

DURAN V. GMC, 1983-NMCA-121, 101 N.M. 742, 688 P.2d 779 (Ct. App. 1983)

CASE HISTORY ALERT: affected by 1995-NMSC-043

**GILBERT E. DURAN, as Personal Representative of the Estate
of LORRAINE DURAN, and GILBERT E. DURAN,
individually, Plaintiff-Appellee,
Cross-Appellant,**

vs.

**GENERAL MOTORS CORPORATION, a foreign corporation, and
SANTA FE MOTORS, INC., a New Mexico corporation,
Defendants-Appellants, Cross-Appellees.**

Nos. 5761, 5690, 5693, Consolidated

COURT OF APPEALS OF NEW MEXICO

1983-NMCA-121, 101 N.M. 742, 688 P.2d 779

October 06, 1983

Appeal from the District Court of San Miguel County, George Perez, Judge.

Petition for Writ of Certiorari Quashed September 5, 1984

COUNSEL

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JUDGES

Bivins, J., wrote the opinion. I CONCUR: WOOD, Judge. LOPEZ, Judge (Dissenting).

AUTHOR: BIVINS

OPINION

{*743} BIVINS, Judge.

{1} This appeal presents the question whether and to what extent a manufacturer has a duty to design and construct a motor vehicle to avoid subjecting its users to injury when a faulty design or manufacture, although not causing the accident, produces or enhances an injury received in the accident. This is a matter of first impression in New Mexico.

{2} Plaintiff brought this action against General Motors Corporation and Santa Fe Motors to recover damages for personal injuries sustained by his minor daughter, Lorraine Duran, in a one-vehicle accident allegedly resulting from design as well as manufacturing defects which plaintiff claims rendered the vehicle not crashworthy. The jury returned a verdict in favor of plaintiff in the sum of \$1,700,000. The trial court reduced the award **pro tanto** by \$300,000, the amount of plaintiff's settlement with the owners and individuals responsible for the use and operation of the vehicle at the time of the accident.

{3} Defendants appeal claiming that the trial court erred in refusing to grant a directed verdict because plaintiff failed to prove that the vehicle presented an unreasonable risk of injury or that the claimed defects proximately caused Lorraine Duran's injuries. Defendants also challenge the amount of the reduction of the jury award based on the prior settlement and contend that venue should have been changed from San Miguel County. Plaintiff cross-appeals challenging the court's reduction of the award and asserting a higher interest rate applicable to the judgment.

{4} In this review, we first consider the nature and extent of an automobile manufacturer's liability under the doctrine of "crashworthiness" or "second collision" and the proof required to establish that liability. We hold that an automobile manufacturer can be held liable under this doctrine based on a cause of action in negligence and, in appropriate cases, breach of express warranty. We next discuss the issue of proximate cause, and hold that plaintiff's proof as a matter of law was insufficient. Because of our disposition of that issue, we do not reach the remaining issues raised by the parties.

I. Background.

{5} In the early morning hours of September 3, 1977, the West Las Vegas High School cheerleaders, of which Lorraine Duran was a member, were returning from a football game in Clayton. The cheerleaders and their school sponsor traveled in a 1975 Chevrolet van manufactured by GM and sold by Santa Fe Motors to the school district. At the time of the accident, Geraldine Lopez, a sixteen-year-old cheerleader, was driving. The party encountered heavy rains with accumulations of water on the roadway. The van hydroplaned causing the driver to lose control. After swerving back and forth, the van, rotating clockwise, slid toward the median with the left side leading. When the left wheels of the van dug into the grassy median, the van "tripped", became airborne and assumed a lateral roll while still turning clockwise. While in the upside-down position the roof above the rear door impacted with the ground. The van then rolled over on its right side facing the direction from which it had been coming. Lorraine Duran was seated in the left rear of the van. The impact caused the roof and rear door header

(metal door frame) to move inward and downward invading the passenger area approximately 13 inches. Lorraine Duran's {744} head struck the header; this caused a dislocation of a cervical disc resulting in paralysis from her chest down.

{6} Plaintiff brought this action based on strict products liability. He does not claim that the van caused the accident. Nor does he contend that the impact itself did not account for most of the intrusion of the roof and rear door header. What plaintiff does claim is that certain manufacturing and design defects enhanced the intrusion and constituted the sole proximate cause of Lorraine's injury and damages. The defects which plaintiff contends caused the injury fall into three categories. First, plaintiff says GM should have installed trim retainers which are thin pieces of metal that span between the rear door header and the first cross roof bow or rib. These retainers, plaintiff claims, provide rigidity and help resist wrinkling or folding of the roof panel on impact. Second, plaintiff contends that faulty spot welding in a number of areas caused the header to intrude farther and at a different angle than it otherwise would. Third, plaintiff says that the header itself should have had a wider or flatter surface and that the sharper edge caused the parabolic scalp laceration that resulted in the cervical dislocation without fracture.

{7} With regard to this third claim of design defect, we encounter the first of several troublesome problems with this case. In the statement of issues instruction which follows NMSA 1978, UJI Civ.14.1 (Repl. Pamp.1980), there is no mention of a claimed defect involving the design of the header. The only reference to design is a claim that the roof and support assembly failed to utilize designs which would properly sustain and distribute the foreseeable and anticipated loads on overturn. The trial court adopted plaintiff's requested instruction as to contentions. A verdict cannot find support in a contention or theory as to which the jury was not instructed. Therefore, we do not consider plaintiff's third contention regarding the shape of the header.

{8} Prior to filing suit against defendants plaintiff settled with the State Board of Education, West Las Vegas School District, the San Miguel County School Fleet, the teacher-sponsor and the driver of the van. At the request of the defendants, however, the jury was asked to determine if the negligence of the driver of the van was a "contributing proximate cause" of Lorraine Duran's injuries. The jury answered, "No". It found that plaintiff had sustained his claims against both defendants.

II. The Crashworthiness Approach.

{9} The seminal case recognizing a crashworthiness cause of action is **Larsen v. General Motors Corporation**, 391 F.2d 495 (8th Cir.1968). That case involved a head-on collision in which the steering assembly displaced rearward striking plaintiff in the head. While making no claim that the steering assembly caused the accident, plaintiff asserted that it enhanced or exacerbated the injuries he would have received without that defect. The court rejected General Motors' argument that it had no duty to build an automobile to withstand collision or impact, and held that the "manufacturer is under a duty to use reasonable care in the design of its vehicle to avoid subjecting the user to

an unreasonable risk of injury in the event of a collision. Collisions with or without fault of the user are clearly foreseeable by the manufacturer and are statistically inevitable." **Id.** at 502.

