ENCOURAGING PRODUCT SAFETY TESTING BY APPLYING THE PRIVILEGE OF SELF-CRITICAL ANALYSIS WHEN PUNITIVE DAMAGES ARE SOUGHT

PAUL B. TAYLOR*

INTRODUCTION

The increasing use of punitive damages[1] in design defect cases has introduced an element of fault into strict products liability actions that may have done more than stifle innovation in the development of new products.[2] Because a plaintiff must prove the defendant had knowledge of the harmful effects of its product before punitive awards can be granted, such awards may also deter firms from conducting safety research in the hopes of eluding this knowledge requirement. This knowledge gap, created by the structure of punitive damages law in design defect and products liability, can be filled by the extension of a privilege against the discovery of data created in the course of product safety testing to firms facing claims of punitive damages. One privilege developed recently by federal courts—the privilege to refrain from disclosing self-critical analyses—should be extended to cover product safety decisions when punitive damages are at issue.

---

* B.A., 1991, Yale University; J.D. (expected), 1994, Harvard University. Helpful comments were provided by Steven Shavell, Victor Schwartz, and Frederick Rowe.

1. Punitive damages—damages in addition to those required to compensate a plaintiff—have generally been defended "as a salutary method of discouraging evil motives . . . ." W. PAGE KEETON ET AL., PROSSER AND KEETON ON THE LAW OF TORTS § 2, at 12 (5th ed. 1984). An award of punitive damages must be justified by more than simple negligence: "There must be circumstances of aggravation or outrage, such as spite or 'malice,' or a fraudulent or evil motive on the part of the defendant, or such a conscious and deliberate disregard of the interests of others that the conduct may be called wilful or wanton." *Id.* at 9-10.

2. Analyses of the effects of expanding tort liability on innovation include PETER W. HUBER, LIABILITY: THE LEGAL REVOLUTION AND ITS CONSEQUENCES 155-61 (1988); W. KIP VISCUSI, REFORMING PRODUCTS LIABILITY 67-70 (1991); W. Kip Viscusi & Michael J. Moore, *Rationalizing the Relationship between Product Liability and Innovation*, *in* TORT LAW AND THE PUBLIC INTEREST: COMPETITION, INNOVATION, AND CONSUMER WELFARE (Peter H. Schuck ed., 1991). *See generally* THE LIABILITY MAZE: THE IMPACT OF LIABILITY LAW ON SAFETY AND INNOVATION (Peter W. Huber & Robert E. Litan eds., 1991).

I: The Use of Punitive Damages in Design Defect Cases

The general approach currently employed by courts to determine whether a design defect exists is the risk-utility test developed by Dean Wade.[3] This test calls for a balancing of the risks associated with the product design against the utility of the design. In the context of design changes, the inquiry usually focuses on whether the costs associated with a safer design are justified given the amount of risk reduction that will be achieved.[4] Balancing tests have become dominant in strict products liability actions.[5] The defenses of contributory negligence and assumption of risk have been considered irrelevant in strict liability actions,[6] thus increasing the exposure of manufacturers to punitive awards.

Punitive damages are a creation of the common law.[7] Cur-

3. *See* John W. Wade, *On the Nature of Strict Tort Liability for Products*, 44 Miss. L.J. 825, 837-38 (1973)(listing seven factors to be considered in the analysis: usefulness of the product, safety aspects of the product, availability of a substitute product, feasibility, user's ability to avoid danger by the use of due care, user's anticipated awareness of the risks involved, and loss spreading).

The risk-utility test is broadly based on the classic formula developed by Learned Hand in U.S. v. Carroll Towing Inc., 159 F.2d 169 (2d Cir. 1947), a case involving foreseeability issues in a negligence action. Judge Hand argued that an actor is negligent only if the cost of precautions the actor could have taken to avoid injury was less than the product of the probability of harm and its magnitude. *Id.* at 173. The authors of one report sponsored by the American Law Institute have stated that "the courts should explicitly recognize that they are employing a de facto negligence standard" in design defect cases, "under which a reasonable balance must be struck between the risks and benefits of alternative designs in light of the state of the art at the relevant time." Reporter's Study, Enterprise Responsibility for Personal Injury, Vol. II: Approaches to Legal and Institutional Change 16 (1991)(draft of the American Law Institute, April 15, 1991). The authors propose a reformulation of this balancing test, stating:

> a product design should be held defective only if there was a feasible alternative design which would have avoided the injury in question without materially altering the consumer's expected use and enjoyment of the product, and then only if the costs of incorporating this new precaution in the design do not outweigh the human and financial harms from the injuries thereby preventable.

Id.

4. *See* Lease v. International Harvester Co., 529 N.E.2d 57, 60 (Ill. 1988); Prentis v. Yale Mfg. Co., 365 N.W.2d 176, 183-84 (Mich. 1984).

5. *See* Phillips v. Kimwood Mach. Co., 525 P.2d 1033, 1039 (Or. 1974)("It is necessary to remember that whether the doctrine of negligence, ultrahazardousness, or strict liability is being used to impose liability, the same process is going on in each instance, i.e., weighing the utility of the article against the risk of its use."); *see also* W. Page Keeton, *Product Liability and the Meaning of Defect*, 5 St. Mary's L.J. 30, 39 (1973)(noting that "if defect is to be a requirement, it is submitted that there is no way to avoid a risk-benefit analysis in passing upon designs.").

6. *See* Lippard v. Houdaille Industries, Inc., 715 S.W.2d 491 (Mo. 1986)(holding that plaintiff's negligence or fault is not at issue in strict liability action).

7. State law governs in product liability suits because there is no federal law on prod-

rently, punitive damages are recoverable in 46 of the 50 states.[8] Over and above the awards necessary to make a plaintiff whole and to compensate for injuries, punitive damages are generally justified on the grounds that they provide an added penalty that deters defendants from causing future harm.[9] These awards can be very large, especially when directed against firms,[10] and appellate judges often uphold them on the grounds that they represent only a small percentage of corpo-

---

ucts liability. *See* O'Gilvie v. International Playtex, Inc., 821 F.2d 1438, 1448 (10th Cir. 1987)(stating that "an assessment of the propriety of awarding punitive damages and the sufficiency of the evidence to support the award must necessarily be made by reference to the factors that the state has deemed relevant in determining whether punitive damages are appropriate"), *cert. denied*, 486 U.S. 1032 (1988). Because manufacturers cannot determine in which jurisdictions their products will be used, they must contend with a patchwork of legal principles.

8. Michigan, Nebraska, New Hampshire, and Washington do not permit the recovery of punitive damages.

The award of punitive damages is an anomaly peculiar to the United States. Punitive damages are almost unknown in other countries, and cannot be awarded at all in Great Britain and Europe for personal injury cases, where, if gross negligence on the part of a firm is at issue, it is more likely that criminal charges will be brought against the officers of the firm. *See* Murray Mackay, *Liability, Safety, and Innovation in the Automotive Industry*, *in* THE LIABILITY MAZE, *supra* note 2, at 191.

9. *See* Gertz v. Robert Welch, Inc., 418 U.S. 323, 350 (1974)(stating that punitive damages serve "to punish reprehensible conduct" and "deter its future occurrence"); Acosta v. Honda Motor Co., 717 F.2d 828, 833 (3d Cir. 1983)("Punitive damage awards provide a useful function in punishing the wrongdoer and deterring product suppliers from making economic decisions not to remedy the defects of the product."); Dorsey v. Honda Motor Co., 655 F.2d 650, 657-58 (5th Cir. 1981)(stating that "[p]unishment and deterrence, the basis for punitive damages . . . are no less appropriate with respect to a product manufacturer who knowingly ignores safety deficiencies in its product that may endanger human life" than in other cases in which "the defendant's conduct shows wantonness or recklessness or reckless indifference to the rights of others."), *cert. denied* 459 U.S. 880 (1983), *aff'd on reh'g* 730 F.2d 650 (11th Cir. 1984).

Section 908(2) of the RESTATEMENT (SECOND) OF TORTS provides a generally applicable provision regarding punitive damages:

> [p]unitive damages may be awarded for conduct that is outrageous, because of the defendant's evil motive or his reckless indifference to the rights of others. In assessing punitive damages, the trier of fact can properly consider the character of the defendant's act, the nature and extent of the harm to the plaintiff that the defendant caused or intended to cause and the wealth of the defendant.

Nowhere in that section or the comments did the drafters suggest that these principles should not apply in a strict products liability context.

10. According to one study by the RAND Corporation, commissioned by the American Bar Association, the median punitive damage awards assessed against business defendants in personal injury cases tended to be at least two to three times as large as those assessed against individual defendants, and the difference in average awards was even greater. MARK A. PETERSON ET AL., PUNITIVE DAMAGES: EMPIRICAL FINDINGS 50-53 (1987); *see also* Drabik v. Stanley-Bostitch, Inc., 796 F. Supp. 1271, 1273 n.1 (W.D. Mo. 1992)(holding $7.5 million punitive award not clearly excessive in case involving brain damage from pneumatic nail gun, stating that "[p]laintiff is not pursuing a claim against Stanley-Bostich, Inc., the current supplier, presumably because Textron, Inc . . . . has a sufficiently deep pocket, a net worth of $2.7 billion.").

Another court has noted that defendants in product liability litigation "are generally

rate wealth.[11] Generally, the burden of proof is the same whether compensatory or punitive damages are sought,[12] but in just under half the states, punitive damages can be awarded only if the jury finds the evidence of defendant's misconduct "clear and convincing."[13] The factors that may be considered in applying punitive damages are quite broad.[14]

Courts today generally speak of exemplary damages in terms of punishment and deterrence.[15] The deterrent purpose of punishment is to induce actors not to engage in conduct for which the expected social cost exceeds the expected social benefit. Expected costs and expected benefits are determined by

---

manufacturers and frequently . . . large national concerns that command little sympathy from jurors." Moore v. Remington Arms Co., 427 N.E.2d 608, 616 (Ill.App. 1981).

11. *See* REPORTER'S STUDY, *supra* note 3, at 253; Cash v. Beltmann North American Co., Inc., 900 F.2d 109, 111 n.3 and cases cited (7th Cir. 1990)("Our research reveals that a typical ratio for a punitive award to a defendant's net worth may be around one percent."); *see also* Hatrock v. Edward D. Jones & Co., 750 F.2d 767, 773 (9th Cir. 1984); Southern Pacific Transp. Co. v. Lueck, 535 P.2d 599, 602 (Ariz. 1975).

The relatively deep pockets of corporations may also be viewed as a source of funds with which to subsidize suits. *See* Grimshaw v. Ford Motor Co., 174 Cal. Rptr. 348, 383 (1981)(stating that punitive damages "remain as the most effective remedy for consumer protection against defectively designed mass produced articles. They provide a motive for private individuals to enforce rules of law and enable them to recoup the expenses of doing so which can be considerable and not otherwise recoverable.").

However, while legislators mandate maximum and minimum criminal penalties and judges, in sentencing or fining an offender for a crime, have the benefit of knowing what they have imposed in similar or dissimilar cases, juries focus only on individual cases when imposing a punitive award. The inability of juries to compare their current award with past awards leads to large variations in awards. These variations limit parties' ability to predict the size of punitive awards, perhaps leading to fewer settlements.

12. This is the standard of "a preponderance of the evidence" or "more probable than not." *See* REPORTER'S STUDY, *supra* note 3, at 249.

13. *See, e.g.*, Acosta v. Honda Motor Co., 717 F.2d 828, 839 (3d Cir. 1983). The court also noted that reckless conduct must involve "a risk of harm to others substantially in excess of that necessary to make the conduct negligent," as well as "an easily perceptible danger of death or substantial physical harm, and the probability that it will so result must be substantially greater than is required for ordinary negligence." *Id.* at 841.

Generally, the standard for the remitting of punitive damage awards is that it is not proper unless the amount awarded is so excessive that it "shocks the judicial conscience." *See* Malandris v. Merrill Lynch, Pierce, Fenner & Smith, Inc., 703 F.2d 1152, 1168 (10th Cir. 1981), *cert. denied* 464 U.S. 824 (1983).

14. *See, e.g.*, Henderson v. Hassur, 594 P.2d 650, 663 (Kan. 1979)(holding that "in assessing punitive damages the nature, extent, and enormity of the wrong, the intent of the party committing it, and all circumstances attending the transaction involved should be considered. Any mitigating circumstances which may bear upon any of the above factors may be considered to reduce such damages.").

15. *See* Masaki v. General Motors Corp., 780 P.2d 566, 571 (Haw. 1989). Other purposes recognized by the courts and commentators for punitive awards include preserving the peace, inducing private law enforcement, compensating victims for otherwise uncompensable losses, and paying the plaintiff's attorneys' fees. *See* Dorsey D. Ellis, Jr., *Fairness and Efficiency in the Law of Punitive Damages*, 56 S. CAL. L. REV. 1, 3 (1982).

multiplying the costs and benefits that can occur by their respective probabilities of occurrence.

Individuals, however, will generally engage in conduct if the contemplated conduct will result in a net gain to themselves, whether or not their actions make society as a whole better off. Because the analysis involved in weighing the risks against the utility of a product is often very complicated, the conclusion of a particular analysis conducted by a third party is often difficult to predict. Consequently, firms may decide to act conservatively by avoiding small risks of harm in product designs even if they believe them to be outweighed by substantially greater benefits attributable to the same design. This reluctance occurs because firms may believe that courts or juries are concerned more with the existence of small risks than the prospect of large benefits from a product, and they may hope conservative designs will protect them from findings of product defects and the resultant imposition of compensatory damages. However, the standards according to which large punitive awards are levied against manufacturers for defective product designs may actually counteract or outweigh the pressures to design conservatively. Ironically, many manufacturers are induced to take fewer or more tentative steps toward making their products safer in the hopes of avoiding large punitive awards.

