feasible; 2) economically factored into their technology delivery system; and 3) not overly burdensome to the continuous relationship already a part of the Edison model. A reasonable jury could easily find in favor of Ashpool.

1. The Marconi implicates human safety.

As the lower court aptly states, "a simple warning is not enough when there is a threat to human safety." R. 15. Courts have recognized manufacturers have a continuing duty where human safety is involved. *Noel*, 342 F.2d at 236, 240. This element ensures that in adapting the duty to retrofit, the court is in lock step with past decisions. Requiring the implication of human safety as a threshold respects the established expectations certain manufacturers have when entering a higher risk field. More often than not when consumers are unaware of the risk the product poses the risk to human safety is even greater. Specialized markets consummately take on a market share on the cusp of innovation, thus there exists the inherent risks that latent danger exists. While consumers rely on administrative agencies to a certain extent for safety standards, it is a socially desirable result for innovative manufacturers to hold human life equal to the importance of their innovation. Critics of this element will argue that any product can be dangerous under the right conditions. But this has remained a hollow argument for learned judges for over fifty years of products liability jurisprudence. The courts have found despite the argument almost any product can prove fatal to fail when analyzing the danger to human life.

The Marconi implicates human life because no consumer would expect that a company known for being an industry leader in autonomous technology to forego safety sensors when it knew there was the possibility of running into a stationary object at high speeds. No one would expect a vehicle would be released into the market that could prevent unsafe lane changes on its own would not also always avoid running head on into a stationary tire in the road, a motorcycle fallen on the freeway, a dislodged pile of 2x4s obstructing several lanes, a tree struck down by a storm, a house sized tumble weed stuck on the road, or a herd of cattle who decided the road looked better than the pasture. Hitting these at speeds over 35 mph, the speed the sensors failed, would lead to catastrophic personal injury and property damage. R. 5. The Marconi Autodrive performed in an unexpected way when its sensors failed to detect a brown bear, with an average length of seven feet and weight of over 1000 pounds, and plummeted directly into its side. The technology could calculate how to avoid low risk lane drifts but could not always detect stationary objects when it travelled at a higher rate of speed. The implication to human life is exponentially compounded by the error that only occurred when the car reached higher rates of speed.

A vehicle touted as safe could not calculate the size of the object it was hurtling towards at 42 mph, could not calculate the distance at which it should autonomously slow down before impact, could not measure the potential force of the collision against the potential impact of swerving out of the bears way. The Autodrive feature enhanced safety within the vehicle; however, it proved to fail to approximate the choice that a human driver makes as a matter of instinct. Edison attempts to dilute any implication to human safety by shifting the blame to the attentiveness of the consumer behind the wheel even though, "the Edison salesperson told Ashpool that 'Autodrive would allow him to simply input a GPS location into the Marconi and enjoy the ride, with no further action required." R. 4. While this sales pitch may have been true, no notice was given to Ashpool or other consumers that the Marconi also had an increased

likelihood of running into stationary objects. The CEO indicated he was uncomfortable passing on the additional costs to consumers, because the manufacturer wanted to stay in the economy market it had worked so hard to break into. This should show the Court, Edison did not care how the lack of additional sensors implicated human life. It was worth their bottom line, worth breaking into that market, to take the risk with consumers who thought they were making the safer choice. In actuality they were putting their lives in the hands of a manufacturer who had factored the risk calculus of leaving off the sensors and determined their lives were ultimately of less value.

2. Edison has a continuing relationship with Ashpool because the manufacturer sends consumers software updates for the Marconi.

Requiring a continuous relationship mitigates many fiscal concerns associated with the search, identification, and notification of the ultimate consumer whether the product was bought from the manufacturer, through an intermediary, or as a used product. *See Hodder*, 426 N.W.2d at 833 (discussing the continuing relationship between the manufacturer and consumer); *cf. Patton v. Hutchinson Wil-Rich Mfg. Co.*, 861 P.2d 1299, 1315 (Kan. 1993) (discussing a necessary factor is an ongoing relationship with the purchaser or other knowledge of the identity of the owner in a duty to warn); *Dixon v. Jacobsen Mfg. Co.*, 637 A.2d 915 (N.J. Super. Ct. App. Div. 1994) (discussing criticism for imposing burdensome post-sale duties on manufacturers is inapplicable where the consumer is known).

Here, the Court is given an example of how technology can institute a continuous relationship between the manufacturer and the consumer. Presumptively this is a quality that holds Edison out from its competitors and why it is chosen by the consumer. If the consumer seeks a continuous relationship, and it is marketed by the manufacturer as a quality separating it from its competitors, the manufacturer assumes additional duties regarding their product and customer. Accordingly, manufacturers should also be held accountable when those expectations implicating human life fall short. The continuous relationship mitigates many decades old cost, identification, and implementation concerns courts have held and manufacturers have propagated. The practical problems and manufacture costs associated with typical product post sale retrofit responsibility do not exist for Edison because of the technological capabilities of the product. It is sound public policy to impose a duty to retrofit when the nature of the technology that can put people's lives at risk also provides a continuous relationship. A continuous relationship uniquely resolves concerns over implementation of solutions to defects discovered post sale. The relationship allows consumers to act to effectively reduce the risk posed by the defect. In Edison's case, consumers do not have to effectively implement anything. Consumers are passive while the integrated system simply pushes through an automated technology update, a relationship contemplated by the manufacturer and marketed to the consumer.