{10} Larsen rejected a contrary holding in **Evans v. General Motors Corporation**, 359 F.2d 822 (7th Cir.1966), that negligent design is not actionable where the defect is not the causative factor in the accident. In the flurry of litigation that followed, the majority of courts adopted the rationale of **Larsen** while only a few have followed **Evans**. See **Huff v. White Motor Corp.**, 565 F.2d 104 (7th Cir.1977), for a list of jurisdictions adopting the two approaches. The Seventh Circuit in **Huff** reversed its prior holding in **Evans**.

{11} We see no rational basis for limiting the automobile manufacturer's liability to those instances where a defect in the design {745} or manufacture caused the accident and resulting injury. The fact that the defect does not cause the initial collision or impact should make no difference if it causes or enhances the ultimate injury. Thus, we join the majority of jurisdictions in adopting "crashworthiness", "second collision" or "enhanced injury" as actionable.

{12} We next consider what form the cause of action should take. In the wake of **Larsen**, courts have recognized crashworthiness to be actionable in negligence, strict liability and breach of warranty. See Annot. 42 ALR 3d 560 (1972). While recognizing a cause of action in strict liability in crash design cases, at least one court noted that an analysis of whether a product is in a defective condition unreasonably dangerous to the user involves a negligence analysis. **Ford Motor Co. v. Hill**, 404 So.2d 1049 (Fla. 1981); See, Note, **Products Liability-Crashworthiness**, 11 Tex. Tech L. Rev. 953 (1980).

{13} While this State is committed to strict liability as relates to products which initially cause injury, **Stang v. Hertz Corporation**, 83 N.M. 730, 497 P.2d 732 (1972), based on the experience of other courts and keeping in mind that many cases in this area involve design defects, we conclude that a cause of action applying the basic principles of ordinary negligence for crashworthiness cases is better suited than strict products liability. Of course, if injury results from the failure of some feature to perform as warranted, there is no reason a cause of action for breach of express warranty should not also lie. We now proceed to discuss the reasons for the approach we have taken. At the conclusion of this discussion we comment on the appropriate instruction.

{14} The most serious shortcoming of a strict product liability approach as applied to crashworthiness results from a case-by-case method of establishing automobile safety requirements. NMSA 1978, UJI Civ.14.7 (Cum. Supp.1983) defines an unreasonable risk of injury as one which "a reasonably prudent person having full knowledge of the risk would find unacceptable." Thus, the instruction leaves to the jury the task of determining whether the product constitutes an unreasonable risk of injury. While this approach may work well for ordinary products which cause an accident -- and there is disagreement as to this¹ -- a review of the cases suggests just the opposite with respect to crashworthiness cases. As observed in **Dawson v. Chrysler Corp.**, 630 F.2d 950

(3rd Cir. 1980), this **ad hoc** adjudication "permits individual juries applying varying laws in different jurisdictions to set nationwide automobile safety standards and to impose on automobile manufacturers conflicting requirements." **Id.** at 962. The Court in **Dawson** noted that while the jury in that case found Chrysler liable for not producing a rigid enough frame, a fact finder in another case might well hold the manufacturer liable for producing a frame that is too rigid. Yet, as the Court noted, for head-on collision, it is desirable to have a car designed to collapse upon impact so that the deformation would absorb much of the shock and divert the force of acceleration away from the passengers. The same type of inconsistency is demonstrated by two separate cases. In **Gray v. General Motors Corporation**, 434 F.2d 110 (8th Cir. 1970), the claim was that the windshield should have been designed to "pop out" in an accident, whereas in **Seese v. Volkswagenwerk A.G.**, 648 F.2d 833 (3d Cir.1981), it was claimed that the windshield should have been designed to remain in place in high-speed upset. Obviously, automobile manufacturers cannot redesign their cars from accident to accident. The **Dawson** court said, "It would be difficult for members of the industry to alter their design and production behavior in response to jury verdicts * * * because their response might well be at variance with what {746} some other jury decides is a defective design." **Id.** at 962.

{15} This raises the question whether "[c]ourts are inherently unsuited to the task of establishing product safety standards in cases involving the liability of manufacturers." Henderson, **Judicial Review of Manufacturers' Conscious Design Choices: The Limits of Adjudication**, 73 Colum.L. Rev. 1531 (1973). Professor Henderson's article persuades us they are, at least for the unique area of "crashworthiness." The court in **McClung v. Ford Motor Company**, 333 F. Supp. 17 (S.D.W.Va. 1971), **aff'd**, 472 F.2d 240 (4th Cir.1973), posed the question and provided the answer:

What standards of duty or reasonableness of design could the courts, in their wisdom, require? Who is to determine the design standards to be imposed? The problems presented by such a proposal certainly would require consideration and evaluation of a number of factors, technical and economic, and is a matter that properly should be resolved by the law making bodies who are directly responsible to the people who make up this Republic. If certain requirements for uniform automobile design are to be imposed upon the manufacturers thereof, then it is for the legislative bodies to make such a determination after full consideration of its political and economic implications.

Contra Bowman v. General Motors Corp., 427 F. Supp. 234 (E.D. Pa. 1977) (holding conscious design cases within competency of the courts).

{16} Professor Henderson, in his article, predicted that if the coming years should find most courts attempting to adjudicate the reasonableness of a manufacturer's conscious design choices, as opposed to applying extrajudicial standards, "we will have entered a regrettable phase in the development of products liability." 73 Colum.L. Rev. at 1578. From a review of some of the cases discussed in this opinion and the frustrations expressed, that prediction merits concern. Some of the articles dealing with the problem are set out in footnote 1, **supra**. **See also** Hoenig, **Resolution of "Crashworthiness"**

Design Claims, 55 St. John's L. Rev. 633 (1981). These articles and the cases discussed therein demonstrate that courts have encountered difficulties with the meaning of "unreasonable risk of injury," "unreasonably dangerous," "not reasonably safe" as well as how to conceptually apply these terms to design defects. While the debate continues, it may be too much to expect the fact finder to understand and apply the concepts when courts and commentators cannot seem to agree as to their meanings.

