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I. INTRODUCTION

Environmental tort litigation often reveals causal indeterminacy on both sides of the caption: indeterminate plaintiffs and indeterminate defendants. A cardinal tenet of traditional tort law liability rules is that the plaintiff must prove that the defendant's conduct was a producing cause of the harm suffered. In the conventional sporadic accident case, identifying the responsible defendant is usually not difficult because of the availability of physical or direct evidence that implicates a particular defendant. In toxic and environmental harm cases, however, the chemical agent or polluting source often does not come branded or trademarked with the defendant's name. While defendant or source indeterminacy arose occasionally in products liability cases and accident cases, the frequency and difficulty of source indeterminacy in environmental and toxic torts create new demands on the courts to develop rules that continue to fulfill the objectives of tort law.

Several courts in diverse circumstances have found plaintiff-favorable procedural or substantive law means to permit the plaintiff to recover against single members of a pool of indeterminate defendants. The situations in which such recoveries would be permitted have been quite limited, largely because courts have, to date, confined application of these legal devices to suits involving products that were identical in chemical composition. Put another way, since a molecule of diethylstilbestrol ("DES") is identical to any other molecule of DES, many courts felt free to attach some form of proportionate liability to all negligent manufacturers of DES, even though the producer of the DES ingested by the mother of a particular plaintiff could not be determined. In contrast, as asbestos is not one mineral but rather a family of distinguishable minerals, each with a different disease causing potential, even courts that adopted novel approaches to
DES litigation refused to apply these procedures to asbestos litigation.

This article describes two recent decisions that could foretell new and more liberal approaches to market share liability. In one suit involving a child who suffered lead paint poisoning, the Wisconsin Supreme Court, applying that state’s law, held that for application of market share liability, it was not necessary that the paint, as marketed by numerous manufacturers over the years, be identical, which of course it was not. Instead, the court held it was sufficient that the bio-accessibility of the toxic component, lead carbonate, be identical in each defendant’s products, which it was. In the second decision, a New York federal trial judge in a multi-district litigation involving methyl tertiary butyl ether (“MTBE”) specified numerous jurisdictions she anticipated would apply market share liability to MTBE suits, even though the concentrations of MTBE, and thus their toxicity, varied in virtually every suit.

The article concludes with a discussion of the potential applicability of these two innovative decisions to litigation involving other products or processes and, more broadly, the effect that any such applicability might have to the certainty, fairness, and predictability of toxic tort litigation.

II. SINDELL V. ABBOTT LABORATORIES

A. The Path to Sindell

Traditional principles of tort law require proof, by a preponderance of the evidence, that a plaintiff suffered an injury caused by a particular defendant’s conduct. In the conventional sporadic accident case, identification of responsible defendants is not difficult, as causation can be determined by the availability of physical or direct evidence that implicates a particular defendant.

1. See discussion infra Part V.A–B.
2. See generally Thomas ex rel. Gramling v. Mallet, 701 N.W.2d 523 (Wis. 2005).
3. Id. at 559.
In other circumstances, such as (1) where one of multiple defendants may have caused the harm, (2) there is a substantial period of time between the harmful conduct and the putative plaintiff's awareness of it, or (3) a combination of both, it may be difficult—if not impossible—to determine the manufacturer of fungible or uniform products. The judicial response to this problem of source indeterminacy has been the creation of mechanisms to ease the plaintiff's burden. Much of the law in this area has developed in the cases involving the synthetic hormone miscarriage preventative DES.

Numerous cases filed in the 1970s against manufacturers of DES brought market share liability to center stage. From 1947 until 1971, millions of pregnant women took the drug as a miscarriage preventative. From the beginning, the medical community raised serious questions about the safety and effectiveness of DES for preventing miscarriages. The companies marketing, manufacturing, and distributing DES failed to test whether it affected fetuses in animals or humans, even though they specifically marketed DES for pregnancy use. According to two medical studies, it would have taken just six months for tests on mice to reveal the danger of cancer when the

the judiciary has become an advocate for protecting consumers more than manufacturers because it has realized that the complexity of products and the long chain of distribution have put consumers at a disadvantage. Id.