Even if the vehicle passed hands through several owners, the nature of the relationship with the possessor is still continuous in Edison's automated updates. The manufacturer can easily identify users once a newly discovered product hazard is recognized regardless of who owns it or if a consumer has relocated away from the original purchase point. While the possibilities of locating the intended user decrease overtime for traditional products in the stream of commerce, the Marconi provides an interface intimately tied to the user. Regardless of how many Marconi's enter the stream of commerce, the relationship with the user remains because of the continuous relationship that exists as part of the purchase agreement, at no additional cost to the user, and as the product was intentionally designed and marketed by the manufacturer. This element has been recognized by courts before and is an expectation for some specialized markets. Autonomous technology and the continuous relationship uniquely met with the model employed by Edison holds the company out as a specialized market. The in-car computer mitigates several concerns from the fiscal and practical perspective of manufacturers. Whether that be a Marconi model, their sport model, or their luxury model, the consumer inadvertently has a continuous relationship built right into the dash, at no extra expense. It keeps consumers in their vehicles and with the most relevant technology either for safety or for aesthetics. Continual upgrades are a standard feature for the remainder of the Edison's useful life. There is an even greater need for Edison to fix consumer's exposure to known hazards during the vehicle's lifetime because the useful life of the vehicle is naturally extended because of the standard updates. Adopting this narrowly defined duty will ensure that manufacturers do not face extreme economic burden, competition is not hindered, and technological advancements can continue. New technology is their market. It is part of the price people pay to own an Edison. Edison should be held responsible for the design defects it could easily fix through their continuous relationship with the consumer, like Ashpool.

3. Edison knew the sensors were failing before the Marconi was placed on the market.

The Marconi poses new risks to human safety, risks not currently mitigated by the State of Freemont common law decisions or by regulation. Risks Edison knew about when placing the vehicle into the stream of commerce. This Court should adopt adequate consumer protections by adopting a duty to retrofit. When Edison elected to take the Marconi to market as-is, the company turned its back on the economy class of consumers it was trying to court.

Testimony revealed that the technology existed and was developed to upgrade the Marconi's sensors to mitigate the kamikaze effect it had either by way of a technology update or by adhering additional sensors to the car. R. 6–7. The technology update cost significantly less

than physically adhering additional sensors onto the vehicle. Neither option was given to consumers and Edison decided to forego the life-saving update. Consumers weren't warned of the danger of going without the additional sensors or technology would pose. Testimony further revealed the cost would be prohibitive to keeping the Marconi in the economy range of vehicles. The CEO testified he was uncomfortable passing the cost along to consumers, believing that consumers would be deterred by the price if the safety feature was incorporated. Consumers weren't even given the option to decide whether, given the full scope of the danger, to increase the price of their own vehicle to add the additional sensors. It was all hidden from the consumer's trusting eye. Presumably, the CEO was more comfortable with the consumers losing their life or limb over Edison losing their market share.

A financially prohibitive design for their newly launched vehicle was not a road-block Edison would weather and it moved forward with pushing out the defective product to their consumer base. A financially prohibitive design is not an economically infeasible one. A corporation's desire to turn a profit does not transform a defective design into a reasonable one. *Cipollone*, 644 F. Supp. at 288. This should indicate to the Court that Edison was unwilling to slash its corporate bottom line to mitigate the additional risk on human life. Pushing a vehicle out of the economy market does not render the cost of the upgrade greater than the risk and cost of injury. There were a multitude of alternatives Edison could have taken instead of placing a defective product on the market that would implicate human life.

While Edison's technology shows it reduces some of the human factors that contribute to accidents in the long term, it also exemplifies the host of problems that can evade regulation. The Marconi was unsafe because their software relied on flawed data received from flawed sensors that made the technology make an unreasonable driving decision. It wasn't only here this

occurred. Edison knew the same accident occurred in approximately twelve vehicles all at speeds over 35 mph. R. 12; see Gerow v. Mitch Crawford Holiday Motors, 987 S.W.2d 359, 365 (Mo. Ct. App. 1999) (indicating another accident under near identical circumstances is "powerful evidence" that the accident was foreseeable and should have been reasonably anticipated by the manufacturer); see also Tab Turner, Proving Design Defects with Other Similar Incidents Evidence, 35 MAR-Trial 42 (1999) (explaining that evidence of other similar incidents "is the most powerful weapon in the plaintiff attorney's arsenal for persuading the jury that a vehicle is defective"). The system Edison put on the market and marketed as safe was suboptimal as proven by the 13% increase in accident rate discovered from their internal testing. R. 5. Edison knew the Autodrive could run smack into an unmoving stationary object and that probability increased with the increase of speed. R. 5. It marketed the Autodrive as a feature that would increase the safety of their consumers all the while knowing the calculus that leaving off additional sensors increased the danger by 13%. Safety was the most important factor to their consumers in the economy market. Safety was an implicit promise with the Autodrive technology. Safety was the one guarantee Edison could not make when it placed the Marconi into the market knowing of the dangers it posed while in Autodrive. Dangers horrifyingly experienced by Ashpool when he collided into a brown bear going over 40 mph while in Autodrive.

This Court should adopt a duty to retrofit where the product implicates human safety, there is a continuous relationship between the consumer and manufacturer, and the manufacturer knows of the product defect while in the hands of consumers. It is a reasonable approach that balances the need to protect consumers in a rapidly developing world while limiting the duty to a special subset of manufacturers.

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CONCLUSION

This Court should REVERSE the judgment of the Court of Appeals for the State of Fremont and REMAND to the district court for further proceedings with proper jury instructions.

Respectfully submitted,

ATTORNEYS FOR PETITIONER

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APPENDIX A

Relevant Statute

Fremont Rev. Code § 5552.321 Rule of Liability

One who sells any product in a defective condition unreasonably dangerous to the driver or consumer or to his property is subject to liability for physical harm caused to the ultimate drive or consumer, or to his property, if

- (a) The seller is engaged in the business of selling such a product, and
- (b) It is expected to and does reach the driver or consumer without substantial change in the condition in which it is sold.