{17} Further, under strict products liability the rule applies even though all possible care has been used by the supplier in putting the product on the market. NMSA 1978, UJI Civ. 14.6 (Cum. Supp.1983). The definition of "unreasonable risk of injury" tells the jury that it shall not consider the reasonableness of acts or omissions of the supplier. UJI Civ. 14.7. The Court of Appeals of Maryland, on certification from the federal court, held that liability of a manufacturer in a crashworthiness case based on defective design depends upon traditional principles of negligence. **Volkswagen of America, Inc. v. Young**, 272 Md. 201, 321 A.2d 737 (1974). While Maryland had not adopted strict liability under Restatement Second of Torts, § 402A, the **Young** court, nevertheless, considered that theory inappropriate in defective design cases, observing that:

Since the existence of a defective design depends upon the reasonableness of the manufacturer's action, and depends upon the degree of care which he has exercised, it is wholly illogical to speak of a defective **design** even though the manufacturer has "exercised all possible care" in the preparation of his product.

Id. 321 A.2d at 747. **See also** Committee Comment to UJI Civ. 14.7. While adopting strict liability in addition to negligence, the Supreme Court of Florida in **Ford Motor Co. v. Hill** noted "that analysis of whether a product is in a defective condition unreasonably dangerous to the user involves a {747} negligence analysis in a 'design defect' case, unlike the analysis ordinarily required in a 'manufacturing flaw' situation." 404 So.2d at 1051. If application of negligence principles offers the preferred analysis, we see no compelling reason to label it strict products liability. Dean Prosser, the reporter for Restatement § 402A, notes that any analysis of a design defect rests "primarily upon a departure from proper standards of care," and that "the tort is essentially a matter of negligence" based upon a "duty to use reasonable care to design a product that is reasonably safe for its intended use, and for other uses which are foreseeably probable." W. Prosser, **Handbook of The Law of Torts**, § 96 at 641, 644-45 (4th Ed.1971).

{18} Larsen was a negligence case. That Court, after stating that the duty of reasonable care in design rests on common law negligence, said:

While all risks cannot be eliminated nor can a crash-proof vehicle be designed under the present state of the art, there are many common-sense factors in design, which are or should be well known to the manufacturer that will minimize or lessen the injurious effects of a collision. The standard of reasonable care is applied in many other negligence situations and should be applied here.

391 F.2d at 503. **Larsen** refrained from commenting on strict liability or implied warranty, stating that these were policy matters for the states and the National Congress.

{19} There should be no lack of available standards for a negligence cause of action. The federal government has regulated in the field of vehicle design and manufacture. **See** National Traffic and Motor Vehicle Safety Act of 1966, 15 U.S.C. § 1396 (1976), and accompanying regulations at 49 C.F.R. § 571.1, **et seq.** (1979). Beyond that, design standards established by the industry and design standards and design guidelines established by authoritative voluntary associations are available.

{20} In addition to promoting uniformity, the use of negligence principles would relieve the jury of having to second guess what a proper design should have been. The Committee Comment to UJI Civ. 14.7 lists seven risk benefit criteria taken from Dean Wade's article, **On The Nature of Strict Tort Liability for Products**, 44 Miss. L.J. 825 (1973). Those are: (1) the usefulness and desirability of the product; (2) the availability of other and safer products to meet the same need; (3) the likelihood of injury and its probable seriousness, i.e., "risk"; (4) the obviousness of the danger; (5) common knowledge and normal public expectation of the danger (particularly for established products); (6) the avoidability of injury by care in use of the product (including the effect of instructions or warnings); and (7) the ability to eliminate the danger without seriously impairing the usefulness of the product or making it unduly expensive. Thus, the jury is given the task of balancing these criteria and in effect setting the standards for the design. These criteria may work well in the ordinary products case; however, the jury's task would seem to be much more difficult in a crashworthiness situation. Vehicles collide or impact with every imaginable object of different shapes and sizes and at various speeds and angles. In **Owens v. Allis-Chalmers Corp.**, 83 Mich. App. 74, 268 N.W.2d 291 (1978), the court said:

Considering the nature of the design process, we find that adjudication must necessarily play a limited role in setting design standards. Without some extrajudicially established guidelines, the adjudicatory standard-setting process would resort to an assessment of conflicting expert testimony by those not possessed of the requisite expertise to adequately evaluate the interrelated and interdependent design choice criteria. Additionally, this evaluation would be made within an atmosphere susceptible to influence by sympathy for an injured plaintiff, instead of an abstract concern for the desirable effect that public policy should play in governing a manufacturer's design choices. Inevitably, this would lead to {*748} varying standards from jury to jury or trial court to trial court.

Id. 268 N.W.2d at 294.

{21} In **Dawson v. Chrysler Corp.**, the court expressed concern over the fact that the National Traffic and Motor Vehicle Safety Act itself provides that compliance does not exempt any person from liability under the common law of the state of injury. **See** 15 U.S.C. § 1397(c) (1976). Thus, even though Chrysler had complied with the national

standard, the court reviewed defendant's appeal on the question of the existence of a design defect under the common law of New Jersey. That State has adopted the seven factors from Dean Wade's article which are similar to those appearing in the Committee Comment to UJI Civ. 14.7 set forth above. The court in **Dawson v. Chrysler Corp.** said the effect of the exemption under the Act leaves the states free "not only to create various standards of liability for automobile manufacturers with respect to design and structure, but also to delegate to the triers of fact in civil cases arising out of automobile accidents the power to determine whether a particular product conforms to such standards." 630 F.2d at 962. In **Dawson v. Chrysler Corp.** the federal court was obliged to apply the common law of the state and therefore was compelled to follow the exemption; however, we are under no such constraint.

{22} In addition to other reasons advanced which favor use of extrajudicial standards for design, we think it safe to assume in most instances, notably the federal standards, that the criteria suggested by Dean Wade in his article will have been considered in establishing the design standards. Significantly, those standards do not arise from consideration of one particular accident, but cover the wide range of accident expectancies.²

{23} Finally, policy considerations strongly favor a negligence approach. There would be little incentive for automobile manufacturers to upgrade safety features, if the standards are set on a case-by-case basis. The case before us provides an example. As previously noted, plaintiff claimed a design defect in not providing for trim retainers. The evidence reflects that these cost only \$2.25 apiece. The two experts for plaintiff testified that these retainers would have tended to stiffen the roof structure and to some extent reduce intrusion. Neither could estimate how much less. GM's expert testified that retainers are designed not to provide support, but for attaching headliners. There were no headliners (roof covering) in the van in question so there were no retainers installed. There was some evidence contradicting GM's expert. Plaintiff offered proof that at least one van had been found which had a retainer without a headliner attached. The retainer will withstand only 20-25 pounds at most; therefore, GM's expert concluded that the presence of retainers would have had no measurable effect on the intrusion of the roof and header on impact, considering the weight and forces involved. With a verdict against G.M., will that manufacturer risk future liability by not adopting this court-made standard?