A. *The Knowledge Requirement*

To recover compensatory damages in design defect cases, the plaintiff is not required to show that the defendant actually knew of the defect and its ramifications. Rather, such knowledge is imputed to the defendant.[16] In *Phillips v. Kimwood Machine Company*,[17] the court stated that the test for strict liability is "whether the seller would be negligent if he sold the article knowing of the risk involved. Strict liability imposes what amounts to constructive knowledge of the condition of the

16. *See* U.S. DEP'T OF COMMERCE, RESEARCH GROUP, INTERAGENCY TASK FORCE ON PRODUCT LIABILITY: FINAL REPORT OF THE LEGAL STUDY 109 (1977)("It is by now well recognized that the difference between negligence and strict liability in design defect cases is that the element of scienter—knowledge of the dangerous propensities of the product—is imputed to the manufacturer when strict liability is applied."); *see also* Lane v. Amsted Industries, Inc., 779 S.W.2d 754, 758 (Mo. 1989)("A claim in strict tort liability for product design defect requires no more proof than that the design renders the product unreasonably dangerous." (citing Nesselrode v. Executive Beechcraft, Inc., 707 S.W.2d 371, 377 (Mo. 1986))).

17. 525 P.2d 1033 (Or. 1974).

product."[18]

However, many cases hold that, before punitive damages can be awarded in a design defect case, the manufacturer must have been aware of the defect and of the serious danger of substantial harm it posed to consumers.[19] "Evil motive" or "intent to injure," phrases common in the assessment of conduct deserving a punitive sanction,[20] require a defendant's awareness of a product defect. The prevailing standard is thus that, although knowledge is irrelevant to causes of action involving strict liability defects, knowledge must be proved in order to recover punitive damages.[21] This knowledge of a defective condition must be shown to have existed at the time the defendant sold

18. *Id.* at 1036. A later case construed *Phillips* to mean that, in strict products liability, "it is assumed that the manufacturer or seller was aware of the risk involved which caused harm to plaintiff, whether or not the manufacturer or seller actually had such knowledge or reasonably could have been expected to have it." Newman v. Utility Trailer & Equip. Co., 564 P.2d 674, 677 (Or. 1977).

19. An early case bearing out this proposition is Moore v. Jewel Tea Co., 253 N.E.2d 636 (Ill.App. 1969), *aff'd*, 263 N.E.2d 103 (Ill. 1970)(holding that defendant's knowledge that unopened can of Drano would generate gaseous pressure if moisture entered the can and that resulting explosion would greatly damage human tissue justified imposing punitive damages when, despite this knowledge, defendant distributed the product without modifications); *see also* Sutherland v. Elpower Corp., 923 F.2d 1285, 1291 (8th Cir. 1991)("For the punitive damage award to stand, we must find evidence showing" that defendant "was aware the sale of its toy naturally or probably would lead to injury."); Wammock v. Celotex Corp., 835 F.2d 818 (11th Cir. 1988)(holding that evidence which proved knowledge of asbestos hazards and a failure to warn of such hazards supported punitive damages award); City of Greenville v. W.R. Grace & Co., 827 F.2d 975 (4th Cir. 1987)(holding that $2 million punitive award was warranted by defendant's knowledge of health risks associated with asbestos); Gillham v. Admiral Corp., 523 F.2d 102 (6th Cir. 1975), *cert. denied*, 424 U.S. 913 (1976); General Chemical Corp. v. De La Lastra, 815 S.W.2d 750 (Tex. App. Corpus Christi 1991)(upholding punitive damages award because evidence indicated manufacturer had been aware of other deaths as result of use of its chemical); Lane v. Amsted Industries, Inc., 779 S.W.2d 754, 758 (Mo. 1989)(stating that "[t]he element of knowledge, irrelevant to the basic strict liability product defect cause of action, is a required proof for punitive damages liability" (citing Sparks v. Consolidated Aluminum Co., 679 S.W.2d 348, 354 (Mo. 1984) and adding that "it is the actual knowledge of the defendant that must be shown—constructive knowledge does not suffice")).

20. *See* Owens-Illinois, Inc. v. Zenobia, 601 A.2d 633, 648 (Md. 1992)(stating that in products liability cases, these phrases, which generally characterize "actual malice," should be read to mean "actual knowledge of the defect and deliberate disregard of the consequences."). Not surprisingly, such phrases resonate well with the standards used to determine negligence or fault, because punitive awards serve to punish intentional wrongful conduct.

21. *See* Lane v. Amsted Industries, Inc., 779 S.W.2d 754 (Mo. 1989); *see also* Laney v. Coleman Co., Inc., 758 F.2d 1299, 1304 (8th Cir. 1985)(holding that to recover punitive damages in a strict products liability case, a plaintiff must show that "the defendant *knew* of the alleged defective condition and danger at the time the defendant sold the product and . . . the defendant thereby showed complete indifference to or conscious disregard for the safety of others.")(emphasis in original); Tuttle v. Raymond, 494 A.2d 1353, 1360 (Me. 1985)(stating that an implied malice standard "overextends the

the product.[22] In sum, as two leading commentators on punitive damages have stated, without proving knowledge, "it is nearly impossible to prove the defendant 'recklessly' disregarded the safety of others," and "inadequate testing or quality control procedures will only rise to the level of 'reckless' disregard in instances where the manufacturer knew that the product required exhaustive testing and that any defect would cause serious harm."[23]

B. *Incriminating Information*

The knowledge requirement discussed above has the potential for turning information gathered during product safety research into the seeds of a large punitive award—a seed manufacturers would like to see killed. As one commentator has noted, the "key to winning a punitive damages case against a manufacturer is often said to lie in finding a 'smoking gun' in the defendant's files."[24]

In *Gryc v. Dayton-Hudson Corp.*,[25] a child was injured when a

availability of punitive damages" and hence "dulls the potentially keen edge of the doctrine as an effective deterrent of truly reprehensible conduct.").

Some courts have refined the standard further and held that in order to justify an award of punitive damages, a defendant must be shown to have consciously acted despite "clear knowledge" of a "highly probable risk" of serious harm. *See* Thomas v. American Cystoscope Makers, 414 F. Supp. 255, 266-67 (E.D. Pa. 1976). In this case, a surgeon burned his eye using an optical scope that was not adequately insulated. The court stated that while the defendant knew that doctors were using the scope, the defendant had not known of the specific type of hazard involved since no instances of this specific type of injury had been reported to the defendant. All past reports involved injuries relating to some other malfunction of the instrument, and there had been no previous reports of injuries to a surgeon's eyes. *See also* Preston v. Murty, 512 N.E.2d 1174, 1174 (Ohio 1987)(stating that, to justify punitive award, plaintiff may show that defendant exhibited "a conscious disregard for the rights and safety of other persons that has a great probability of causing substantial harm").

22. *See* Donahue v. Phillips Petroleum Co., 866 F.2d 1008, 1010 (8th Cir. 1989).

23. I JAMES D. GHIARDI & JOHN J. KIRCHER, PUNITIVE DAMAGES: LAW AND PRACTICE, 121-22 (1985).

For a rare judicial attempt to view knowledge in a larger context, see Loitz v. Remington Arms Company, Inc., 563 N.E.2d 397 (Ill. 1990)(holding that evidence concerning shotgun manufacturer's knowledge of prior shotgun explosions was insufficient to establish that manufacturer committed the willful and wanton misconduct required to support punitive award). The *Loitz* court stated that "[i]t is also important to view the number of complaints and lawsuits concerning a product in the context of the total number of products sold and in use, the frequency of the product's use, and the particular product's inherent dangers," and noted that "[t]he 94 prior accidents represent about 0.003% of Remington's production of more than 3 million Model 1100 barrels during the span of time in question." *Id.* at 420.

24. David G. Owen, *Problems in Assessing Punitive Damages Against Manufacturers of Defective Products*, 49 U. CHI. L. REV. 16 (1982).

25. 297 N.W.2d 727 (Minn. 1980)(holding punitive award of $1 million was not clearly excessive), *cert. denied*, 449 U.S. 921 (1980).

pair of pajamas, made of inflammable material, ignited. Probably the most damaging piece of evidence was a memorandum sent by management to its research department stating that the company was "sitting on somewhat of a powder keg as regards our flannelette being so inflammable," after the management heard of a number of clothing fires involving the cotton material of its product.[26] The defendant left an even lengthier paper trail in *Hale v. Firestone Tire & Rubber Co.*,[27] in which it was held that evidence showing that the defendant had knowledge of a defect prior to sale—including memoranda concerning prior accidents and requests for lists of complaints associated with the defective tire—was sufficient to sustain an award of punitive damages.[28] In *Bonnie v. Bic Corporation*,[29] the court held that Bic's knowledge of the dangers to children posed by the colorful and attractive nature of its lighters, outlined in Bic's own internal memoranda, meant that plaintiff's claim could not be dismissed.[30] Furthermore, in *Wolf v. Goodyear Tire & Rubber Co.*,[31] a $250,000 punitive award was upheld, based in part on several company memos, one of which stated that Goodyear's Chairman of the Board had "commanded an all-out effort to eliminate the safety hazards of multi-piece tube type truck rims so as to protect the Goodyear investment in tube type tire facilities."

These cases raise the question of whether the threat of large punitive awards encourages engineers to downplay product dangers in order to avoid leaving a colorful paper trail that may

26. *Id.* at 734; *see also* Rimer v. Rockwell Int'l. Corp., 641 F.2d 450 (6th Cir. 1981), *appeal after remand*, 739 F.2d 1125 (6th Cir. 1984)(involving a crash landing relating to a fuel tank problem); Ford Motor Co. v. Nowak, 638 S.W.2d 582 (Tex.Ct.App. 1982). While the trial court in *Rimer*, ruling that there was no evidence of willful or wanton negligence, struck the claim for punitive damages, the Sixth Circuit reversed, noting that a memorandum revealing that the manufacturer knew of the danger of fuel siphoning—but failed to issue a bulletin requiring replacement of the fuel caps because it feared the encouragement of litigation—was sufficient to raise a question of fact for the jury on the issue of willful negligence.

27. 756 F.2d 1322 (8th Cir. 1985).

28. On retrial, the jury awarded $1.5 million in punitive damages. Hale v. Firestone Tire & Rubber Co., 636 F. Supp. 585 (W.D. Mo. 1986). Similarly damning memoranda were present in Dorsey v. Honda Motor Co., 655 F.2d 650 (5th Cir. 1981)(noting that Honda knew of design defects through its own crash tests and the recommendations of its engineers that there were practical ways of improving the defective design) and American Motors Corp. v. Ellis, 403 So.2d 459 (Fla. 1981)(noting that AMC gained knowledge of the "catastrophic results" of fuel tank fires from its own crash tests).

29. 739 F. Supp. 346 (E.D. Mich. 1990).

30. However, other cases have held that a mere response to injury reports may not justify a punitive award. *See* Lockley v. Deere & Co., 933 F.2d 1378 (11th Cir. 1991).

31. 808 S.W.2d 868, 871 (W.D. Mo. 1991).

open their company to potentially bankrupting liability. A recent memorandum written by one design engineer, the chairman of the firm safety committee, described his observations of the area of a combine that would have to be cleaned out:

> I did note that it seemed natural to reach through the rear opening with your fingers to get final clean out. On this particular machine there was barely clearance between the bottom of the auger flight and the end of the housing so that if the auger did turn there would be a good chance your finger would be cut off at the end of the small door opening. This remote possibility can be eliminated by putting a 45 degree cut off on the tip of the flighting to eliminate this cut off point.[32]

The court held that from this memorandum *alone*, "the jury could determine that Deere was aware," at least as of the date of the memorandum, "of the foreseeable possibility of the insertion of finger, hands, and arms into the unloading auger housing to clean out grain residue."[33]

Upholding such large punitive damages based on a single memorandum—here amounting to 4,308 percent of the compensatory award of $650,000—may well deter future engineers from even exploring or discovering such "remote possibilities." These engineers might prefer instead to risk a more likely liability judgment of much smaller compensatory damages by foregoing additional safety research and reducing their susceptibility to vastly larger punitive damages.

In these cases, even if no formal memorandum had been produced, substantially similar issues may have come up at business meetings and recorded in the minutes, exposing firms to punitive liability.[34]

---

32. Burke v. Deere & Co., 780 F. Supp. 1225 (S.D. Iowa 1991)(remitting to $28 million punitive damages awarded to plaintiff whose hand was injured cleaning out combine auger).

33. *Id.* at 1252.

34. Deposition testimony alone, however, was held insufficient to support a claim of punitive damages in a case involving property damaged in an explosion due to defective electrical equipment. *See* Electric Power Bd. of Chattanooga v. Westinghouse, 716 F. Supp. 1069, 1075 (E.D. Tenn. 1988)(finding "isolated excerpts from deposition testimony wherein Westinghouse engineers described . . . component parts as generally expendable, or implied that Westinghouse knew or 'possibly knew' of potential failures of these component parts" inadequate as a matter of law to satisfy standards for punitive award).