9. Id. The first DES case to go to trial resulted in a jury verdict against the plaintiff because the jury concluded that the plaintiff had failed to meet her burden of proving that the named defendant had indeed manufactured the injury-causing DES. See Barros v. E.R. Squibb & Sons, Inc., No. 75-1226 (E.D. Pa. Jan. 27, 1978).

10. Rostron, supra note 5, at 159. DES is a synthetic substance that duplicates the activity of estrogen, a female hormone crucial to sexual development and fertility. Id.


13. Rostron, supra note 5, at 159.
offspring reached maturity. In 1971, the Federal Food and Drug Administration ("FDA") put an end to the use of DES for miscarriage prevention after scientists discovered that daughters of women who took DES during pregnancy had unusually high rates of certain rare forms of cervical and vaginal cancer. By the time of the FDA ban, as many as 300 companies had produced DES for sale.

Many DES daughters seeking to recover compensation for their injuries faced a severe problem identifying the manufacturer or manufacturers of the DES consumed by their mothers. While all manufacturers produced DES according to substantially the same chemical formula, they sold it in a wide variety of forms. If the adverse effects of the drug had appeared quickly after use, conceivably many users would have been able to identify the manufacturer of the DES they consumed based on their recollection of the product's appearance or from records of their pharmacy's source of supply. Instead, the harm did not manifest itself for a generation.

14. See Bichler, 436 N.Y.S.2d at 629. Expert testimony presented in the Bichler trial established the available scientific knowledge at the time of the FDA application and indicated that it was well-known that substances ingested by pregnant women would pass through the placenta to the fetus. Id. The trial court allowed the jury to infer from the evidence of consciously parallel behavior that an implied agreement existed between Eli Lilly and other drug companies to market DES for problems of human pregnancy without first conducting tests with DES upon mice. Id. at 630.


17. See Sindell, 607 P.2d at 927. The court estimated that the number of women who took the drug during pregnancy ranged from 1.5 million to 3 million. Id. Hundreds, perhaps thousands, of the daughters of these women suffer from adenocarcinoma, and the incidence of vaginal adenosis among them is thirty to ninety percent. Id.

18. Id. at 932–33.

19. Id. at 929. The court reasoned that the complaint charged that defendants processed DES from a "common and mutually agreed upon formula," allowing pharmacists to treat the drug as a "fungible commodity" and to fill prescriptions from whatever brand of DES they had on hand at the time. Id. at 932. Courts have explained that, in the DES cases, it is not definite that the negligent party is before the court, and the defendants are not in a better position to determine who was the negligent party. See, e.g., id.
A number of circumstances contributed to the barrier of establishing causation in fact in these cases. By the time a DES daughter developed cancer or other reproductive system problems and identified DES as a likely cause, the chances of identifying a manufacturer were slim. Many mothers could no longer recall the brand or appearance of the drug they had consumed or even remember the pharmacy from which they had obtained it. If the mothers knew the pharmacy and it remained in business, the memories of the pharmacists who remained had faded, and their records had long since been destroyed or lost. Contributing to the lack of records is the fact that the manufacturers were not required by law to maintain records for long periods of time, and some of these manufacturers no longer existed.

Under these difficult circumstances, only a small minority of DES plaintiffs could identify the maker of the DES taken by their mothers. Faced with the possibility of leaving the majority of DES daughters without a remedy, theories of tort law had to evolve in order to provide redress. To date, the judicial response to this and related problems of source indeterminacy has been the creation of mechanisms to ease the plaintiff's burden of showing which particular defendant(s) caused the harm. This has most commonly been achieved by shifting to the defendant(s) the burden of proof of establishing non-causation. Much of the law in this area has developed in the DES cases. Its origin, however, is found in a lawsuit arising from a simple hunting accident.