{24} In **Dawson v. Chrysler Corp.** the court pointed out other policy concerns, including the impact of a case-by-case system of establishing safety requirements on national social and economic goals. Because of dependency on foreign sources of energy and the increases in cost of that energy, the domestic automobile industry has struggled to compete with foreign manufacturers which have stressed smaller, more fuel-efficient cars. In the face of this, **ad hoc** adjudications can hold a manufacturer culpable for not producing a car that is considerably heavier, but likely to be less fuel efficient.

{*749} {25} The focus of our discussion has been on conscious design defects.³ In the case before us, the configuration of the header, a contention we do not consider, and the lack of retainer, which we do consider, fall within the category of design defects. The failure of the welds do not; they constitute manufacturing flaws. The question then is whether the cause of action in negligence should apply only to design defects, or whether it should also include manufacturing flaws. Because so many cases in this area have involved, or future litigation is likely to involve, design defects, we believe a clearer presentation can be made to a jury by including both claims under the negligence theory, without **unduly burdening** the plaintiff by way of proof. To hold otherwise would mean a jury would have to deal with negligence standards as to conscious design defects, a much clearer and straightforward task, and possibly strict product liability risk-benefit criteria as to inadvertent design failures and manufacturing flaws.⁴ Therefore, we hold that the cause of action for crashworthiness shall be based on negligence principles both for design as well as manufacturing defects, leaving open a cause of action also for breach of express warranty as previously mentioned.

{26} In conclusion, given fifteen years experience of others in a unique area, we find the negligence approach the most viable alternative, its rationale sound, flaws few, the supporting policy persuasive, the results fair.

{27} Having held that liability in crashworthiness cases is based on negligence, instructions which disregard care and reasonableness, such as UJI Civ. 14.6 and 14.7, are not appropriate. We are not suggesting these instructions are wrong, **see Collins v. Michelbach**, 92 N.M. 366, 588 P.2d 1041 (1979), when applied to a standard products liability case; only that they are inappropriate for use in a negligence case based on crashworthiness. The approved jury instructions do not state the manufacturer's duty involved in a design case involving a vehicle. That duty, stated in **Larsen**, is "to use reasonable care in the design of its vehicle to avoid subjecting the user to an unreasonable risk of injury in the event of a collision." 391 F.2d 502.

{28} The instructions in this case subjected defendants to liability without regard to their care or the reasonableness of their action. However, these instructions are not an issue in this appeal, and the result herein is not based on the erroneous instructions.

{29} Although plaintiff brought suit under strict products liability, rather than negligence, the standard for establishing proximate causation would be the same under either theory. Therefore, we turn to that issue to determine if the verdict can stand.

III. Proximate Causation.

{30} In **Larsen** the court held:

Any design defect not causing the accident would not subject the manufacturer to liability for the entire damage, but the manufacturer should be liable for that portion of the damage or injury caused by the defective design **over and above** the damage or

injury that probably would have occurred as a result of the impact or collision absent the defective design. [Emphasis added.]

391 F.2d at 503. **Larsen** did not articulate how the damages should be assessed.

{31} In **Huddell v. Levin**, 537 F.2d 726 (3d Cir. 1976), the court held that a claimant in an enhanced injury case must prove that the defective design caused injuries over and above those which otherwise would {750} have been sustained, must demonstrate the degree of "enhancement", and "must offer proof of what injuries, if any, would have resulted had the alternative, safer design been used." **Id.** at 737. And, as a corollary to that aspect of proof, "the plaintiff must offer some method of establishing the extent of enhanced injuries attributable to the defective design." **Id.** at 738. Proof of aggravation of a pre-existing injury involves a similar assessment. In **Hebenstreit v. Atchison, Topeka & Santa Fe Ry. Co.**, 65 N.M. 301, 336 P.2d 1057 (1959), our Supreme Court held that the defendant there was liable only for the injuries it inflicted on the injured party and, was in no way responsible for her pre-existing condition. **See also** NMSA 1978, UJI Civ. 18.8 (Repl. Pamp.1980); **Woods v. Brumlop**, 71 N.M. 221, 377 P.2d 520 (1962). The **Hebenstreit** court said, referring to defendant: "It is liable only for the aggravation or acceleration and the burden of proving with reasonable certainty the extent of the aggravation was on the plaintiff." (Citations omitted.) **Id.** 65 N.M. at 306, 336 P.2d 1057. We adopt the **Huddell** standard of proof as to proximate cause. Because crashworthiness liability is based only on enhanced or additional injuries, the concurrent tortfeasor concept is not applicable. **Huddell**.

{32} Plaintiff does not object to the **Huddell** standard, but contends "[b]oth these considerations have been met fully herein." He argues that proximate cause was established by expert testimony through Dr. Zigmund Kosicki and also by facts from which the jury could infer that Lorraine Duran's injuries were caused by the additional intrusion of the header. In reviewing the evidence we are mindful that plaintiff is not contending that the initial accident and impact caused any injury to Lorraine Duran. He contends that the second collision, that is the striking of Lorraine's head with the rear header, was the "sole proximate cause of Lorraine Duran's injury and damages."

{33} For a clearer understanding of the issue, additional facts are needed. In our review of this question we are bound by standards set forth in **Archuleta v. Pina**, 86 N.M. 94, 519 P.2d 1175 (1974).

{34} When the rear door of the van impacted with the ground, a portion of the roof and the rear door header invaded the passenger compartment a total of 13 inches. Dr. Gerald May, an expert for plaintiff, testified that, because of the elastic component in metal, the 10 inches of intrusion measured after the accident does not reflect the total intrusion that occurs during impact. He estimated an additional one to three inches due to the elasticity. Both of plaintiff's experts testified that as result of the failure of the welding and the absence of the trim retainers, the rear door header intruded farther into the passenger compartment than it would have without those defects. Neither, however, could estimate how much more. Using percentages offered by GM's expert, plaintiff

says that the intrusion would have been reduced between .65 and 1.3 inches if the welds had held, or significantly less if the retainers had been installed. Since plaintiff's own experts could give no estimate and GM's expert attributed nothing to the retainers, we assume for the purposes of our review that there was an additional intrusion in the area behind Lorraine Duran of at least 1.3 inches.