C. *Punitive Damages and the Information Gap*

Because punitive awards are often many times the size of compensatory awards,[35] one way firms can limit their susceptibility to liability is by altering their conduct so as to avoid the legal standards governing these awards.[36] Specifically, firms may reduce the length of various "paper trails" or cut them off entirely either by not doing the research they otherwise would have done, or by not keeping records of their testing as meticulously as they had in the past. This would avoid the knowledge prong of the prevailing criteria for the imposition of punitive damages. Anecdotal evidence "suggests that engineers, for example, may favor an older, time-tested design rather than employ a design that is better and more innovative but that would entail greater and uncertain liability."[37] The greatest uncertainty in the products liability area may lie in the domain of punitive damages. One way of avoiding this uncertainty is to

35. The Supreme Court, in Pacific Mut. Life Ins. Co. v. Haslip, 111 S. Ct. 1032 (1991), while acknowledging that there is no "mathematical bright line between constitutionally acceptable and constitutionally unacceptable" awards, *id.* at 1043, did suggest that an award of punitive damages more than four times the compensatory damages "may be close to the line." *Id.* at 1046.

Lower courts have since read the decision differently. In Dunn v. Owens-Corning Fiberglass, 774 F. Supp. 929 (D.V.I. 1991), the federal court for the Virgin Islands, faced with an award of $1.3 million in compensatory damages and $25 million in punitive damages, remitted the compensatory damages to $500,000 and the punitive damages to $2 million, specifically noting the ratio the Supreme Court had suggested was "close to the line" of unconstitutionality. But see Hospital Auth. of Gwinnett County v. Jones, 409 S.E.2d 501 (Ga. 1991), one of the cases remanded by the Supreme Court in *Haslip*. In this case, on remand, the Georgia Supreme Court reaffirmed its upholding of a $1.3 million punitive damage award and a compensatory damage award of only $5,001. The *Hospital Authority* court stated that nothing in *Haslip* mandated a four to one ratio, as did the Alabama Supreme Court in Associates Fin. Servs. Co. of Alabama, Inc. v. Barbour, 592 So.2d 191 (Ala. 1991).

36. For example, pressures on manufacturers, created by the rules of tort liability, to defer implementation of design changes is explored in James A. Henderson, Jr., *Product Liability and the Passage of Time: The Imprisonment of Corporate Rationality*, 58 N.Y.U. L. REV. 765 (1983).

Steven Shavell, commenting on a posited variation of the negligence rule based on the level of care that is optimal given the information that a party actually possesses, has also stated that under such a rule parties "may decide not to obtain information whenever doing so is optimal because they can always escape liability if they do not obtain information by exercising moderate care." Steven Shavell, *Liability and the Incentive to Obtain Information About Risk*, 22 J. LEGAL STUD. 259, 261 (1992). The variation of the negligence rule described by Shavell is essentially the current standard for the imposition of punitive damages in design defect cases. The case law governing the latter, however, does not require the exercise of "moderate care" in producing information.

37. REPORTER'S STUDY, *supra*, note 3, at 276. Firms that tend to have very high levels of product liability costs will be even more likely to feel constraints on innovation and new product development. *See* W. Kip Viscusi and Michael J. Moore, *An Industrial Profile of the Links between Product Liability and Innovation*, *in* THE LIABILITY MAZE, *supra* note 1, at 81, 82-83.

minimize the number of safety tests and evaluative procedures, or the records of them—thus avoiding the likelihood that such information will be read one way or another by a jury likely to be dreaming of a society free of all risk.

The knowledge requirement for the imposition of punitive damages in design defect cases presents firms with the following equation.[38] Assuming that the cost of the tests is less than the expected reduction in compensatory damage liability due to design alterations suggested by the tests, the firm, before it engages in product safety testing, will ask itself if the gains it expects in the form of reduced compensatory damage liability is less than its increased expected punitive liability costs due to the body of evidence left by the safety research tests and the added litigation or settlement costs the introduction of the punitive damages issue will create. If the gains from testing are less than the increased expected punitive liability costs, the firm will not do the additional safety research. This is more likely to be the case the larger the expected punitive award and the larger the likelihood of a firm's meeting the knowledge criteria justifying the levying of punitive damages.

To illustrate, suppose a series of safety tests will cost a firm 10, and there is a 25 percent chance that these tests will reduce accident costs from 300 to 100. Here, the firm will expect that by spending 10 on tests, it will save (0.25)(200), or 50, in compensatory damages. However, if performing the additional tests will increase the probability from zero to fifty percent that it will be struck with additional punitive damages in suits involving the remaining injured plaintiffs, and these punitive damages may amount to 100, then by performing the tests the firm, in spending 10, will save 50 in compensatory damages, but lose (0.50)(100), or 50, in punitive damages. Thus, the firm will expect to suffer a net loss of 10 by performing the tests, and will therefore not perform them. When one considers that performing the tests will also increase the costs of litigating design defect claims—because the paper trail created by the tests will allow the introduction of the issue of punitive damages—the firm will stand to lose even more by conducting the tests.

As the case law bears out, the knowledge requirement for the imposition of punitive damages means that any evidence of re-

38. A general theory of incentives to investigate risk is presented in Shavell, *supra* note 36.

search exposing even the most unlikely chance of harm can be used against a firm by a plaintiff seeking punitive damages. However, the absence of such evidence, and hence the absence of the knowledge generated by these tests, cannot generally be held against a firm facing a punitive sanction. Therefore, firms have the incentive, all else being equal, to avoid performing the tests that could increase their chances of being hit by a punitive award much larger than the compensatory damages they might avoid by doing the testing.[39]

Generally, a reasonable attention to safety will include premarketing engineering studies and prototype testing, assembly line quality controls, consideration of appropriate warnings and instructions, and field performance monitoring of product responses. However, no one has been able to articulate a minimum quantum of safety testing. Whereas a total absence of safety testing may be clearly reckless behavior,[40] and certainly financially damaging to a firm unconcerned with future compensatory costs under strict liability, it is unclear whether courts can meaningfully evaluate the level of safety testing in which firms engage.

For example, David Owen, a leading commentator on punitive damages, has stated that the "expenditure of only paltry sums on research into flame retardants by a manufacturer of highly flammable cotton flannelette for use in children's nightwear" is evidence of the type of egregiously deficient research warranting punitive sanctions.[41] Citing the *Gryc* case as an example, Owen points out that the court noted "minimal" efforts in the defendant's "surveillance of developments in the

39. As one commentator has noted, documentary tests of safety research "can later return to haunt the manufacturer." David G. Owen, *Problems in Assessing Punitive Damages Against Manufacturers of Defective Products*, 49 U. CHI. L. REV. 1, 18 (1982).

40. *See* Dorsey v. Honda Motor Co., 655 F.2d 650 (5th Cir. 1981); d'Hedouville v. Pioneer Hotel, 552 F.2d 996 (9th Cir. 1977)(holding punitive award justified by inadequate testing of potentially dangerous product); Gillham v. Admiral Corp., 523 F.2d 102 (6th Cir. 1975), *cert. denied*, 424 U.S. 913 (1976)(holding inadequate attempts to discover a means to remedy a product defect justified punitive award); Leichtamer v. American Motors Corp., 424 N.E.2d 568, 580 (Ohio 1981)(holding that advertising jeep for use on steep hills and foreseeability of jeep's use on steep hills, in conjunction with the fact that defendants failed to test the safety of the roll bar, manifested a flagrant disregard for the safety of others and sufficient basis for punitive award); *see also* Maxey v. Freightliner Corp., 450 F. Supp. 955 (N.D. Tex. 1978), *aff'd*, 623 F.2d 395, 404 (5th Cir. 1980), *reh'g en banc granted*, 634 F.2d 1008 (5th Cir. 1980)(Johnson, J., dissenting)(citing defendant's failure to crash-test its truck tractors and to stay abreast of accident statistics and engineering developments as representing a reckless indifference to consumer safety).

41. Owen, *supra* note 39, at 35.

flame-retardant field," and further remarked that, from 1967 to 1969, the company had spent only $140,000 on this type of research out of its total research and development budget of $1.8 million.[42] It is unclear, however, and the *Gryc* court did not attempt to elaborate, how much money should have been spent on fire-retarding research.

An article in *Scientific American*, published in 1974, summarizes the state of flammability knowledge at the time and points out that "although the data on fires over the century are not very reliable, they do suggest that the success of fire-control measures is not significantly greater now than it was in earlier times," and that flammability testing is part of the difficulty.[43] The article describes an experiment undertaken in the early 1960s by six nations, in cooperation with the International Organization for Standardization, to rate twenty-four wall-covering materials in order of their flammability, according to each nation's standard test. The results diverged widely.[44] The author concluded that "no one knows what characteristics a material should have to be safe in a fire."[45] Each test was based on a best judgment rather than on established facts because each test was measuring something different under the heading of flammability. If the defendant in *Gryc* was aware of this data, it may have reasonably felt that any greater expenditure on fire testing, leading to results of questionable meaning, would be a misallocation of testing resources.

While firms will always do some level of safety testing in order to eliminate those defects most likely to cause great harm, the threat of punitive damages may cause them to contract their sphere of testing at the margins to a smaller core of tests in order to avoid the risks of punitive damages. Many products undergo performance testing in which reaction to stress is measured, either under normal simulated conditions or under highly taxing, exaggerated conditions. Yet the threat of punitive damages may lead to a gradual reduction in the amount of

42. *Id.* (citing Gryc v. Dayton-Hudson Corp., 297 N.W.2d 727, 740 (Minn. 1980), *cert. denied*, 449 U.S. 921 (1980)).

43. Howard W. Emmons, *Fire and Fire Protection*, 231 SCI. AM. 21, 21 (1974).

44. For example, one piece of wallboard was the safest of all 24 samples provided, according to the testers in Germany, and the most dangerous of all 24 according to the testers in Denmark. The plot of all the flammability data from each country resembled a plot of meaningless random data plotted by Emmons. *Id.* at 21.

45. *Id.*

testing. The exaggerated tests may become less exaggerated, and the stress tests less stressful.

If a legal sanction does not vary with the degree of undercompliance, then when firms undercomply, they will generally undercomply by a large amount.[46] With this in mind, Robert Cooter has noted that rules determining fault "make the injurer's precaution sensitive to variations in the legal standard and insensitive to variations in damages," whereas the opposite holds true for strict liability rules. Cooter concluded that "a strict liability rule is preferable if the courts are likely to make errors in setting the legal standard of care and unlikely to make errors in setting damages."[47] Because this is generally the case where a complicated product causes easily identifiable harm, however, punitive damages should not be awarded in that context. Doing so needlessly[48] stifles the private production of information[49] and tends to encourage courts to examine the standard of care exercised by firms in making product safety decisions, an examination courts can conduct relatively crudely at best.[50]

Every product has as many properties as a factfinder might wish to measure, properties which often present complicated trade offs. To take the *Gryc* case once again, a company might be faced with the question of the fabric composition of children's clothing. Repeatedly testing the composition to check the point at which it bursts into flames may lead a firm to consider raising its ignition temperature. But raising its ignition

46. *See* Robert D. Cooter, *Economic Analysis of Punitive Damages*, 56 S. CAL. L. REV. 79, 93 (1982) (concluding that punitive damages are appropriate where the defendant acted willfully, thus violating legal standards by a wide margin.); *see also* Alan Schwartz, *Proposals for Products Liability Reform: A Theoretical Synthesis*, 97 YALE L.J. 353, 412-13 (1988)("If the evidence fails to show a disregard for safety and the manufacturer's design or warning choice is at all plausible, punitive damages are unnecessary.").

47. Cooter, *supra* note 46, at 93.

48. Shavell argues that, to employ strict liability, "courts need only to ascertain the extent of losses. They do not need to inquire whether information should have been obtained, whether it actually was obtained, or whether the level of care was appropriate." Shavell, *supra* note 36, at 269. This is so because generally, under strict liability—where a party is liable for losses caused regardless of the level of care exercised or whether information about risk was obtained—it is not necessary for a court to inquire about the adequacy of safety research. If a firm bears the losses it causes and incurs the costs of obtaining information and exercising care, its problem becomes the social problem, and the firm will make socially desirable decisions. *Id.* at 260.

49. *See* Shavell, *supra* note 36, at 269 (concluding that "[i]f . . . courts base their findings on the negligence rule using the level of care that is optimal assuming actual knowledge of risk, the incentive to obtain information may be inadequate").

50. *See infra* Part I.E.

temperature raises its resistance to extinction once ignited, thus creating one risk while reducing another.[51] A firm faced with the threat of punitive damages may decide to forego more advanced tests, or later stages of testing, in order to avoid creating documentary evidence that would assist opposing counsel.[52]

While evaluating these types of alternatives and choosing between them is very difficult, choices must be made. Still, accidents will happen, tragedies will arise, and a jury will be left facing a seriously injured child and staring at the documents indicating that this result was known to the defendant. The children who avoided injury due to the choice that was made, however, may never be considered.

David Owen has noted that a manager eager to produce a safe product "will act to eliminate or reduce such risks only to the extent that it is reasonable to do so," but that such a manager may "consciously" yet reasonably choose to leave in a product "remote dangers that are too expensive to remove, and even substantial dangers for which there is no practicable remedy." He concluded that "the documentation of such a choice should not, of course, support a punitive award."[53] Yet even experienced judges admit to feeling a bias toward actual, injured plaintiffs.[54] Better perhaps, in the mind of the firm, to

51. WILLIAM W. LOWRANCE, OF ACCEPTABLE RISK—SCIENCE AND THE DETERMINATION OF SAFETY 54 (1976).

52. As Owen has stated, "constantly striving to uncover sources of weakness in and sources of dissatisfaction with its products to produce an even better product for the public, may thereby create the documentary seeds for a punitive damages claim in a future products suit." Owen, *supra* note 39, at 18.