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20. See Abel v. Eli Lilly & Co., 343 N.W.2d 164, 175 (Mich. 1984) (citing Michigan statutory law that requires the preservation of prescription records for only five years). See Products Liability: Necessity and Sufficiency of Identification of Defendants As Manufacturers and Sellers of Product Alleged to Have Caused Injury, 51 A.L.R.3d 1344, 1349 (1973) (“It is obvious that to hold a producer or seller liable for injury caused by a particular product, there must first be proof that the defendant produced, sold, or was in some way responsible for the product.”). The identification requirement is, of course, a facet of the factual causation element of tort law as a means of limiting the scope of potential liability. Causation requirements also reflect common notions of moral responsibility or blame. Abel, 343 N.W.2d at 170–74.

21. See Martin v. Abbot Labs., 689 P.2d 368 (Wash. 1984). In this action against manufacturers of DES initiated by a woman who contracted cancer after the drug was taken by her mother, the court adopted what it called “market-share alternative liability,” where the plaintiff could sue one or more manufacturers who produced the DES taken by her mother. Id. at 371. See also Ryan v. Eli Lilly & Co., 514 F. Supp. 1004, 1007 (D.S.C. 1981).

22. Id. at 371.

1. Alternative Liability

The modern origin of the burden-shifting approach to tortfeasor indeterminacy is found in *Summers v. Tice*, a hunting accident case. The plaintiff was shot in the eye and in the lip from either of two guns fired negligently by two other hunters. The negligence of the two hunters was in shooting at a form they thought to be lawful prey without first determining if it might be another hunter. Understandably, the plaintiff could not prove by a preponderance of the evidence which of the two hunters actually injured him, as the most he could show was that it was equally likely that each was the source of that bullet. The California Supreme Court was moved by its appreciation that the plaintiff ran the risk of not being able to recover for his proved harm, as well as the concomitant risk that two negligent hunters would not be held to account for their actions.

In its prominent opinion, the California Supreme Court devised alternative liability to solve the source indeterminacy of plaintiff's harm. As a matter of fairness, rather than foreclosing a potential recovery by the innocent plaintiff, the court required the defendants to prove that they did not cause the plaintiff's injury. Underlying the court's decision were such factors as: (1) the plaintiff's inability, through no fault of his own, to identify the tortfeasor; (2) the joint culpability of the defendants, in that both fired negligently at a target they had not determined to be prey; and (3) the defendants' superior position, when contrasted to that of the plaintiff, to prove which one caused the injury. The resulting doctrine of *Summers* was that if one defendant could exculpate...

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24. 199 P.2d 1 (Cal. 1948). Evidence did not clearly show which of the two defendant hunters' shots struck plaintiff, finding that pellets lodged in the plaintiff's eye and lip as a result of shots fired by "defendants[.] and each of them" was a sufficient finding that defendants were jointly liable and that negligence of both was the cause of injury. *Id.* at 1, 4. See Martin, 689 P.2d at 375-77 (strict application of alternative liability does not provide DES plaintiffs with a cause of action); RESTATEMENT (SECOND) OF TORTS § 433B(3), at 441-42 (1965).
26. *Id.* at 2.
27. *Id.*
28. *Id.* at 1-2. An economic view of such a result might be that if one of the hunters was not ultimately found accountable, the incident would have the destabilizing and inefficient aspects of a forced taking. *Id.* at 4. But see *Jackson v. Anchor Packing Co.*, 994 F.2d 1295 (8th Cir. 1993) (rejecting alternative liability because state law did not recognize alternative or market share liability).
30. *Id.*
himself, then the other would be wholly liable for the damages. If neither could show that he did not shoot the plaintiff, then the two would be jointly and severally liable.  

At first glance, the alternative liability theory of Summers should have considerable appeal to plaintiffs in the types of defendant indeterminacy lawsuits so frequent in environmental tort litigation. However appealing, though, its application was limited by its own terms. The requirement that all or at least one of the potential defendants be negligent was not the principal stumbling block for, as will be seen below, such a requirement is typical for each of the devices courts have adopted in indeterminate defendant cases. Indeed, to get past dismissal on the pleadings, the same would be true of any civil lawsuit. Rather, the primary limitation on the Summers alternative liability theory is that all of the potential tortfeasors must be before the court.  