{35} As we mentioned earlier, Lorraine Duran was seated in the left rear seat. To her right in the center seat was Henrietta Martinez, and Leroy Lovato occupied the right rear seat. We understand that the van did not strike the ground uniformly across the rear top, or in any event the intrusion was not even. The greatest intrusion occurred above Lovato and the least was in the middle above Martinez. Lovato received no injuries in the accident, but we understand he was asleep with his head across the lap of one or both of the girls to his left. Martinez received a neck sprain, and hair matching hers (she is red-headed) was found in the fold or crimp of the roof panel. The header deformed on the left rear side, and testimony reflects this edge cut the occiput on Lorraine Duran's head. Martinez {751} testified that she "went down in my seat, tucked up and we started praying." She said she was "being thrown all over the van." Martinez ended up behind the rear seat. Lorraine Duran described what happened:

All of a sudden the van started to swerve on the highway. I remember I reached over to Rusty [Martinez] and we held hands. Then I heard a sound of gravel hitting the van. I knew that we were going to turn over. At that time I immediately grabbed on to the seat in front of me. I remember I tucked my legs under the seat to hang on. I made myself hold stiff and I heard skidding and crashing sounds. I felt like my head just thrust forward.

{36} Lorraine Duran did not go over the rear seat as did Martinez.

{37} Lorraine Duran suffered a dislocation of the cervical spine without fracture. As Dr. Kosicki described it, C-5 "jumped the track," went forward of C-6 and damaged the spinal cord. To accomplish this severe injury without fracture of the vertebra, two things are critical. First, the spine has to be in a tuck-in position, "The chin pulled in a little bit", and, second, there has to be a stress or pressure to the back of the head. We understand that pressure has to be rather slight, two pounds or less; otherwise, fracture would result.

{38} In response to the question of what caused the injury to Lorraine Duran, Dr. Kosicki said:

It is my opinion that as a result of the intrusion of the structural components of the rear end of the cab of the van in the rollover accident and in the position that she was in held against the wall of the van, the lateral wall of the van by centrifugal force and upside down with the header intruding and sliding the back of the occiput causing the paraploid cut that I described, this in turn caused her to be in a tucked position as I have described and then dislocating the spine without a fracture as described in the

experiments that I have talked about, this intrusion of the rear header into the cab itself causing her to dislocate the spine and causing her paralysis.

{39} We understand from this testimony then that while the van was upside down, Lorraine Duran did not succumb to gravitational pull and fall toward the area of impact, but instead was held against the side by centrifugal force so that the intruding header came to her, sliding or perhaps slicing across the occiput of her head. While this may appear incredible, it does find support in the evidence. Dr. May said that notwithstanding the pull of gravity, the centrifugal force would hold the passengers in their seats. He said, "That's my opinion. They would not actually drop out of their seats during this time." It is difficult to square that opinion with other testimony from Dr. May and Dr. Kosicki. On rebuttal, Dr. May said that when the van landed on its back, "at that time, all occupants of the van were thrown toward the zone of impact * * * all would have been drawn backward and slightly upward." Also, both Dr. May and Dr. Kosicki, in stating why the available but unused lap belts would not have prevented the injury, said that the belt would not have prevented a vertical ascent of several inches. Under our review we do not resolve conflicts even in the testimony of the same witness. Therefore, we assume the correctness of Dr. Kosicki's opinion expressed above; otherwise, if Lorraine Duran fell toward the header as a result of the rollover accident and impact, it would not matter whether the header intruded an additional inch or more, because she would have struck it anyway.

{40} Even with the acceptance of this testimony, it nevertheless fails. Plaintiff characterized the following opinion of Dr. Kosicki as a description of what injuries Lorraine Duran would have suffered absent an intrusion of the rear header. Actually, the question dealt with whether the force of the blow was "localized or was it sort of spread out?"

Well, it was localized by the fact that there was a sharp edge of the rear header that had cut into the scalp of the {752} occiput. The passengers on the right in the middle of the same cab didn't sustain that type of injury, didn't have a dislocation. The law of physics where you lay stress over a large area, this can prevent serious injuries. Now, if you have for instance -- if there was no intrusion of the rear header into the compartment and she went upward, she would hit the tin or the sheet metal roof itself with the head and she would have the same injury that the girl next to her had had, a neck sprain.

{41} In his brief plaintiff concedes that "even though the header intruded into the passenger area to the extent necessary to strike Lorraine Duran by reason of its defective manufacture, the injury would not have occurred if the header would have been designed and manufactured with a wider forward face." As we previously mentioned, the jury did not consider this contention. Without it, according to plaintiff's own statement, there is no basis for the verdict because it cannot be sustained on the intrusion alone.

{42} Even if we could consider the design defect, the proof still will not withstand examination. After prefacing the question with the fact that hair matching Martinez' had

been found on the fold or crimp of the roof panel on the roof, and with the assumption that the welds had not failed and the retainers had been installed, Dr. Kosicki was asked his opinion, based on engineering and biomechanical principles⁵ as well as orthopedics, as to whether or not Lorraine would have suffered the injuries she did. He answered:

If the weldings had not failed, if the right pillar had not failed, **if the roof had not buckled in causing intrusion of the rear header as a sharp object** which stressed the blow into the skull causing the dislocation without a fracture, if this did not happen, Lorraine would have hit the roof like her red headed friend to the right. She would have sustained a neck sprain. She would have not sustained a dislocation because the blow was directed in the proper direction. Therefore, she sustained a dislocation. (Emphasis added.)

{43} This represents the only evidence which attempts to prove what injuries, if any, would have resulted had there been no defects.

{44} We are confronted with insurmountable difficulties. First, the doctor based his opinion on a cause not wholly attributable to defendants. Second, he fails to offer any explanation as to how he arrived at his opinion.

{45} Dr. Kosicki said that if the roof had not buckled in, the rear header would not have intruded. This is correct. Plaintiff did not claim, and his experts did not testify, that the roof should not have buckled on impact. It is the additional intrusion attributable to the defects that is at issue. Defendants are not liable for injuries caused by the initial impact and intrusion of the rear header resulting therefrom. They are only liable, if at all, for that portion of the damage or injury caused by the defects **over and above** the damage or injury that probably would have occurred as a result of the van impacting on its roof without those defects. The doctor does not address this in his testimony; he opined only that the failure of the welds and the absence of the retainers "contributed" to the injury. **Cf. Dawson v. Chrysler Corp.** (proof of intrusion from collision with unrelenting pole held sufficient).