53. *Id.* at 17 n.83. However, plaintiff attorneys rarely focus on the costs of removing a particular hazard other than the specific costs of physically altering the product. The more hidden costs, such as the safety tradeoffs present in the decision to use one combination of fibers over another to reduce inflammability, are often ignored.

54. Judge Alex Kozinski, of the Ninth Circuit, has stated:

> When I get a case in which someone got really badly mangled, I can intellectualize about it as well as the next fellow. But you overlook the emotional appeal of a case where some kid has just had an iron pole driven through his insides . . . . He has no insurance. What do the courts do with this problem? The solution they have picked is mandatory, court-imposed insurance . . . . Oh, I understand the inefficiencies of selling insurance [through higher product prices that cause firms to internalize accident costs harming consumers], but intellectualizing about it does not entirely deal with the realities that courts face.

Session One, Discussion of Paper By Richard Epstein, University of Chicago, transcript, 10 CARDOZO L. REV. 2239-40 (1989).

West Virginia Supreme Court of Appeals Justice Richard Neely has also written that "as a state court judge, much of my time is devoted to designing elaborate ways to

learn less about additional product safety hazards.

The result of this dynamic is the absence of research and the information it generates. Courts could try, of course, to fill this gap by analyzing whether or not a firm "should have" gone ahead with a particular test. But, as explored further in the following section, there is little evidence of any judicial tendency to enter this quagmire, as demonstrated by the few cases that include invitations to judges or juries to evaluate the business judgments of firms when it comes to the decision to perform one test rather than another.[55] No doubt this is largely due to a recognition that courts have little institutional ability to perform the types of complex tests and design evaluations that a firm, or a regulatory agency, is equipped to perform. Any attempt to loosen the standards for the imposition of punitive damages—that is, to drop the knowledge requirement and move toward a judicial analysis of what a company "should have" tested for—would force the courts into an evaluative role that they are ill-equipped to perform.[56]

---

make business pay for everyone else's bad luck." RICHARD NEELY, THE PRODUCT LIABILITY MESS 1 (1988).

55. This question is distinct from that posed to juries when they are asked by plaintiff's counsel to punish firms for choosing "profits over lives" when faced with certain information regarding a safety hazard. If firms do not do the tests that reveal these hazards in the first place, then they cannot be punished for having made a choice, based on the known existence of the hazard, of "profits over lives" because they will have already made a choice of "no testing over increased chances of punitive liability."

56. Rejecting such a move is Owens-Illinois v. Zenobia, 601 A.2d 633, 653-54 (Md. 1992)("The knowledge component, which we hold is necessary to support an award of punitive damages, does not mean 'constructive knowledge' or 'substantial knowledge' or 'should have known.' More is required to expose a defendant to a potential punitive damages award. The plaintiff must show that the defendant actually knew of the defect and of the danger of the product at the time the product left the defendant's possession or control."). *See also* School Dist. of Independence v. U.S. Gypsum, 750 S.W.2d 442, 446 (Mo. 1988)("No Missouri case has permitted submission of punitive damage claim in a strict products liability case on the theory that the defendant should have known of a dangerous defect in its product."). The *Zenobia* court stated that "[a]ctual knowledge . . . does include the willful refusal to know." 601 A.2d at 654 n.23 (citing State v. McCallum, 583 A.2d 250, 253 (My. 1991)(Chasanow, J., concurring)(stating in a case involving driving with a suspended license that "knowledge" exists "where a person believes that it is probable that something is a fact, but deliberately shuts his or her eyes or avoids making reasonable inquiry with a conscious purpose to avoid learning the truth.")). Justice Chasanow added that the doctrine of "deliberate ignorance" or "willful blindness" has "become well recognized in the federal courts and has been applied in a variety of criminal prosecutions." 583 A.2d at 254 (citing U.S. v. Feroz, 848 F.2d 359 (2d Cir. 1988)(per curiam)(involving claim of ignorance in transporting heroin in secret compartment of attache case) and U.S. v. Hiland, 909 F.2d 1114 (8th Cir. 1990)(holding that a deliberate ignorance instruction was proper in prosecution for fraudulently marketing an unapproved and misbranded drug where defendants took no action to investigate or consult FDA, despite indications that drug they were marketing was dangerous)). Qualifications such as these try to close the gap in punitive

D. *Industry Custom*

Given the potential of the knowledge requirement for the imposition of punitive awards to stifle the private creation of information, one might inquire into how this effect may manifest itself throughout entire industries. In a negligence action, compliance with an industry custom is relevant, but not conclusive evidence of due care.[57] Although compliance with industry custom is afforded less weight in the design defect context in strict liability,[58] it has been accorded substantial weight in the punitive damages context.[59]

David Owen has stated that punitive damages "ordinarily will be proper only in cases of extreme departure from accepted

---

damages law in the design defect context that creates the disincentive to create safety information at the margins. The *Zenobia* court concluded that "a defendant cannot shut his eyes or plug his ears when he is presented with evidence of a defect and thereby avoid liability for punitive damages." 601 A.2d at 654. But the requirement that a defendant has to first be presented with the information, and then look away from it, before punitive damages may be levied allows defendants to avoid liability by not creating the information in the first place.

57. *See* W. PAGE KEETON ET AL., PRODUCTS LIABILITY AND SAFETY: CASES AND MATERIALS 59 n.4 (1980); *see also* Lane v. Amsted Industries, Inc., 779 S.W.2d 754, 759 (Mo. 1989)("Compliance with industry standard and custom impinges to prove that the defendant acted with a nonculpable state of mind—without knowledge of a dangerous design defect—and hence to negate any inference of complete indifference or conscious disregard for the safety of others the proof of punitive damages entails."); Chown v. USM Corp., 297 N.W.2d 218, 222 (Iowa 1980)(stating that "we have long recognized 'custom and practice of the industry,' as well as 'state of the art,' as a part of tort law."), *cited in* Reed v. Chrysler Corp., 1992 WL 380588 (Iowa 1992).

58. *See* Sturm, Ruger & Co. v. Day, 594 P.2d 38, 45 (Alaska 1979), *on reh'g*, 615 P.2d 621 (Alaska 1980).

59. *See* Maxey v. Freightliner Corp., 450 F. Supp. 955 (N.D. Tex. 1978). The decisive factor in the trial court's decision to set aside a $10 million punitive award was the fact that the design of the fuel system on the defendant's truck tractor was in line with the prevailing industry design in all material respects. The court stated it could not find the entire national trucking industry had shown such callous indifference to the safety of others, especially in light of fact that no government regulator had attacked the design and it had been used by the trucking industry for over 30 years, despite evidence that the defendant had performed no crash tests on the fuel system of the truck and had maintained no records as to how the vehicles were performing in accidents or as to their frequency. On appeal, the Fifth Circuit upheld the trial court, but admonished it to consider only evidence actually presented at trial in reviewing a jury verdict. (Freightliner had never attempted to prove that its design was common to that used in the industry.) *See also* Liesser v. Weslo, Inc., 775 F. Supp. 857 (D. Md. 1991)(holding that it was not reckless conduct, and hence not supportive of punitive award, for manufacturer to follow industry standard in giving warning, even though corporate counsel had urged a more cautious approach). *But see* O'Gilvie v. International Playtex, Inc., 821 F.2d 1438, 1443 (10th Cir. 1987)(holding that compliance with industry standards is not dispositive as a defense against punitive damages if "a reasonable manufacturer would have done more"); Drayton v. Jiffee Chem. Corp., 591 F.2d 352, 374 (6th Cir. 1978)(Keith, J., concurring in part and dissenting in part)("If an entire industry monolithically markets a dangerous product instead of competing to make a safer product, the deterrent effect of punitive damages is vitally needed.").

safety norms in the particular industry."[60] However, the dynamic outlined above indicates that industry standards may become generally more lax and less comprehensive over time, due to the incentives created by the knowledge requirement of punitive damages in design defect cases. Owen states that "[r]arely will an entire industry act with flagrant impropriety against the health and safety of the consuming public, and running with the pack in general should shield a manufacturer from later punishment for conforming to the norm."[61] It is more plausible, however, that an entire industry will at least marginally reduce the extent of its safety testing, leading to a custom of implementing generally fewer safety procedures,[62] the reasonableness of which courts will have difficulty assessing.

E. *Moves Toward the Judicial Reevaluation of Product Safety Testing and the Question of Institutional Competence*

As stated earlier, one way courts might attempt to fill the informational gap created by the knowledge requirement for the imposition of punitive damages is through increased judicial scrutiny of business design decisions. Over the past decade, there have been a few moves toward the judicial reevaluation of product safety testing procedures.

Perhaps the first such move was made in *Airco, Incorporated v. Simmons First National Bank, Guardian*.[63] In *Airco*, an engineer's

60. Owen, *supra* note 39, at 27. See also *O'Gilvie*, 821 F.2d at 1446, in which the court found that the defendant had known of, but disregarded, studies linking high absorbency tampons with an increased risk of toxic shock syndrome. The court noted that other manufacturers, with the same knowledge, modified their product or withdrew it from the market.

61. Owen, *supra* note 39, at 40-41.

62. An exception may arise when one company reduces its expenditures on safety research not to avoid an increased risk of punitive damages, but to gain a competitive advantage. *See O'Gilvie*, 821 F.2d at 1446 (noting, in upholding a punitive award, that there was evidence that defendant Playtex deliberately sought to profit from the extraordinarily absorbent nature of its tampons, increasing the risk of toxic shock syndrome, "by advertising the effectiveness of its high-absorbency tampons when it knew other manufacturers were reducing the absorbency of their products due to the evidence of a causal connection between high absorbency and toxic shock. This occurred in the face of . . . awareness that its product was far more absorbent than necessary for its intended effectiveness.").

63. 638 S.W.2d 660 (Ark. 1981). But see Laney v. Coleman Co., Inc., 758 F.2d 1299 (8th Cir. 1985), in which a $3 million punitive damage award was overturned. In *Laney*, the trial court had instructed the jury that it could award punitive damages if "defendant knew or should have known of the defective condition and danger." *Id.* at 1304. However, the Eighth Circuit held that the punitive award must be reversed because plaintiff offered no evidence, direct or circumstantial, that the defendant actually knew

testimony showed that the company knew of its product's defect. Interestingly, however, the instructions presented to the jury required that the jury find that Airco "knew" or "ought to have known" of the propensity of their selector valve to cause injury. The inclusion of the term "ought" was a move away from an inquiry into a particular defendant's state of mind and toward an inquiry into the research judgments of individuals—a move that requires a recreation of the circumstances surrounding product safety research and design and an inquiry into the reasonableness of particular decisions and company resource allocations.[64]

In *International Armament Corporation v. King*,[65] the evidence established that before any guns were marketed in the United States, two out of every twenty-five guns were inspected. Although many guns failed these tests for cosmetic reasons, none revealed any defects in performance. However, an adverse expert witness stated that the gun could fire even with the safety lever pulled "if the sear and hammers assembly were defectively manufactured."[66] Concluding that this testimony constituted "some evidence that appellant . . . was consciously indifferent to appellee's welfare and safety," the court affirmed the punitive award.[67]

---

of the defect in its fuel cans. Thus, only the knowledge the defendant actually had, and not the knowledge it should have had, was deemed relevant to an inquiry involving punitive damages.

64. One prominent commentator has also suggested that while the standard for punitive damages in product liability cases should focus on the manufacturer's knowledge, such knowledge "should be capable of objective proof, tested by what it plainly should have known in light of objectively provable facts." Owen, *supra* note 39, at 27 n.123. How this standard would be applied is not made clear, but it would appear to entail the sort of judicial inquiry into product design decisions that courts are not capable of making.

65. 674 S.W.2d 413 (Tex. 1984).

66. *Id.* at 417.

67. *Id.* The dissent, finding the majority opinion "incredible," stated that the "common thread in the cases from all jurisdictions that have allowed punitive damages in products liability cases is that liability for exemplary damages depends almost exclusively on the degree of the defendant's prior knowledge of the specific defect of which complaint was made by the plaintiff." *Id.* at 422 (Gonzales, J., dissenting). The punitive award was later affirmed by the Texas Supreme Court in International Armament Corp. v. King, 686 S.W.2d 595 (Tex. 1985). The court focused on the defendant's failure to inspect every gun or else issue a warning. *See also* Johnson v. Colt Industries Operating Corp., 797 F.2d 1530 (10th Cir. 1986)(holding that evidence that defendant knew or should have been aware of the risk of gun firing when dropped to the floor was sufficient to award punitive damages in light of general industry awareness of the hazard); Ivins v. Celotex Corp., 115 F.R.D. 159 (E.D. Pa. 1986)(holding that punitive damages may be awarded when an actor should have appreciated a significant risk); *cf.* Bemer Aviation, Inc. v. Hughes Helicopter, Inc., 621 F. Supp. 290, 299 (E.D. Pa. 1985),

A few recent cases have followed this line of decisions. In *Moran v. G. & W.H. Corson, Inc.*,[68] the court stated that it had looked at the evidence to see if anyone in the distributor's corporation had known or *had reason to know* in the 1960s that exposure to asbestos fibers in insulation materials could cause cancer. In another asbestos case, *Fibreboard Corporation v. Pool*,[69] the court, in allowing a punitive award, stated that evidence supported the conclusion that a *reasonable person* would have realized the dangers of failing to warn of asbestos exposure. Even though there was no direct evidence offered to show the defendant's awareness of the dangers, the existence of general knowledge among manufacturers since the 1920s was held sufficient to justify punitive damages. In *Davis v. International Harvester Company*,[70] the court stated that, to warrant a punitive award, plaintiff must show defendant "was aware" or "should have know" that its product "was defective and likely to cause injury."