In ordinary civil litigation, procedural rules may place a premium on bringing a single, comprehensive suit, but none subject the plaintiff to dismissal on the pleadings for lack thereof; under the Summers alternative liability theory, however, failure to bring suit against all defendants would be fatal to the plaintiff's case. The logic of this limitation on the Summers theory is apparent when one considers the application of burden-shifting to the situation where one or more tortfeasors has not been named as a party. The potential would exist that all of the named defendants could sustain their burden of proof, and the plaintiff would remain as remediless as he or she would be without the Summers approach. That the plaintiff would be left no worse off than before would not by itself be a flaw, save for the fact that an ordinary predicate for changes in the law, be they procedural or substantive, is that the changes will aid a person, a class of persons, or a policy.


2. Concert of Action Liability

A second means of relieving the plaintiff of the need to identify an individual tortfeasor from a field of potential tortfeasors (none of whom was more likely than not the producing cause of plaintiff's injuries) has been to identify a group or class of persons who acted in concert with one another to bring about the harmful consequence. The concert of action theory posits that when a group of actors agree, whether explicitly or tacitly, to proceed in risk-creating behavior, each of the actors will be jointly and severally liable if that behavior results in injury to another. When translated to the toxic tort context, the potential for concert of action liability might arise when two or more manufacturers of a particular product or pharmaceutical have expressly or impliedly agreed to follow a similar pattern of conduct (usually in research, manufacturing, or marketing methods) that justifies treating them as jointly and severally liable. Under these circumstances, a plaintiff could sue one of the actors in the group and hold it liable for all of the damages suffered. Though initially attractive to potential DES plaintiffs, the concert of action theory was almost impossible to pursue. While a showing of parallel behavior was straightforward, demonstrating any agreement between or among the manufacturers was a practically insurmountable barrier.

3. Enterprise or Industry-Wide Liability

The last significant initiative some courts applied prior to Sindell in order to facilitate plaintiffs' burden of defendant identification was that of enterprise liability. The pioneer case in this area was Hall v. E.I. Du Pont De Nemours & Co. In Hall,
some exploding blasting caps injured a group of children. Even though the specific manufacturer of the blasting caps that actually caused the injuries could not be determined, suit was brought on the children's behalf against the manufacturers. There were only a limited number of manufacturers of blasting caps, and they were represented by a trade association that had been, over the years, very active in its attempts to fend off various legislative and regulatory safety initiatives. The plaintiffs sued the small group of manufacturers and their association, claiming that in acting together and—through their trade association—in steadfastly opposing safety and labeling regulation, the manufacturers needed only to comply with lax industry-imposed safety standards. The plaintiffs' claim survived a motion to dismiss, and the court held that if the blasting cap manufacturers and their association had "joint or group control of the risk," liability could be imposed on each of the manufacturers without the need to show which manufacturer had produced the caps that caused the injuries. The enterprise liability theory is thus a hybrid theory combining elements of alternative liability and concert of action. More specifically enterprise liability: (1) incorporates the alternative liability requirement that, in regard to the plaintiff, each actor is at fault; and (2) provides that the group's pursuits through their trade association provide circumstantial evidence of a concert of action. The most significant limitation on the enterprise liability approach to environmental tort litigation is the court's quite specific comment that the theory was only suited to claims involving a small group of defendants. To date, the courts have not specifically embraced enterprise liability in an environmental tort case.

B. Sindell v. Abbott Laboratories and Its Boundaries

With the various and specific limitations imposed upon each of the above approaches intended to favor the plaintiff in his or her multi-defendant claim, it is not surprising that facts would arise in which none of these approaches would work, and courts would


37. Id. at 358.
38. Id.
39. Id. at 359.
40. Id.
41. See Madden & Owen, supra note 31, at § 12.3.
once again be importuned to find a remedy where before there was none. Such facts would arise in the context of DES litigation. In the California Supreme Court's seminal decision, *Sindell v. Abbott Laboratories*, the court adopted the new approach of market share liability, which the court concluded provided justice to the injured claimants while inflicting no unfairness on defendants.