{46} As to how Lorraine Duran would have received the same injury as Henrietta Martinez, Dr. Kosicki offers no explanation. We held in **Four Hills Country Club v. Bernalillo, Etc.**, 94 N.M. 709, 616 P.2d 422 (Ct. App.1979), that "[t]he rule is [sic] this jurisdiction has long been that experts must satisfactorily explain the steps followed in reaching a conclusion, and without such an explanation the opinion is not competent evidence." (Citations omitted.) **See {*753} also Smith v. Klebanoff**, 84 N.M 50, 499 P.2d 368 (Ct. App.1972).The jury was not told, nor was any explanation given, as to what affect the differences in the intrusion where the girls were seated would make. The least intrusion occurred in the middle where Martinez sat. Would the manner in which the two girls prepared for the impact explain why Marinez escaped serious injury while Lorraine Duran did not? We do not know, and the jury could only have guessed.

{47} Plaintiff argues that even without this expert testimony, there was sufficient evidence from which the jury could infer that the defects caused Lorraine Duran's injury.

Essentially this involves the same evidence outlined at the beginning of this discussion. We disagree.

{48} Without expert testimony, the jury would be left to stack inferences upon inferences. This is impermissible under prior holdings. **Adamson v. Highland Corporation**, 80 N.M. 4, 450 P.2d 442 (Ct. App.1969); **Lovato v. Plateau, Inc.**, 79 N.M. 428, 444 P.2d 613 (Ct. App.1968). To reach a finding that the inch or so additional intrusion caused Lorraine Duran's injuries would require speculation and conjecture. Moreover, in this highly technical area expert proof is essential. To hold otherwise here would allow the jury to decide the very question which plaintiff's expert could not answer. **See Curtis v. General Motors Corp.**, 649 F.2d 808 (10th Cir.1981).

{49} We hold that the jury could have no basis other than conjecture, surmise or speculation upon which to consider whether Lorraine Duran's injury occurred as a result of the added intrusion of the rear header or as a result of the unavoidable intrusion.

{50} When there is no fact question for the jury to pass upon or when the court, in the exercise of its sound discretion, would be required to set aside a verdict favorable to one side rather than the other, the court should direct a verdict. **Landers v. Atchison, Topeka & Santa Fe Railway Co.**, 68 N.M. 130, 359 P.2d 522 (1961). That drastic action is required here.

{51} We reverse with instructions to set aside the verdict and enter an order dismissing plaintiff's complaint. Costs on appeal are assessed against plaintiff.

{52} IT IS SO ORDERED.

I CONCUR: WOOD, Judge.

LOPEZ, Judge (Dissenting).

DISSENT

LOPEZ, Judge (Dissenting). I respectfully dissent.

{53} The majority opinion bases its reversal on two issues, namely: 1. The duty of GMC to the plaintiffs; and 2. Proximate cause.

{54} The main holding of the majority opinion regarding GMC's duty states that the cause of action for crashworthiness shall be based on negligence principles both for design as well as manufacturing defects.

{55} I totally disagree with this holding. I conclude at the outset that crashworthiness represents not only an extension of strict products liability, but it is also an integral part of products liability law which our Supreme Court has recognized and we have no

authority to depart therefrom. **See Alexander v. Delgado**, 84 N.M. 717, 507 P.2d 778 (1973).

{56} The late Chief Justice Charles Evans Hughes of the United States Supreme Court, during the New Deal era in the 1930's said, "the American industrial revolution which gave to America the automobile, gave to this country wealth and might," but "along side those benefits to America it was necessary for the American courts to create the theory of strict products liability in order to protect the American people and the American consumers." I totally agree with that concept of our American jurisprudence.

FACTS

{57} This action is based on the "second collision" or "crashworthiness" theory. While the defects in the manufacture and design of the van did not initiate the overturn of the vehicle, such defects were nevertheless decided by the jury to be the proximate {754} cause of Lorraine Duran's injury and damages and the jury so found.

{58} The record states that the van and in particular the roof and its component parts were manufactured by General Motors Corporation and sold through its the agent, Santa Fe Motors, to the West Las Vegas School District. Lorraine Duran was a passenger in the van then being used for a school activity. The van overturned, and because of defects in the manufacture of the roof and design of a component part thereof, the roof collapsed in the course of overturn causing the rear door header to invade the passenger area where Lorraine Duran was seated, striking her head and causing the vertebral bodies of her cervical spine to become dislodged, without fracture, damaging the spinal cord. She suffered, according to the record, permanent paralysis from the chest down.

I. DUTY OF GMC.

{59} This case is premised on the doctrine of strict products liability under section 402A of the Restatement (Second) of Torts (1965) as adopted in **Stang v. Hertz Corp.**, 83 N.M. 730, 497 P.2d 732 (1972). **See also Rudisaile v. Hawk Aviation Inc.**, 92 N.M. 575, 592 P.2d 175 (1979) and **Bendorf v. Volkswagenwerk Aktiengesellschaft**, 88 N.M. 355, 540 P.2d 835 (Ct. App.1975), **cert. denied**, 88 N.M. 319, 540 P.2d 249 (1975). Section 402A reads as follows:

(1) One who sells any product in a defective condition unreasonably dangerous to the user or consumer or to his property is subject to liability for physical harm thereby caused to the ultimate user 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 user or consumer without substantial change in the condition in which it is sold.

{60} The condition of the product must create an "unreasonable risk of injury." See NMSA 1978, UJI Civ.14.6 and UJI Civ.14.7 (Cum. Supp.1983). The standard is that the product be "unreasonably dangerous".

{61} Before discussing the evidence relating to the condition of the van as creating an unreasonable risk of injury, the incidental and applicable theory of "second collision" must be considered.

{62} Admittedly, the defects in manufacture and design did not initiate the accident. It was the "second collision" of Lorraine Duran's head with the intruding rear-door header that caused her injuries. This immediately brings to question whether or not the manufacturer has the duty to manufacture the vehicle in such a manner as to make it reasonably safe in the event of a collision of this kind.

{63} The applicability of this theory is a matter of first impression in New Mexico. The landmark case adopting the "second collision" theory is **Larsen v. General Motors Corporation**, 391 F.2d 495 (8th Cir.1968). In that case, the Plaintiff, while driving a Corvair manufactured by GM, was seriously injured in a head-on collision with another car. The impact caused a severe rearward thrust of the steering mechanism to the Plaintiff's head. The steering mechanism did not incorporate a design which would protect a driver against rearward displacement during an accident.