Given these moves toward filling the information gap described above, one might ask whether there are other institutions besides the courts that are more appropriate and effective forums for product safety evaluation. The tort system is only one of several institutions that can help reduce risks.[71] Others include market forces, government regulation, and a social insurance system providing compensation to the injured. As risks

a breach of contract action in which the court stated that the defendant's "failure to take any meaningful steps to address the obvious problems with the helicopter . . . makes its conduct outrageous and . . . warrants the imposition of punitive damages." The court noted that, in light of over fifty incidents involving the defective bearings, the defendant "never ordered an inspection of all the bearings . . . never examined the bearings which had already failed, and never tested new bearings to determine the nature of the problem," concluding that the defendant "conducted a woefully insufficient investigation of the problem," its only response being "superficial" and addressing "the symptom and not the cause." *But see* School Dist. of Independence v. U.S. Gypsum, 750 S.W.2d 442 (Mo. 1988)(stating that no Missouri case has permitted submission of punitive damages claim in a strict products liability case on the theory that the defendant "should have known" of a dangerous defect in its product); Martin v. Johns-Manville Corp., 494 A.2d 1088 (Pa. 1985)(holding that conscious disregard of a known risk will support punitive award, but failure to appreciate degree of risk from a known danger will not support a punitive award).

68. 586 A.2d 416 (Pa. 1991).

69. 813 S.W.2d 658 (Tex. App. Corpus Christi 1991).

70. 521 N.E.2d 1282, 1289 (Ill. 1988).

71. The narrow approach to risk reduction of some legal scholars, whose works seem to assume that the tort system is the only available system to reduce risks, has been termed the "tortcentric" perspective by Richard Stewart. *See generally* RICHARD STEWART, THE ROLES OF LIABILITY AND REGULATION IN CONTROLLING ENTERPRISE RISKS (1987).

to health and safety become more widespread and more difficult to assess, the role of the courts in promulgating risk-reducing rules should be reduced because other institutions are better able to evaluate safety decisions. Whether judicial attempts to fill the information gap are worthwhile will depend on the institutional competence of the courts compared to other institutions dealing in risk management.

In the absence of a class action involving multiple plaintiffs, courts must analyze cases individually, with hearing experts presenting their views on the underlying causal factors. Regulatory agencies have far more resources than courts with which to formulate safety policies,[72] including a staff of technically trained experts familiar with the scientific evidence.[73] While many government regulations focus on technological designs,[74] others emphasize design defects.[75] While regulatory rules allow the information costs associated with making cost-benefit or risk-utility decisions to be borne by one institutional body whose determinations are applied to all parties, liability rules impose the costs of gathering information about the benefits of safety measures that the defendant may have employed on every party in every case that comes before the court.[76]

72. Problems encountered by regulatory agencies, however, include the fact that changing widely applicable regulations is time-consuming and administratively costly, principally because of the complicated procedural requirements imposed on the rulemaking process, such as the procedures involved in collecting comments from all interested parties. *See* Administrative Procedure Act, 5 U.S.C. § 553 (1982). Also, special interest groups are likely to vigorously oppose any changes in regulations if they fail to preserve existing benefits. *See* W. Kip Viscusi, *Toward a Diminished Role for Tort Liability: Social Insurance, Government Regulation, and Contemporary Risks to Health and Safety*, 6 YALE J. ON REG. 65, 78 (1989).

73. These agencies study widespread accident patterns rather than discrete, particular events.

74. *See, e.g.*, 29 C.F.R. §§ 1910.211-1910.222 (1987)(OSHA standards concerning machinery and machine guards).

75. Recalls ordered by the Consumer Products Safety Commission, for example, usually focus on problems that extend across an entire product line, rather than defects due to occasional manufacturing errors. *See generally* W. KIP VISCUSI, REGULATING CONSUMER PRODUCT SAFETY (1984).

76. One commentator has proposed that firms be exempted from potential liability in court actions "if they can demonstrate either compliance with a government regulation that leads to an efficient degree of safety, or the use of a hazard warning program that leads the market to promote an efficient level of risk." W. Kip Viscusi, *Product Liability and Regulation: Establishing the Appropriate Institutional Division of Labor*, *in* 77 AMERICAN ECONOMIC ASSOCIATION PAPERS AND PROCEEDINGS 300, 303 (1988). Another commentator has argued that courts are not equipped to deal with complex policy problems "in which each point for decision is related to all the others as are the strands of a spider web. If one strand is pulled, a complex pattern of readjustments will occur throughout the entire web." James A. Henderson, Jr., *Judicial Review of Manufacturers' Conscious Design Choices: The Limits of Adjudication*, 73 COLUM. L. REV. 1531, 1536 (1973);

Federal preemption arguments based on these considerations are strongest when federal regulation of the product is comprehensive and detailed. For example, federal preemption has been found in cases involving cigarettes,[77] air bags,[78] pesticides,[79] and medical devices.[80] One problem with federal preemption, however, is that it is possible for a company to follow government specifications, knowing of a hazard the government was unaware of.[81]

In most cases it is the firm itself that has the best available knowledge concerning safety features.[82] To deter its collection

see also Weinberger v. Bendex Pharmaceuticals, Inc., 412 U.S. 645, 654 (1973)(stating that "[t]hreshold questions within the particular expertise of an administrative agency are appropriately routed to the agency while the court stays its hand"); American Hoist & Derrick Co. v. Sowa & Sons Inc., 725 F.2d 1350, 1359 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 821 (1984)(stating, with respect to Patent and Trademark Office, that deference is "due a qualified government agency presumed to have properly done its job. which includes one or more examiners who are assumed to have some expertise."); Premo Pharmaceutical Lab., Inc., v. United States, 629 F.2d 795, 804 (2d Cir. 1980)(stating that the FDA "is usually better equipped by reason of its expertise to make the determination than the court" of a drug's safety and effectiveness.). *But see, e.g.*, Riegle Textile Corp. v. Gryc, 449 U.S. 921 (1980); O'Gilvie v. International Playtex, Inc., 821 F.2d 1438 (10th Cir. 1987); Gard v. Raymark Indus., Inc., 229 Cal. Rptr. 861, 874 (2d Dist. 1986)(stating "it cannot be said that a defendant manufacturer of asbestos is not liable for punitive damages as a matter of law simply because it followed government specifications"); Gryc v. Dayton-Hudson Corp., 297 N.W.2d 727 (Minn. 1980)(holding that product compliance with federal safety standards does not preempt state private civil remedy of punitive damages in strict liability action).

77. *See* Cipollone v. Liggett Group, Inc., 789 F.2d 181 (3d Cir. 1986), *cert. denied*, 484 U.S. 976 (1987); Kotler v. American Tobacco Co., 685 F. Supp. 15, 18 (D. Mass. 1988).

78. *See* Baird v. General Motors Corp., 654 F. Supp. 28 (N.D. Ohio 1986).

79. *See* Arkansas-Platte v. Van Waters Rogers, Inc., 981 F.2d 1177 (10th Cir. 1993). *But see* Ferebee v. Chevron Chem. Co., 736 F.2d 1529, 1540-41 (D.C. Cir. 1984), *cert. denied*, 469 U.S. 1062 (1984).

80. *See* Stamps v. Collagen Corp., 984 F.2d 1416 (5th Cir. 1993); King v. Collagen Corp., 983 F.2d 1130 (1st Cir. 1993).

81. *See* Gard v. Raymark Indus., Inc., 229 Cal. Rptr. 861, 874 n.10 (2d Dist. 1986)("Failure to inform the government of the company's knowledge of the product's hazards could possibly be construed by a trier of fact to be the kind of egregious conduct for which punitive damages should be imposed."); *see also* O'Gilvie v. International Playtex, Inc., 821 F.2d 1438, 1442 (10th Cir. 1987)(reprinting, as an accurate reflection of Kansas law, jury instruction that "even if you find that defendant . . . met all government regulations and requirements, which are minimum standards, such compliance is not a defense if a reasonable and prudent manufacturer would have taken added precautions").

82. The *Gryc* court, for example—even while holding that punitive damages are a legitimate legal tool with which to deter manufacturers from putting excessively hazardous products on the market—stated that "[m]anufacturers have a powerful hold over the means for discovering and correcting product hazards" and that "the manufacturer has virtually exclusive access to much of the information necessary for effective control of dangers facing product consumers." Gryc v. Dayton-Hudson Corp., 297 N.W.2d 727, 732-33 (Minn. 1980), *cert. denied*, 449 U.S. 921 (1980).

The reviewing court in *Grimshaw*, in reciting the evidence concerning inexpensive remedies to the hazard in the light most favorable to the judgment below, stated "[d]esign changes that would have enhanced the integrity of the fuel tank system at

of information will often be to kill the goose that lays the golden eggs. The incentives of firms to create information are less than socially optimal because information is a public good that can be transferred to others relatively easily and costlessly without the agreement or compensation of the information creator. This problem, however, is magnified by the presence of possible punitive awards. That is, firms may fail to engage in safety testing in areas that would open them up to punitive liability, preferring instead to let other companies do the research first and see if this research leads to punitive awards. If it does, the refraining firm gains a competitive advantage, and if it does not, then the refraining firm can simply use the information gained by the information creating firm for its own purposes. According to this logic, of course, each firm may reason this way, so the result is that no firm will produce this safety information.[83]

F. *The Scope of the Problem*

In order to better understand the extent of the incentives problem created by the knowledge requirement for the imposition of punitive awards, one must examine the extent of the threat punitive damages pose to manufacturing firms dealing in mass-produced items.

A recent Conference Board study of the general effects of products liability rules included a survey of CEOs representing both the largest U.S. manufacturers and manufacturers with fewer than 500 employees.[84] When asked to list effects of liability costs on their businesses based on their actual liability experience, 21 percent of the large-firm CEOs and 18 percent of the

relatively little cost per car included . . . placement of the tank over the axle at $5.08 to $5.79." Grimshaw v. Ford Motor Co., 174 Cal. Rptr. 348, 361 (1981). The court apparently ignored evidence that such a tank cannot be built into a small hatchback car such as the Pinto model involved in the *Grimshaw* case. Reply Brief and Cross-Respondent's Brief of Ford Motor Co. at 4.

83. This is why one commentator has stated that "[g]overnment regulation is the most effective institution for generating new risk information. Because information is a public good, one can argue that information costs should be shared broadly. In addition, public funding of risk-related research is an efficient method of generating risk information because it eliminates free riders." Viscusi, *Toward a Diminished Role for Tort Liability*, *supra* note 72, at 76.

84. See E. PATRICK MCGUIRE, THE IMPACT OF PRODUCT LIABILITY (1988), a study sponsored by the Conference Board. Approximately 270 usable responses were received from the large manufacturers and approximately 280 were received from the smaller manufacturers.

small-firm CEOs cited discontinued product research.[85] In another study, it was revealed that more than 85 percent of respondents to a national survey of corporate insurance buyers ranked capping noneconomic and punitive damage awards as the single most important issue facing their companies.[86]

Companies worry not only about the eventual affirmance of a punitive award, but also about the costs of litigating the issue to a final appeal[87] and the reputational costs of being associated with allegations of opprobrious conduct, over many years, in judicial and media fora,[88] including broadcasts, publications, and private watchdog groups.[89]

Also, a single large punitive award can trigger the filing of

85. *Id.* at 19-20, 34-35, Tables 28, 31, 59, and 61. However, the report does not explore in any detail why decisions were made to reduce investment in research. Little information exists about management safety investment decisions because potential defendants are no doubt reluctant to discuss the sensitive subject of what tactics they use to avoid coming to the attention of the plaintiff's bar.

A similar survey of 101 corporate executives, conducted in 1987 by Egon Zehender International of New York City, states that 62 percent of its respondents agreed that they had experienced recent constraints on innovation and experimentation, and 91 percent of these agreeing executives stated that the liability system was a major cause of the constraints. *Strict Liability Inhibits Innovation, Majority of Panelists Agree at ABA Session*, Products Safety and Liability Reporter (BNA) at 768-69 (Aug. 12, 1988).

86. See 1989 RISK MANAGEMENT SURVEY (1989), a study sponsored by A&A Government & Industry Affairs.

87. For example, a jury awarded $124.6 million in punitive damages to a man who lost an eye in a drug injection accident. The defendant, Upjohn Co., will appeal the award, but the appeals process may take as long as eight years. Michael Conlon, *Upjohn Jury Award in Eye Drug Suit Called Country's Biggest*, REUTERS BUSINESS REPORT, Oct. 21, 1991, BC cycle.

88. *See* Pacific Mut. Life Ins. Co. v. Haslip, 111 S. Ct. 1032, 1062 (1991)(O'Connor, J., dissenting)(stating "there is a stigma attached to an award of punitive damages that does not accompany a purely compensatory award. The punitive character of punitive damages means that there is more than just money at stake.").