In *Sindell*, the plaintiff, Judith Sindell, sought to impose tort liability on the defendant pharmaceutical manufacturers, alleging that her mother was given DES while pregnant as a miscarriage preventative. Sindell eventually developed bladder malignancy and related medical problems that she asserted were caused by her mother's ingestion of DES. The plaintiff sought to impose tort liability using existing collective liability theories, contending that DES was produced from a common and mutually agreed upon formula "as a fungible drug interchanged with other brands of the same product," and that the defendant manufacturers "collaborated in marketing, promoting, and testing the drug, relied upon each other's tests, and adhered to an industry-wide safety standard." The plaintiff contended further that the defendant manufacturers were jointly and severally liable to her "because they acted in concert, on the basis of express and implied agreements, and in reliance upon and ratification and exploitation of each other's testing and marketing methods."

As suggested above, and as was true also of claims brought by other DES daughters, Sindell's ability to establish a traditional tort cause of action was hindered by her inability to identify the specific producer of the DES that her mother ingested. Like many cases before *Sindell*, the causation factors weighed heavily against her due to the following factors: the significant number of firms that had produced the drug; the number of such manufacturers that had ceased doing business altogether in the intervening years; the passage of many years since the ingestion of the drug due to the long latency period before the adverse effects on the female children of the mothers became clinically

42. 607 P.2d 924 (Cal. 1980).
43. *Id.* at 925–26.
44. *Id.* at 926.
45. *Id.*
46. *Id.*
47. *Id.* It was alleged by plaintiff that during the period of marketing DES, the defendant manufacturers, collectively, knew or should have known that it was a carcinogenic substance and that it was ineffective to prevent miscarriages. *Id.* See also Parlee, *supra* note 6, at 612–13.
observable; and the destruction or loss of marketing and manufacturing records of the producers.\(^49\)

The first cause of action alleged that defendants were jointly and individually negligent in that they manufactured, marketed, and promoted DES as a safe and effective drug to prevent miscarriage without adequate testing or warning and without monitoring or reporting its effects.\(^50\) A separate cause of action alleged that defendants were jointly liable regardless of which particular brand of DES was ingested by plaintiff's mother because defendants collaborated in marketing, promoting, and testing the drug; relied upon each other's tests; and adhered to an industry-wide safety standard.\(^51\) "Other causes of action were based upon theories of strict liability, violation of express and implied warranties, false and fraudulent representations, misbranding of drugs in violation of federal law, conspiracy[,] and lack of consent."\(^52\) The trial court sustained the defendants' demurrers without leave to amend on the ground that plaintiff did not and could not identify which defendants had manufactured the drug responsible for her injury.\(^53\)

After reviewing the trial court's dismissal, the California Supreme Court turned to the numerous cases filed throughout the country seeking to hold drug manufacturers liable for injuries allegedly resulting from DES prescribed to the plaintiffs' mothers since 1947.\(^54\) The review revealed that hundreds, perhaps thousands, of women whose mothers had taken DES suffered from adenocarcinoma, and the incidence of vaginal adenosis among them was thirty to ninety percent.\(^55\) While most of these cases were still pending at the time, the California court noted two exceptions. In those two exceptions, judgments had been entered in favor of the defendant drug companies due to the plaintiffs' inability to identify the manufacturer of the DES prescribed to their mothers.\(^56\)

\(^{49}\) Id. at 929–30.

\(^{50}\) Id. at 926. See also Parlee, supra note 6, at 612.

\(^{51}\) Sindell, 607 P.2d at 926.

\(^{52}\) Id. For a discussion of the reasons underlying the inapplicability of these theories, see Kaye, supra note 7, at 184.

\(^{53}\) Sindell, 607 P.2d at 926. The trial court did not specify the ground upon which the demurrers were sustained. Points and authorities submitted by the parties to the court emphasized identification failure as the source of injuries, and that basis was assumed for purposes of appeal. Id.

\(^{54}\) Id. at 927.

\(^{55}\) Id. See, e.g., Collins v. Eli Lilly & Co., 342 N.W.2d 37, 45 (Wis. 1984) (estimating that as many as 1000 class action or individual suits were pending against DES manufacturers in 1971).