{64} Larsen did not contend that the design caused the accident, but rather that because of the design defect he received injuries he would not have otherwise suffered. In the alternative, he contended that his injuries would not have been so severe were it not for the design defect.

{65} In **Larsen** the District Court rendered summary judgment dismissing the complaint on the basis that there was no duty on the manufacturer to make a vehicle which would protect the user from injury in the event of collision. On appeal, the Eighth Circuit rejected the limited duty argument that had been adopted by the Seventh Circuit in **Evans v. General Motors Corporation**, 359 F.2d 822 (7th Cir.), cert. denied, 385 U.S. 836, 87 S. Ct. 83, 17 L. Ed. 2d 70 (1966). In reversing the District Court, the Appellate Court ruled:

{*755} Automobiles are made for use on the roads and highways in transporting persons and cargo to and from various points. This intended use cannot be carried out without encountering in varying degrees the statistically proved hazard of injury-producing impacts of various types. The manufacturer should not be heard to say that it does not intend its product to be involved in any accident when it can easily foresee and when it knows that the probability over the life of its product is high, that it will be involved in some type of injury-producing accident.

* * * * *

* * * While automobiles are not made for the purpose of colliding with each other, a frequent and inevitable contingency of normal automobile use will result in collisions and injury-producing impacts. **No rational basis exists for limiting recovery to situations where the defect in design or manufacture was the causative factor of the accident, as the accident and the resulting injury, usually caused by the so-called "second collision" of the passenger with the interior part of the automobile, all are foreseeable.** * * * The sole function of an automobile is not just to provide a means of transportation, it is to provide a means of safe transportation or as safe as is reasonably possible under the present state of the art.

Larsen, 391 F.2d 501-03.

{66} The Supreme Court of New Mexico appears to have impliedly accepted the "second collision" theory based upon Uniform Jury Instruction Civil No. 14.3 and the Committee Comments thereunder which read as follows:

UJI Civ. 14.3. Foreseeable risk of injury; misuse.

The supplier has the duty to consider foreseeable risks of injury. This duty is limited to use of the product for a purpose or in a manner which could reasonably be foreseen.

Where an injury is caused by a [risk] [or] [misuse of the product] which was not reasonably foreseeable to the supplier, he is not liable.

* * * * *

COMMITTEE COMMENT

* * * * *

Thus, these instructions reject the contention that a manufacturer of an automobile has no duty to consider risks of injury associated with vehicle collision simply because the intended purpose of an automobile does not include its participation in collisions. In the "crashworthiness" cases, as in any other case, the manufacturer's liability is circumscribed by foreseeable use. **Since involvement in accidents is reasonably foreseeable, a duty exists to consider this risk in design of the vehicle.** Compare *Larsen v. GMC*, 391 F.2d 495, 502 (8th Cir. 1968), with ***Evans v. GMC***, 359 F.2d 822, 825 (7th Cir.), **cert. denied**, 385 U.S. 836, 17 L. Ed. 2d 70, 87 S. Ct. 83 (1966), overruled, ***Huff v. White Motor Corp.***, 565 F.2d 104 (7th Cir. 1977).

NMSA 1978, UJI Civ. 14.3 (Repl. Pamp.1980). The commentary itself recognizes the validity of the **Larsen** case in this jurisdiction.

{67} Additionally, in ***Frericks v. General Motors Corporation***, 274 Md. 288, 336 A.2d 118 (1975), where a passenger was injured in a rollover accident, the Court stated:

* * * The fact that a negligent driver may be the initial cause of an accident does not abrogate the manufacturer's duty to use reasonable care in designing an automobile to reduce the risk of "Secondary impact" injuries * * *

Id. at 304, 336 A.2d at 127.

{68} Recovery under the "second collision" theory is allowed for both the injury caused solely by the defect, as in this case, as well as the injury which is enhanced by the defect.

{69} The majority in the instant case devotes much space to explaining why "design defect" cases in the crashworthiness context should be adjudicated under negligence principles. When it comes time to address {756} the manufacturing flaws question, which the jury found to exist in the failing sport welds, the majority briefly suggests that convenience to **plaintiffs** also warrants a negligence approach in deciding these cases. While I believe that a negligence approach is inappropriate in the design defect area, this approach is even more objectionable in the manufacturing defect context. The majority does not relieve plaintiffs of any burdens, as it asserts; it today saddles plaintiffs with additional and heavy burdens. I would have applied a strict liability analysis and held that since the manufacturing defects compromised the integrity and strength of the roof, they constituted a self-evident risk of injury or at least a risk which a reasonably prudent person having full knowledge of the risk would not accept. The fact question was properly one for the jury.

{70} Uniform Jury Instruction Civil No. 14.7, which was given the jury, defines "unreasonable risk of injury" insofar as pertinent, as follows:

An unreasonable risk of injury is a risk which a reasonably prudent person having full knowledge of the risk would find unacceptable. * * *

The design of a product need not necessarily adopt features which represent the ultimate in safety. You should consider the ability to eliminate the risk without seriously impairing the usefulness of the product or making it unduly expensive.

You are to look at the product itself and consider only the risks of harm from its condition or from the manner of its use at the time of the injury. * * *

{71} In **Rudisaile v. Hawk Aviation Inc.**, where an airplane was leased without oil, the Court stated:

* * * under Section 402A the plaintiff need only show that the product was dangerous beyond the expectations of the ordinary consumer...

{72} In so concluding, the New Mexico Supreme Court quoted with approval from **Seattle-First Nat'l Bank v. Tabert**, 86 Wash. 2d 145, 542 P.2d 774 (1975), as follows:

* * * If a product is unreasonably dangerous, it is necessarily defective. The plaintiff may, but should not be required to prove defectiveness as a separate matter.

* * * * *

[L]iability is imposed under Section 402A if a product is not reasonably safe.

Rudisaile, 92 N.M. at 577, 592 P.2d at 177 (quoting **Seattle-First Nat'l Bank**, 86 Wash. at 154, 542 P.2d at 779).

{73} Substantial evidence in this case shows that the rear door header intruded to the extent necessary to lacerate Lorraine Duran's head, and cause the vertebral dislodgment, injure the spinal cord and cause paralysis **because** of manufacturing flaws or defect in spot welding and failure to incorporate available retainer rods.