89. There is also some evidence that the stock market can react quite dramatically to reports of judicial events. For example, the initial report of the Agent Orange lawsuit in the Wall Street Journal resulted in a $221 million loss for the Dow Chemical Company. Later litigation led to losses of $97 million, $51 million, and $179 million. The final decision by Judge Weinstein, generally viewed as favorable to the defendants, led to a $301 million boost in Dow Chemical's stock. The stock market appears to incorporate both favorable and unfavorable information as revealed, or alleged, in product liability suits. *See* W. Kip Viscusi and Joni Hersch, *The Market Response to Product Safety Litigation*, 2 J. REG. ECON. 215, 220-23 (1990); VISCUSI, REFORMING PRODUCTS LIABILITY, *supra* note 2, at 37-40.

More recently, in the 1993 case of Moseley v. General Motors, General Motors was ordered by a jury to pay a plaintiff $101 million in punitive damages and $4.2 million in compensatory damages in a design defect case involving the placement of the fuel tank in its GMC pickup truck. Estimates of the cost of either recalling the GMC trucks or appealing the issue are estimated to be between $500 million and $1 billion. Consequently, the day the verdict was announced the price of GM stock fell $1.125 per share. Michael J. McCarthy, *GM Ordered by Jury to Pay $105.2 Million Over Death*, WALL ST. J., Feb. 5, 1993, at A3.

many more claims. Lawyers realize that if they file enough claims, they may eventually hit the jackpot, and, even if they do not, the mere possibility of doing so will result in higher settlements.[90]

William Landes and Richard Posner, in a 1987 study of the use of punitive damages in product liability cases,[91] concluded that, out of a total of 359 state and federal cases sampled, punitive damages were allowed in only seven.[92] The authors also stressed that less than 3 percent of all punitive awards were eventually upheld,[93] yet they failed to reveal data concerning the number of punitive awards at the trial level. The Report of the Tort Policy Working Group on the Causes, Extent, and Policy Implications of the Current Crisis in Insurance Availability and Affordability[94] noted that the number of product liability filings between 1974 and 1985 had increased by 758 percent. These figures have been updated by the Administrative Office of the United States Courts, which reported that 1,578 product

90. *See* ISO DATA, INC., CLAIM FILE DATA ANALYSIS: TECHNICAL ANALYSIS OF STUDY RESULTS 86-87, 87-88 (1988). One sample in the study, published by the Insurance Services Office, indicates that settlements in claims where plaintiffs sought punitive damages were nearly 150 percent higher than in those where plaintiffs did not seek punitive damages, and in another the settlements were 60 percent higher due to this punitive damages "shadow effect."

Even settling a claim can lead to devastating results for a firm. When Olin Chemical Corporation decided to settle approximately 1,200 cases arising from toxic contamination in Triana, Alabama, associated with its DDT products in 1980, over 7,000 additional claims were filed within a year of the settlement announcement by a different class of claimants. Henderson, *supra* note 76, at 779. A more recent example involves a jury award of $5 million in compensatory damages and $20 million in punitive damages. The award is believed to be the largest given to date in a silicone breast implant case involving claims of defective design. Several hundred suits against the defendant, the Medical Engineering Corporation, a wholly-owned subsidiary of Bristol-Myers Squibb, had been filed before the trial began in Texas in December, 1992. Since the trial, the Harris County district clerk's office is expecting an "onslaught" of new suits. Ruth Piller, *Jury Awards $25 Million in Silicone Suit; Breast Implant Maker Must Pay for Damage by Rupture*, HOUSTON CHRONICLE, Dec. 24, 1992, at A1.

91. WILLIAM M. LANDES & RICHARD A. POSNER, THE ECONOMIC STRUCTURE OF TORT LAW 305-06 (1987).

92. The vast majority of the studied cases, from 1982 to the middle of 1985, were design defect cases. *Id.* at 303.

93. *Id.* at 302-05. A more recent study surveying 967 products liability cases determined that punitive awards were granted in 8.9% of all verdicts handed down in products liability suits. *See* Stephen Daniels and Joanne Martin, *Myth and Reality in Punitive Damages*, 75 MINN. L. REV. 1, 38 (1990). *But see* VISCUSI, REFORMING PRODUCTS LIABILITY, *supra* note 2, at 94. Viscusi conducted a computerized case search that revealed 108 products liability cases between 1970 and 1989 in which punitive damages were awarded and for which the final award actually granted to the plaintiff could be ascertained. The punitive awards averaged $2.5 million per case.

94. The report, issued in 1986 by the United States Tort Policy Working Group and commissioned by the United States Attorney General, examined, in part, product liability lawsuits in United States District Courts from 1974-1985.

claims were filed in 1974 while 19,428 were filed in 1990, a 1,230 percent increase.[95]

The upward trend in award verdicts is also quite steep. From 1980 to 1987, the average verdict rose from $565,000 to $1.3 million and the median verdict—less subject to the influence of aberrationally large awards—increased over the same period from $225,000 to $430,000. In contrast to the overall increase in consumer prices of 38 percent, the average tort verdict rose by 135 percent and the median verdict rose by 91 percent, revealing that the increase in product liability awards rose much faster than the overall rate of inflation in the 1980s.[96] Although this data does not separate out punitive awards from compensatory awards, Landes and Posner, in their study, point out that the average award of punitive damages was slightly greater

95. *See* For the Defense, October 1991, at 6. While these figures only address federal claims, filings at the state level are, according to the RAND Corporation, "almost certainly several times greater than federal filing levels." TERENCE DUNGWORTH, PRODUCT LIABILITY AND THE BUSINESS SECTOR: LITIGATION TRENDS IN FEDERAL COURTS (1988). This increase cannot be attributed to a general upward trend in litigation because the product liability share has also risen as a percentage of all civil cases. Whereas the product liability component of all civil cases was only two percent in 1975, it had risen to six percent by 1987, these two comparison years being representative of the overall trend. *See* REPORTER'S STUDY, *supra* note 3, at 267. While the greatest growth by far has been due to asbestos claims, which rose in number from 49 in 1975 to 7,774 in 1987 and was responsible for more than half of all product liability litigation in the federal courts, there has nevertheless been a great increase in suits not involving asbestos. Suits involving other types of products have generally more than tripled since 1975. *Id.* at 267-68; *see also* DUNGWORTH, *supra*, at 20, 42.

A United States General Accounting Office study of 305 product liability cases filed from 1983 to 1985 in five states showed that 108, or 35%, sought punitive damages. UNITED STATES GENERAL ACCOUNTING OFFICE, PRODUCTS LIABILITY—VERDICTS AND CASE RESOLUTIONS IN FIVE STATES 29 n.12 (1989). Furthermore, according to this limited study, these awards are often upheld, in whole or in part, by appellate courts. *Id.* at 38.

One court noted recently that the vaguer the standards for the imposition of punitive damages, the more likely punitive claims will go to trial. *See* Owens-Illinois v. Zenobia, 601 A.2d 633, 650 (Md. 1992)("The irrational and inconsistent application of a punitive damages standard undermines the objective of deterrence because persons cannot predict, and thus choose to abstain from, the type of behavior that is sanctioned by a punitive damages award."). However, it may be that cases likely to result in punitive awards are more likely to be settled than other cases because firms may want to keep allegations of conduct deserving punitive sanctions out of public view. If so, cases reaching the trial stage in which punitive damages are awarded will not reflect the total number of cases in which punitive claims are important.

96. REPORTER'S STUDY, *supra* note 3, at 270-71. See also the REPORT OF THE TORT POLICY WORKING GROUP, *supra* note 94, according to which the average jury verdict in products liability cases had grown from $394,000 in 1974 to $1.85 million in 1985, an increase of 470 percent—well above the rate of inflation. This statistic reveals that plaintiff's lawyers, while they may have a statistically poor chance of winning a future final verdict, believe they have a much better chance of extracting substantial settlements from defendants after filing an initial suit.

than the average compensatory damages award.[97]

Insurance premiums rose substantially during the 1980s as well, but as punitive damages cannot generally be insured against on policy grounds, firms' insurance rate increases do not affect the analysis here.[98] Ironically, despite the rise in the size and frequency of punitive awards over the past decade, one scholar, after looking at injury and death statistics, has concluded that "aggregate statistics show no substantial reduction in product-related accidents since 1970 despite the enormous expansion of products liability."[99]

II: The Privilege of Self-Critical Analysis

One way to avoid the problems created by the information gap produced by the knowledge requirement for the imposition of punitive awards is to extend to firms a privilege against the disclosure of safety testing information when plaintiffs assert claims for punitive damages. The role of privileges in discovery is recognized in the Federal Rules of Civil Procedure. The Rules limit discovery to "any matter, not privileged, which is relevant to the subject matter involved in the pending action."[100]

Parties asserting privileges during discovery must overcome strong barriers,[101] such as the general rule that the public "has a right to every man's evidence."[102] However, the judicial determination of whether a privilege should be recognized inevitably involves a balancing test weighing the public interest in confidentiality against the public and private interests in seeing the information discovered.[103] Historically, privileges have

97. Landes & Posner, *supra* note 91, at 305-06.

98. *See generally* Reporter's Study, *supra* note 3, at 272.

99. *See* George L. Priest, *Products Liability Law and the Accident Rate*, *in* Liability: Perspectives and Policy 220-21 (Robert E. Litan & Clifford Winston eds., 1988).

100. Fed. R. Civ. P. 26(b)(1).

101. *See* United States v. Nixon, 418 U.S. 683, 710 (1974)(stating that privileges "are not lightly created nor expansively construed, for they are in derogation of the search for truth").

102. United States v. Bryan, 339 U.S. 323, 331 (1950)(quoting 8 John H. Wigmore, Evidence § 2192 (3d ed. 1940)). However, the Supreme Court has also stated that privileges can be justified when there is "a public good transcending the normally predominant principle of utilizing all rational means for ascertaining truth." Trammel v. United States, 445 U.S. 40, 50 (1980).

103. Judge Weinstein has elaborated a balancing test for determining if the need for disclosure outweighs the public interest in confidentiality. *See* United States v. King, 73 F.R.D. 103, 105 (E.D.N.Y. 1976). In Kansas Gas and Elec. v. Eye, 789 P.2d 1161, 1167-68 (Kan. 1990), the court held that confidential information, part of a program to en-

been recognized when the public interest weighs heavily in favor of protecting confidentiality.[104]

The development of privileges in federal courts is governed by Rule 501 of the Federal Rules of Evidence, which reflects the intent of Congress that privilege doctrine be readily adaptable to different situations.[105] Because privilege questions generally arise amid discovery requests, privilege doctrine has been formulated almost exclusively by trial courts.

One recognized privilege, the privilege of self-critical analysis, attempts to assure evaluators and those who receive their information that their analyses will not be subject to manipulation by counsel in the future, or subject to unrealistic tests applied post hoc. It also helps reduce the possibility that evaluations will be tempered due to the fear that, if frankness leads to harsh consequences for the firm, there will be reprisals by management, or that the profitability of the firm will be reduced by a massive punitive judgment. As the risk of a firm's liability increases, the likelihood that safety engineers will render unadulterated opinions decreases. As one commentator has put it, the privilege protects against "a direct chilling effect on the institutional or individual self-analyst; this effect operates to discourage the analyst from investigating thoroughly

---

courage whistle-blowers, must be disclosed to the public unless injury caused by disclosure is greater than the benefits conferred by disclosure and that, under a balance of interests test, the public has an overriding interest in the dissemination of vital information concerning the safety of nuclear power plants.

104. *See* 4 JAMES W. MOORE ET AL., MOORE'S FEDERAL PRACTICE ¶ 26.60[3] (2d ed. 1982)("The public interest may be a reason for not permitting inquiry into particular matters by discovery."). Any business seeking protection of documents, however, in light of its greater knowledge concerning its studies, its methodologies, and the types of information it contains, should probably bear the burden of proof in showing that the public interest requires that certain information remain confidential.

105. *See* University of Pa. v. EEOC, 493 U.S. 182, 189 (1990)(stating that Rule 501 reflects Congress' intent to allow courts "flexibility to develop rules of privilege on a case by case basis").

Rule 501 states that "in civil actions and proceedings, with respect to an element of a claim or defense as to which State law supplies the rule of decision, the privilege of a witness, person, government, State, or political subdivision thereof shall be determined in accordance with State law." FED. R. EVID. 501. Thus, Rule 501 requires federal courts to look to state law for guidance on the recognition of privileges, at least in a diversity case and when state law provides the rule for decision. When federal courts are not required to rely on state law, and federal law governs, they may develop new privileges "in light of reason and experience" and "the federal common law of privileges will govern." FED. R. EVID. 501; *see also* Everitt v. Brezzel, 750 F. Supp. 1063, 1066 (D. Colo. 1990). Where there are both federal and state law claims, federal rather than state privileges apply to all claims. *See* Wei v. Bodner, 127 F.R.D. 91, 94 (D.N.J. 1989).

and frankly or even from investigating at all."[106] This effect was recognized in *Gillman v. United States*,[107] in which the court stated that, if discovery were allowed, constructive analysis "would be suppressed for fear of the consequences" and that "directors of hospitals might find it more expedient, in such event, to have no official inquiry at all to the detriment of the safety of the hospital."

One commentator has summarized the criteria that must be met before a privilege of self-critical analysis is recognized. First, "the information must result from a critical self-analysis undertaken by the party seeking protection." Second, "the public must have a strong interest in preserving the free flow of the type of information sought." Finally, "the information must be of the type whose flow would be curtailed if discovery were allowed."[108]

Each of these three prongs applies to documentation developed by firms in the course of evaluating the safety of their products. The public has a strong interest in preserving the free flow of this type of information, because, as developed earlier,[109] only firms themselves or regulatory agencies—but not courts—are in the best position to develop safety information. And, also as developed earlier,[110] in the punitive damages context, without this privilege this type of information may dry up, or at least shrivel to suboptimal quantities.