\(^{56}\) Sindell, 607 P.2d at 927–28.
Aware that the conventional rule requiring defendant determinacy was denying and would continue to deny DES daughters compensation for their harm, the Sindell court explored the then-extant exceptions to the rule that might be applicable to the plaintiff. It first examined the alternative liability approach of *Summers v. Tice* and found it unsuited to application in the DES context, as it was practically certain that not all potential tortfeasors were before the court. A concert of action claim, the California court held, was also inappropriate, as the DES plaintiff was unable to show an agreement between and among any two or more of the manufacturers of DES. Nor was industry-wide or enterprise liability a fit. In a leading decision applying concert of action liability, *Hall v. E.I. Du Pont de Nemours & Co.*, in which the injured plaintiff had been unable to pinpoint the specific manufacturer of the device that had caused him injury, the court permitted recovery based upon a showing that the small group of cap manufacturers that dominated the market had acted jointly to delegate to their trade association responsibility for advancing opposition to stricter labeling regulation, thereby assuming joint control of the risk. Finding concert of action liability unsuited to DES litigation, the Sindell court noted that, at all pertinent times, there was neither any showing of an industry standard and no delegation of safety-related concerns to a third party, nor was there any showing of joint control of the risk. The court also remarked, tellingly, that while the application of enterprise liability might be fair in litigation involving five to ten defendants, it did

57. *Id.* at 928. In discussing exceptions to the rule of the imposition of liability, the court discusses *Summers*, where the court required defendants to prove that they did not cause the plaintiff's injuries. 199 P.2d 1, 1–4 (Cal. 1948). Underlying the court's decision were such factors as: (1) the plaintiff's inability, through no fault of his own, to identify the tortfeasor; (2) the joint culpability of the defendants, in that both fired negligently at a target they had not determined to be prey; and (3) the defendants' superior position, when contrasted to that of the plaintiff, to prove which one caused the injury. *Id.*

58. *Id.*


60. *Id.* at 931–33.

61. *Id.* at 933–35.

62. 345 F. Supp. 353 (E.D.N.Y. 1972). In *Hall*, the plaintiffs were unable to identify the manufacturer of a blasting cap that injured a child. *Id.* at 359. The court denied defendant's motion to dismiss the complaint brought under an enterprise liability cause of action because the court believed the plaintiffs could prevail. *Id.* at 376–78.

63. *Id.*

64. *Id.* at 366–67.
not follow that it was suited to litigation involving a large number of defendants.\textsuperscript{65}

Writing for the Sindell majority, Justice Mosk proceeded \textit{sua sponte} to create a burden-shifting approach that conformed to the facts of the Sindell litigation and litigation like it.\textsuperscript{66} Burden-shifting would be fair and warranted, Justice Mosk wrote, upon a plaintiff's predicate showing that: (1) the injury causing substance caused his injury; (2) the injury causing product was fungible; (3) the plaintiff could define a relevant market for the injury causing product; and (4) the plaintiff had joined as defendants a substantial share of the defendant producers that had sold DES during the pertinent time period, i.e., the time during which the mother was pregnant and taking DES.\textsuperscript{67} Upon satisfaction of this evidentiary burden, the burden would shift to the defendants to demonstrate individually that they had not produced the DES that the mother had taken.\textsuperscript{68} Upon such a showing, a defendant would not be liable. Defendants unable to exculpate themselves would be liable for any plaintiff's proven harm in an amount proportionate to the defendant's share of the market during the relevant time period.\textsuperscript{69}