{74} In **May v. Portland Jeep, Inc.**, 265 Ore. 307, 509 P.2d 24 (1973), an analogous case, a jeep being driven down a steep dike and sandy incline, buried its front end, flipped forward, landing upside down, and injuring the driver. Insofar as pertinent, the opinion reads as follows:

Defendant first contends the trial court erred in failing to grant its motion for a directed verdict because there was insufficient proof that the vehicle was in a defective condition and unreasonably dangerous. An engineer called by plaintiff testified that the roll bar should have been capable of withstanding the load caused by the vehicle's rolling over in the manner recounted by the plaintiff. The engineer also testified that the support for the roll bar could have been increased by making continuous welds where the wheel wells joined the body or by bolting the angle irons, which supported the bases of the roll bar, to the sides of the vehicle as well as to the wheel wells. Bolt holes, although unused, had been provided in the angle irons for that purpose. This evidence, together with evidence of the purpose of a roll bar, was sufficient for the jury to find that the vehicle was in a defective {757} condition and was unreasonably dangerous. * * *

Id. at 310, 509 P.2d at 26.

{75} The manifest existence of a jury question where the defect or flaw is in the manufacture of the product is very aptly articulated in the Committee Comment to UJI Civ. 14.7 as follows:

* * * Design, formulation, warning, safety device and unavoidably unsafe product cases present greater latitude for argument than does the production flaw which the reasonably prudent person would generally be expected to find unacceptable when known. * * *

NMSA 1978, UJI Civ. 14.7 (Cum. Supp. 1983).

{76} Based on the facts of this case and the legal authorities that I have cited I conclude that the trial court did not err in denying the defendant's motion for directed verdict as alleged by GMC on the issue of duty under Point I. I would affirm the judgment of the trial court on the issue of duty under this point.

II. PROXIMATE CAUSE.

{77} The majority opinion bases its position of this issue on its holding that the jury could have no basis other than conjecture, surmise or speculation upon which to consider whether Lorraine Duran's injury occurred as a result of the added intrusion at the rear header as opposed to that which she would have suffered without the added intrusion. I interpret this holding to mean that the majority opinion holds that the plaintiffs failed to prove, as a matter of law, proximate cause and that that issue should not have gone to the jury.

{78} I therefore summarize pertinent evidence which I think constitutes substantial evidence of proximate cause.

{79} 1. The left portion of the rear door header caused the laceration to the occipital region of Lorraine Duran's head.

{80} 2. Lorraine Duran's head was in a flexed position when the impact with the header caused the dislodgment of the vertebral bodies. The impact damaged the spinal cord, causing paralysis, but did not fracture the vertebrae.

{81} 3. The particular force and the direction of the force that caused the laceration also caused the dislodgment, the spinal cord damage, and the paralysis.

{82} 4. The force necessary to cause the dislodgment without fracture was relatively small and much less than the force applied when fractures occur.

{83} 5. Henrietta Martinez, who was seated to the right of Lorraine Duran, struck the sheet metal of the roof panel while Lorraine Duran collided with the header.

{84} 6. Henrietta Martinez suffered a neck sprain because the impact to her head was not localized, but spread over a large area.

{85} 7. The rear door header, in its deformed state, intruded into the passenger area a total of 13 inches.

{86} 8. If the allegedly defective welding had held, the intrusion of the header would have been reduced by 1.3 inches, without regard to the absence of retainer rods.

{87} 9. The roof of the van upon impact, in the absence of retainer rods, deformed in an accordion-like manner.

{88} I have reviewed Dr. Kosiki's [sic] [Kosicki's] expert testimony, which was properly admitted over the objections of GMC, and I believe that his testimony supports the conclusion that substantial evidence in the record sustains the jury verdict. GMC objected to portions of Dr. Kosiki's [sic] [Kosicki's] testimony but I believe the trial court was correct in allowing the testimony to go to the jury. **See Roberts v. Sparks**, 99 N.M. 152, 655 P.2d 539 (1982). **See also Alford v. Drum**, 68 N.M. 298, 361 P.2d 451 (1961); **Harrison v. ICX, Illinois-California Express**, 98 N.M. 247, 647 P.2d 880 (Ct. App.1982).

{89} It is my opinion that the trial court properly denied GMC's motion for directed verdict on proximate cause. I further conclude that there is substantial evidence in the record of proximate cause and that the issue was properly submitted to the jury. **See Archuleta v. Pina**, 86 N.M. 94, 519 P.2d 1175 (1974); {*758} **Mabrey v. Mobil Oil Corp.**, 84 N.M. 522, 505 P.2d 865 (Ct. App.1972).

CONCLUSION

{90} In conclusion, the majority applies a pernicious interpretation of product liability law to the facts of this case. The decision and the tort principles upon which the majority rely may have been proper 100 years ago, in the days of the horse and buggy, but such theories are neither appropriate nor equitable in these days of mass produced and fast moving vehicles.

{91} In conclusion I would affirm the judgment of the trial court on the issues upon which the majority opinion has based its reversal.

[1.](#) Keeton, **Manufacturer's Liability: The Meaning of "Defect" in the Manufacture and Design of Products**, 20 Syracuse L. Rev. 559 (1969); Wade, **On Product "Design Defects" and Their Actionability**, 33 Vand. L. Rev. 551 (1980); Henderson, **Renewed Judicial Controversy Over Defective Product Design: Toward the Preservation of an Emerging Consensus**, 63 Minn. L. Rev. 773 (1979).

[2](#) Dean Wade in his recent article suggests that to make regulations controlling would not even be in the best interests of the manufacturers themselves, since administrative agencies, realizing that compliance with the regulations would mean that a plaintiff might not recover, would inevitably set those standards higher, and compliance would be more difficult. Wade, 33 Vand. L. Rev. at 569.

[3.](#) **See Bowman v. General Motors Corp.** for distinction between conscious design defect and inadvertent design failure. 427 F. Supp. at 241.

[4.](#) Wade recommends combining negligence, breach of warranty, and strict liability into a single cause of action to avoid confusion; however, he does not suggest negligence

as the form. 33 Vand. L. Rev. at 577. **See Schuldies v. Service Mach. Co., Inc.**, 448 F. Supp. 1196 (E.D. Wis.1978) where jury found product not in such defective condition as to be unreasonably dangerous, but found manufacturer negligent in the manner in which it designed, constructed and equipped the product.

5. Plaintiff offered Dr. Kosicki as an expert based on courses he took in college in 1938, classes in welding and the studies and articles he had written in biomechanics. Defendants objected to this physician testifying beyond the area of medicine.