The privilege of self-critical analysis can be applied to a variety of different documents, provided only that these documents meet the requirements of the privilege. Still, the privilege of self-critical analysis "remains largely undefined and has not generally been recognized by many authorities."[111]

106. Comment, *The Privilege of Self-Critical Analysis*, 96 HARV. L. REV. 1083, 1091, 1092 (1983).

107. 53 F.R.D. 316, 318 (S.D.N.Y. 1971).

108. Comment, *supra* note 106, at 1086.

109. *See infra* Part I.E.

110. *See infra* Part I.C.

111. Guardian Life Ins. Co. v. Service Corp. Int'l, Civ. A. No. 87-1280 T, 1989 WL 3496, at *3 (E.D. Pa.); *see also* Dowling v. American Hawaii Cruises, Inc., 971 F.2d 423, 426 (9th Cir. 1992)(citing University of Pa. v. EEOC, 493 U.S. 182, 188-95 (1990)("The Supreme Court and the Circuit courts have neither definitively denied the existence of such a privilege, nor accepted it and defined its scope. Rather, when confronted with a claim of privilege, they have refused on narrow grounds to apply it to the facts before them.")).

A. *The Privilege and Safety Evaluation*

Courts have been willing to extend privileges to protect evaluative information in the context of the provision of medical care far more readily than in the context of the provision of goods,[112] even though for-profit hospitals make the same cost-benefit decisions on safety that product manufacturers do.[113] Just as consumers place themselves in the care of medical providers, they also place themselves in the care of product providers. Incentives should be created for allowing these providers to produce the socially optimal amount of safety information—that is, to produce information up to the point at which the marginal costs of the additional information equals the additional benefits of the information, measured, at least in part, by the amount of compensatory damages thereby avoided.

The judicial system has entrusted the medical profession to invest adequately in safety even when practicing for profit and enjoying immunity from liability. Individual doctors are held liable for deviating from standards established by the profes-

112. State statutes reveal this bias as well. While several of the cases to be discussed involve state statutes protecting the confidentiality of safety committee reports in the medical setting, a recent court rule adopted in Texas indicates a trend toward making information produced as a result of product safety testing even more susceptible to forced disclosure.

Rule 166b(5) of the Texas Rules of Civil Procedure authorizes the issuing of orders to protect the discovery and revelation of information "in the interest of justice necessary to protect the movant from undue burden" or from an "invasion" of its property rights. TEX. R. CIV. P. 166b(5). A Texas Appeals Court recently approved such orders in an automobile product liability case to protect General Motors' "development and testing" and other "confidential business information" from "indiscriminate disclosure." Dunshie v. General Motors Corp., 822 S.W.2d 345, 346 (Tex. App. Beaumont 1992). A new rule, however, states that "court records, as defined in this rule, are presumed to be open to the general public," placing the burden to rebut this presumption on the defendant seeking to keep such documents confidential. TEX. R. CIV. P. 76a(1). "Court records" are defined, in part, as "discovery, not filed of record, concerning matters that have a probable adverse effect upon the general public health or safety. . . ." TEX. R. CIV. P. 76a(2)(c). Such a broad, almost standardless rule, although unique to Texas, may make available to plaintiffs nationwide documents determined to be "court records" in Texas suits. Rule 76a has forced auto companies to make public sensitive documents they had sought to seal. *See* Order No. 91-003605, March 15, 1992 (protective order issued by Judge Cochran, 270th District Court, Harris County, Texas).

A federal bill similar to Rule 76a, making it more difficult for corporate defendants in product liability cases to keep internal documents under seal, has recently won the backing of one senator on the Judiciary Committee, who plans to formally introduce it later this year. *Product-Liability Groups Take Up Arms*, WALL ST. J., Jan. 29, 1993, at B1.

113. *See* Bundy v. Sinopoli, 580 A.2d 1101, 1106 (N.J. 1990)("The Peer Review Process is not motivated by a purely altruistic desire to improve health care. However, the purpose of the process is self-evaluation and health care improvement. The court must, therefore, characterize the Peer Review Process as a self-critical process."). The same reasoning could apply to firm safety testing decisions.

sion, just as manufacturers are liable for manufacturing defects that deviate from their own design plans. Yet traditionally, the medical professional standards themselves are not reviewed by the courts.[114]

Federal courts have done the most to recognize the privilege of self-critical analysis,[115] and in *Bredice v. Doctors Hospital, Inc.*,[116] a federal district court, the first to recognize the privilege, put forth the most-quoted statement on the privilege of self-critical analysis in a medical malpractice case. *Bredice* extended the privilege to cover the minutes of a committee meeting in which staff members were asked for their frank analyses of hospital procedures. The purpose of the meetings and the resulting reports was solely to improve the available care and treatment of patients in accordance with requirements of a hospital accreditation commission. Emphasizing that confidentiality is essential to the free flow of information that protects the public interest in better health care, the court stated that, in the long run, denying the privilege to hospital committees would lead to the suppression of more information than the extension of the privilege, thus reducing the amount of information available not only to private parties, but also to courts themselves.[117] The court added that "[t]o subject these discussions and deliberations to the discovery process, without a showing of exceptional necessity, would result in terminating such de-

114. *See generally* Allan McCoid, *The Care Required of Medical Practitioners*, 12 VAND. L. REV. 549, 608 (1959). McCoid states that "[a] large measure of judgment enters into the practice" of medicine, and if the physician is "to be judged by some outsider who relies on after-acquired knowledge of unsatisfactory results or unfortunate consequences in reaching a decision as to liability, the medical judgment may be hampered and the doctor may become hesitant to rely upon his developed instinct in diagnosis and treatment." This same reasoning can be applied to manufacturers and the judgments they cast in safety testing and design decisions. *See also* Richard N. Pearson, *The Role of Custom in Medical Malpractice Cases*, 51 IND. L.J. 528 (1976).

115. Some state courts have recognized the privilege as well. *See, e.g.*, Palmer v. City of Rome, 466 N.Y.S.2d 238, 239-40 (N.Y. Sup. Ct. 1983); Posey v. District Court, 586 P.2d 36, 37-38 (Colo. 1978); Tuscon Medical Ctr., Inc. v. Misevich, 545 P.2d 958, 961-62 (Ariz. 1976); Oviatt v. Archbishop Bergan Mercy Hosp., 214 N.W.2d 490, 491-92 (Neb. 1974). While the privilege has often been recognized in state courts only when statutes protecting information circulated among committees—medical review committees, for example—have been enacted legislatively, these courts also draw on the broad public policy of encouraging frankness in the review process by protecting evaluations.

116. 50 F.R.D. 249 (D.D.C. 1970), *aff'd*, 479 F.2d 920 (D.C. Cir. 1973).

117. The court stated that confidentiality "is essential to effective functioning of these staff meetings; and these meetings are essential to the continued improvement in the care and treatment of patients." *Id.* at 250; *see also* Mewborn v. Heckler, 101 F.R.D. 691 (D.D.C. 1984); Dade County Medical Ass'n v. Hlis, 372 So.2d 117, 118-20 (Fla. 1979) (both holding that reviews of medical and patient-care procedures should be privileged).

liberations" and concluded that the confidentiality of the staff meetings preserved "the unimpeded flow of ideas and advice, thereby fostering physicians' knowledge of up-to-date information and techniques."[118] As one commentator stated, the opinion recognized that "[l]ong-term accessibility to vital information must not be sacrificed on the altar of immediate discovery needs."[119]

In *Scott v. McDonald*,[120] a diversity medical malpractice case, the court applied a Georgia statute that protected hospital medical review proceedings from discovery. The statute was a codification of the *Bredice* result, and the court recognized the reasons in favor of protecting the confidentiality of a hospital's own in-house reviews. In *Bundy v. Sinopoli*,[121] the court held, in a medical malpractice claim, that opinions, criticisms, or evaluations contained within peer review committee files are protected by the privilege of self-critical evaluation, qualifying this holding by stating that the court would conduct an in camera review of the files to see if the plaintiff had a particularized need for the materials. The court based the privilege in a statute that gave immunity to peer review committee members for actions they took in the review process, but that did not provide a privilege against discovery of peer review materials. The court, however, held that the reasons for the statute's provision for immunity were equally applicable to the protection of review documents from discovery. The court stated that the committee members "may determine as a result of such a meeting that no real problem exists or it may conclude that a physician requires additional training or supervision . . . ."[122] Similarly, product testing decisions may result in either acting on the new tests or not acting on them; these decisions affect public safety as well. The court added that "liberal discovery philosophy should not . . . encompass matters protected by any applicable privilege."[123]

B. *Application of the Privilege in Design Defect Cases*

Judicial justifications for the privilege of self-critical analysis

118. *Bredice*, 50 F.R.D. at 250, 251.
119. Comment, *supra* note 106, at 1088.
120. 70 F.R.D. 568 (N.D. Ga. 1976).
121. 580 A.2d 1101, 1106 (N.J. 1990).
122. *Id.* at 1103.
123. *Id.* (citing Dickson v. Rutgers, 541 A.2d 1046 (N.J. 1988)).

are often based on policies readily applicable to products safety decisions.[124] The judicial embrace of efficiency arguments has been explored in a recent empirical analysis of judicial reasoning in products liability decisions.[125] The study reveals that judges relying on fairness arguments quoted other authorities or past cases to justify their decisions forty percent of the time, while judges drawing on efficiency arguments quoted other authorities for justification only twenty-three percent of the time,[126] and when they used efficiency arguments they tended to be more specific in their analysis and to use their own words.[127] The author speculated that this indicates judges have more trouble articulating the reasons behind fairness arguments than efficiency arguments.[128] This research should encourage defense counsel—in advocating the extension of the privilege to information privately produced in the course of safety testing procedures when punitive damages loom—to draw on past judicial pronouncements on the efficiency of the privilege of self-critical analysis.

If courts admit design documents liberally and if plaintiffs are prone to misuse them successfully, manufacturers will tend to test and design conservatively. If such evidence is generally excluded when requests for punitive damages are involved, however, the rules of strict liability will remain in place and continue to induce manufacturers to invest in product safety at the socially optimal level—the level at which the marginal cost

124. *See* Hardy v. New York News, Inc., 114 F.R.D. 633, 640 (S.D.N.Y. 1987)("Generally, the privilege of self-critical analysis is based upon the concern that disclosure of documents reflecting candid self-examination will deter or suppress socially useful investigations and evaluations or compliance with the law or with professional standards."); O'Connor v. Chrysler Corp., 86 F.R.D. 211, 217-18 (D. Mass. 1980)("[T]he incentives for any institution to engage in self-evaluative investigation pale considerably with the knowledge that the results may be used against it."); Banks v. Lockheed-Georgia Co., 53 F.R.D. 283 (N.D. Ga. 1971)("[T]o allow the plaintiffs access to the written opinions and conclusions . . . would discourage companies . . . from making investigations which are calculated to have positive effect.").

125. *See* James A. Henderson, Jr., *Judicial Reliance on Public Policy: An Empirical Analysis of Products Liability Decisions*, 59 GEO. WASH. L. REV. 1570 (1991).

126. *Id.* at 1592.

127. *Id.* at 1593.

128. *See also* Drabik v. Stanley-Bostitch, Inc., 796 F. Supp. 1271, 1273 n.2 (W.D. Mo. 1992)("It may be acknowledged that my comments may have been influenced by public policy questions. It seems extraordinary and very possibly unsound for a single jury to have authority, by granting punitive damages, to 'send a message' to an entire industry, designed to stop production and sale of commonly used carpentry equipment. I have concluded, however, that such questions should be resolved by legislation, administrative regulation, or by common law rulings by appellate courts having authority to establish local tort law.").

of the investment in design information equals the marginal costs avoided of accidents causally related to the product.[129]

David Owen has suggested that, by adopting appropriate safeguards, "the courts can help prevent manufacturers from being discouraged from generating and retaining complete records of a product's development, and thereby they can also advance the goals of product safety and compensation in proper suits."[130] Owen did not suggest any of these safeguards himself. The courts, however, should implement one such safeguard by applying the rationales offered to justify the privilege of self-critical analysis in the settings in which it is already established to the products liability context when punitive damages are at issue.[131]

It should be stressed that the need for the privilege against self-evaluation arises in the product liability context *only* where punitive damages are sought. When punitive damages are not at issue, the pressures of the market can be relied on to make sure that firms invest in an optimal amount of research—that is, that firms do enough preventive research to ensure that the profits coming in from the product outweigh the costs of the compensatory damages they will have to pay under a strict liability regime. But the existence of punitive damages in design defect cases, and the increased chance of their application due to the knowledge requirement, means that firms will refrain from doing some testing under the threat of punitive damages that they would have done if they were not under such a threat. Applying the privilege to safety testing and design evaluations when punitive damages are at issue will greatly reduce the threat to firms of punitive damages and thus will reduce their incentive not to generate more information through additional

129. *But see* Dowling v. American Hawaii Cruises, Inc., 971 F.2d 423, 427 (9th Cir. 1992)("A rule that manufacturers' reviews of the safety of their products are privileged from discovery would place a nearly insurmountable barrier in front of plaintiffs who must prove malice in order to obtain punitive damages in product liability actions.").

The *Dowling* court stated that "it is perverse to assume that the candid assessments necessary to prevent accidents will be inhibited by the fear that they could later be used as a weapon in hypothetical litigation they are supposed to prevent." *Id.* at 427. This statement, however, cuts against the argument here presented and would be incorrect when large punitive damage claims are made.

130. Owen, *supra* note 39, at 19.

131. *But see* Gray v. Bd. of Higher Educ., 692 F.2d 901, 904 (2d Cir. 1982)(noting that "in resolving the tensions between the opposed needs of disclosure and confidentiality we are reminded that the discovery rules are to be accorded broad and liberal treatment, particularly where proof of intent is required" (citing Herbert v. Lando, 441 U.S. 153, 170-75 (1979))).

research and testing. An examination into a firm's research and design data may be necessary, however, to prove the elements of causation and fault in a strict liability claim for compensatory damages; therefore, the privilege should not be extended to cover claims for compensatory damages.[132]

One commentator has suggested that the application of the privilege may not serve the public interest in certain circumstances.[133] For example, "the primary purpose of the study must not have been to improve the efficiency of the business" because "that study will generally be conducted even without protection from subsequent disclosure. The privilege is therefore not needed in such cases."[134] However, as has been argued above, when future punitive damage awards threaten a firm, it will be forced to consider more than the costs its products impose on others in the form of compensatory damages. Because firms will face additional, often much larger, punitive awards as well, they may decide not to produce information through safety testing that would have led to fewer future compensatory payments in order to reduce the likelihood that a much larger punitive payment will have to be made by limiting the size of its research paper trail. Thus, the privilege *is* needed when punitive damages are at issue. Again, under strict liability without punitive damages, companies have an incentive to increase profits by minimizing compensatory payments. This is not the case where punitive damages are concerned.

Few judicial moves have been made toward extending the privilege to cover safety decisions. In *Richards v. Maine Central Railroad*,[135] a post-accident investigation by a railroad company was held privileged.[136] However, more recently, in *Dowling v. American Hawaii Cruises, Inc.*,[137] the court held that, in a negligence action involving an injury suffered by an employee, min-

132. See Robert v. Carrier Corp., 107 F.R.D. 678, 684 (N.D. Ind. 1985), in which, since some of the reports in question apparently were produced to assist design engineers in remedying a design defect, the court believed that allowing the protection of such documents from discovery in products liability suits would defeat the policies behind the privilege and would allow manufacturers to cover up critical evidence concerning defective products.

133. David P. Leonard, *Codifying a Privilege for Self-Critical Analysis*, in 25 HARV. J. ON LEGIS. 113 (1988).

134. *Id.* at 132.

135. 21 F.R.D. 593 (D. Me. 1957).

136. *But cf.* Jolly v. Superior Court, 540 P.2d 658, 662-63 (Ariz. 1975)(holding safety inspections not privileged).

137. *See supra* note 111.

utes from a safety committee meeting on working environment safety hazards were not protected by the privilege of self-critical analysis.[138] The court added that "reviews will rarely, if ever, be curtailed simply because they may be subject to discovery."[139] The court argued that its refusal to extend the privilege would not inhibit similar safety reviews because

> a reputation for safety renders a product more marketable. It is noteworthy that automobile and other manufacturers continue to conduct such reviews despite the infamous cost-feasibility memorandum that subjected Ford Motor Company to enormous punitive damages in Grimshaw v. Ford Motor Co.[140]

While a reputation for safety makes a product more marketable, the allegation that punitive damages should be applied to a firm harms the reputation of firms. If a firm believes it will increase the chances that its reputation will be greatly harmed amidst claims for punitive damages if it leaves a longer paper trail, it might believe it best to refrain from additional testing and risk a larger chance of a less reputationally damaging, and often less expensive, compensatory damages suit.

The *Dowling* court added that, even if such a privilege existed, "the justifications for it do not support its application to voluntary routine safety reviews. First, such reviews will rarely, if ever, be curtailed simply because they may be subject to dis-

138. The court held that a contrary ruling by the lower court was an abuse of its discretion. *Cf.* Lloyd v. Cessna Aircraft Co., 74 F.R.D. 518, 522 (E.D. Tenn. 1977)(permitting discovery in negligence action of information addressing quality of company's products).

139. Dowling v. American Hawaii Cruises, Inc., 971 F.2d 423, 426 (9th Cir. 1992). No punitive damages, however, were demanded in the case. *But see* Wylie v. Mills, 478 A.2d 1273 (N.J. 1984)(holding, in action by injured corporate employee who sought production of in-house corporate report on the accident, public policy demands that the evaluative, but not the factual, aspects of the report—which discussed whether the corporation should alter its procedures to prevent future employee injuries—were covered by the privilege of self-critical evaluation). The *Wylie* court stated that "[i]f the public policy of safety improvements in practice and procedures is to be encouraged, the 'public need for disclosure' for the individual must give way. This is especially so if such improvements are to continue to develop" and "[v]aluable criticism can neither be sought nor obtained nor generated in the shadow of potential or even possible public disclosure" in a subsequently litigated matter. *Id.* at 1273. The court also stated that "[t]he doctrine of 'privileges' is dynamic in nature not static," adding that a privilege develops when the public need for disclosure is outweighed by the public need for confidentiality of information. *Id.* at 1276. The *Wylie* court also stated that "[i]t is clear that the reliability of the input in this situation varies inversely with the risk of disclosure of the input or resulting criticisms." *Id.* at 1277.

140. *Dowling*, 971 F.2d at 426 (citing Grimshaw v. Ford Motor Co., 174 Cal. Rptr. 348 (1981)).

covery . . . . The most prominent of these is surely the desire to avoid law suits arising from unsafe conditions."[141] However, while an efficient incentive structure is created when firms must consider all the costs of their actions, punitive damages that exceed what is required for compensation create the incentive for firms to depart from a calculation of liability formulated to minimize accident costs, and to look also at their increased vulnerability to punitive damages when they perform, and record, additional safety tests.

Finally, one might also ask whether a claim of protection can be used by those calling for production as evidence of knowledge in punitive damages claims. In *Angotti v. Celotex Corporation*,[142] the court held that an asbestos manufacturer's desire to keep confidential an occupational disease consultant's warning that the possible adverse affects of asbestos were formidable did not reveal actual knowledge of the health hazard to asbestos insulators.

C. *The Issue of Fact Versus Opinion*

Courts often interpret the privilege of self-critical analysis to protect the evaluative but not the factual portions of documents. Courts have held that the reasons justifying the privilege against self-evaluation do not support the confidentiality of factual information that is independently replicable, as if often the case with statistics.[143] One commentator has argued that replicability reduces the likelihood that an evaluator will fail to undertake an investigation for fear of reprisals because "by definition, the party seeking discovery could reconstruct the self-analyst's work without discovery."[144] Another commentator has stated that the privilege should only apply to "subjective evaluations," and not "objective type[s] of information," such as facts, because these are "readily verifiable and often available notwithstanding the privilege."[145] Who determines what is "readily verifiable" is an important question with

141. *Id.*

142. 812 S.W.2d 742 (Mo. 1991).

143. *See* Dickerson v. United States Steel Corp., 12 Empl. Prac. Dec. (CCH) ¶ 11,095, at 5070-71 (E.D. Pa. 1976)(stating that "allowing discovery of statistical information will not impair the government's affirmative action policies since the quality of statistics does not depend to any great extent on the employer's voluntary cooperation, and statistics can easily be checked on a random basis.").

144. Comment, *supra* note 106, at 1094.

145. *See* Paul A. Weiss, *Who's Watching the Watchdog?: Self-Evaluative Privilege and Jour-*

several implications. If a firm fails to conduct tests, fearing an increased likelihood of future liability, then either the courts or private parties will be forced to expend the resources to "reconstruct" the appropriate tests, a role for which both courts and private litigants are ill-suited. Product testing can be very expensive. Crash testing cars costs more than the price of the car alone. Thus, in many cases, if a firm does not conduct a test, private litigants will presumably not have the expertise, or the resources, to do so.

Also, restricting the privilege to "subjective evaluations" may simply encourage firms to couch safety evaluations in vague terms, with reference to "gut feelings" rather than empirical data resulting from actual testing. What can be categorized as factual or evaluative is often ambiguous. While the data gathered in additional tests may be subject to objective verification, the decision to administer or not administer particular additional tests may not. As Owen has stated, although much safety research decisionmaking involves the application of proven scientific principles, "much is art, and some by its nature can be little more than trial and error."[146]

Some courts have also held that the privilege of self-critical analysis protects only those evaluations that the law requires one to make.[147] However, if information required to be produced should be protected, then, *a fortiori*, information not required by law to be produced—and which may not be produced at all if not protected—should be protected.

When the question arises whether certain documents should be afforded the privilege, an in camera inspection by a judge could be used to screen out any information that does not directly indicate that a firm had "knowledge" of a particular haz-

nalistic Responsibility in Westmoreland v. CBS, Inc., 7 HASTINGS COMM. & ENT. L.J. 149, 161 (1984).

146. Owen, *supra* note 39, at 25.

147. *See* Robert v. Carrier Corp., 107 F.R.D. 678, 684 (N.D. Ind. 1985)(stating that documents produced "in the regular course of . . . business" containing product evaluations are not entitled to protection of the privilege if they were not produced for government-required reports). *But see* Ashley v. Uniden Corp. of America, Civil No. SA-84-CA-2383, 2-3 (W.D. Texas July 23, 1986)(order denying motion to compel documents required by the government to be filed with the Consumer Products Safety Commission, stating that "[t]he need to encourage full and frank disclosure of information to the government regarding defective products is of crucial importance to the consuming public. The success of the reporting scheme would be severely undercut if manufacturers feared that their frank disclosures might be used against them in lawsuits.").

ard.[148] In cases where the same judge who screens documents during discovery will be the finder of fact at trial, a magistrate could be called in to inspect the documents.[149] Qualifications, however, should not be placed on the privilege because the more qualifications that are placed on the privilege, the more likely it will be that a firm will be deterred from producing safety information.[150]

CONCLUSION

A firm facing current law governing the imposition of punitive damages in products liability suits may refrain from conducting additional product safety tests—even if the costs of the tests and the resulting safety alterations are less than the expected reduction in compensatory damage liability. This will be so if the gains it expects in the form of reduced compensatory damage liability is less than its increased expected punitive liability costs due to the body of evidence left by the safety re-

148. In camera inspection was used to differentiate protected from unprotected materials in Dickerson v. United States Steel Corp., 12 Empl. Prac. Dec. (CCH) ¶ 11,095, at 5070-71 (E.D.Pa. 1976). In camera inspection is commonly used in privilege cases. *See, e.g.*, Kerr v. United States District Court, 426 U.S. 394, 406 (1976); Dykes v. Morris, 85 F.R.D. 373, 377 (N.D.Ill. 1980). Cases involving the privilege of self-critical analysis and in camera inspection include EEOC v. University of Notre Dame Du Lac, 715 F.2d 331, 338 (7th Cir. 1983), *cert. denied* 476 U.S. 1163 (1986); O'Connor v. Chrysler Corp., 86 F.R.D. 211, 218 (D. Mass. 1980); Rosario v. New York Times Co., 84 F.R.D. 626, 631 (S.D.N.Y. 1979). This process has the virtue of initially screening complicated information before it reaches the jury.

149. *See O'Connor*, 86 F.R.D. at 218 ("Were it not for the resulting increase in commitment of scarce judicial resources . . . it would be preferable that the in camera examination be done by a hearing officer, judge or magistrate, other than the judge who is to try the case.").

150. Congress has mandated that privileges be developed on a case-by-case basis. *See* S. REP. No. 1277, 93d Cong., 2d Sess. 13 (1974)(declaring that "the recognition of a privilege . . . should be determined on a case-by-case basis."). As the Comment in the Harvard Law Review points out, however, this directive "does not . . . imply that privileges must be applied on a case-by-case basis. In fact, to apply the privilege of self-critical analysis in such a manner is to risk its evisceration." Comment, *supra* note 106, at 1097. The Supreme Court has noted, for example, that the purposes of the attorney-client privilege can be served only provided that the attorney and the client "must be able to predict with some degree of certainty whether particular discussions will be protected. An uncertain privilege, or one which purports to be certain but results in wildly varying applications by the courts, is little better than no privilege at all." Upjohn Co. v. United States, 449 U.S. 383, 393 (1981). The Comment further suggests that the privilege of self-critical analysis should be applied in the same way as privileges, such as the attorney-client privilege, were applied under the common law of evidence. That is, courts should not weigh the equities—such as the plaintiff's exceptional need for the information sought to be protected—in each case to determine whether protection was justified, but rather determine if the type of information under consideration meets the general criteria of the privilege. Comment, *supra* note 106, at 1098.

search tests and the added litigation or settlement costs the introduction of the punitive damages issue will create. This is more likely to be the case the larger the expected punitive award and the larger the likelihood that the firm will meet the knowledge criteria justifying the levying of punitive damages. Because punitive awards can be extremely large, often many times the size of compensatory awards, even a small increase in the probability that punitive sanctions will be imposed may encourage firms not to create the sorts of paper trails on which many courts and juries have focussed in imposing punitive awards. Because courts are not well suited to evaluate the sorts of complex risk analysis decisions firms "should have," but did not, perform, courts should extend to firms a privilege against the production of safety testing information when they face claims for punitive damages. Such action will encourage firms to engage in optimal levels of safety testing leading to the production of safer products.