\begin{itemize}
\item \textsuperscript{65} Sindell, 607 P.2d at 934.
\item \textsuperscript{66} Id. at 924.
\item \textsuperscript{67} Id. It can be seen that the "substantial share" requirement was intended to bolster the cause in fact element of a DES claim. \textit{Id.} at 937. As taken in the aggregate, manufacturers representing a substantial share of the market would, more likely than not, have produced the DES taken by the mother. \textit{Id.} \textit{See also} Mullen v. Armstrong World Indus., Inc., 200 Cal. App. 3d 250, 255 n.6 (Cal. Ct. App. 1988) (quoting Hannon v. Waterman S.S. Corp., 567 F. Supp. 90, 91 n.1 (E.D. La. 1983) (quoting Jonathan B. Newcomb, Note, \textit{Market Share Liability for Defective Products: An Ill-Advised Remedy for the Problem of Identification}, 76 Nw. U. L. Rev. 300, 301-02 (1981))).
\item \textsuperscript{68} Such showings might be had by proof that the defendant did not manufacture DES for human use, or that the defendant did not market its product in the region in which the plaintiff resided, or that although the plaintiff's memory of the DES she ingested was imperfect, she was able to recall sufficient facts, such as size, color, or shape of the product, to permit a defendant manufacturer to distinguish its product from the DES taken by the mother. \textit{See} Collins v. Eli Lilly & Co., 342 N.W.2d 37, 52 (Wis. 1984).
\item \textsuperscript{69} Sindell, 607 P.2d at 937. The Sindell court partly rested its reasoning and theory on a student-written law review comment. \textit{Id.} at 934-37. That comment proposes seven requirements for a cause of action based on industry-wide liability and suggests that if a plaintiff proves these elements, the burden of proof of causation should be shifted to the defendants. \textit{Id.} at 935. \textit{See Comment, DES and a Proposed Theory of Enterprise Liability}, 4 \textit{Fordham L. Rev.} 963, 965 (1978) (requiring: (1) an insufficient, industry-wide standard of safety as to the manufacture of the product; (2) the absent proof of the causative agent is not due to any act of the plaintiff; (3) all defendants manufactured a generically similar defective product; (4) plaintiff's injury was caused by this defect; (5) defendants owed a duty to the class of which the plaintiff is a
Nothing in market share liability relieved the plaintiff's burden of proof regarding the underlying tort pursuant to negligence or strict tort liability. In a later decision, Brown v. Superior Court ("Abbott Laboratories"), the California Supreme Court determined that liability would be proportionate only.

There are two principal rationales for applying market share liability. The first, specifically adopted in Sindell, is that all manufacturers and sellers of DES acted negligently, that an individual firm's share of the market (say twenty percent) represents the probability that it actually caused the individual plaintiff's harm, and that imposing liability for twenty percent of the damages represents a judgment that it should be liable to that extent for the chance that it did in fact cause her damages. Indeed, in mass tort cases, if courts in all states followed the identical approach, the theory goes, a manufacturer's damages under the market share analysis will converge with the actual harm it caused to all plaintiffs. The second rationale is that, again, all market participants acted negligently and that approaching liability from a "risk contribution" to a national market would expedite resolution of the claims while leaving unaltered the fairness of a market share result.

III. RECEPTION OF SINDELL AND ITS VARIATIONS

Sindell prompted the high courts of several other states to adopt market share liability in principle, while remaining free to tinker with its particular applications as might best suit the law of the jurisdiction. While there were several alternative approaches to Sindell, one of the most influential merged concepts of proportionate liability with risk contribution, namely, the New York Court of Appeals' decision in Hymowitz v. Eli Lilly & Co. In Hymowitz, New York's highest court concluded that strict adherence to Sindell, which based defendant-manufacturers' market share on small geographic units, would result in years of litigation and required a different approach, that of a national member; (6) there is clear and convincing evidence that the plaintiff's injury was caused by a product made by one of the defendants; (7) all defendants were tortfeasors). But see Stapp v. Abbott Labs., No. C 344-407 (Cal. Super. Ct., Los Angeles County) ("[T]he author of the Fordham comment is in the same position that the [California] supreme court was in Sindell; it had never taken one minute's evidence and it's apparent that whoever wrote that comment doesn't know anything about the DES drug industry to put it bluntly.").

70. 751 P.2d 470 (Cal. 1988).
71. 539 N.E.2d 1069, 1078 (N.Y. 1989).
market. The court conceded that utilization of a national market to determine the defendant-manufacturers' market share would likely disfavor many manufacturers by imposing liability "disproportionate to . . . the actual injuries each manufacturer caused in this State." As a consequence, liability pursuant to a Hymowitz analysis could not be grounded in the Sindell hypothesis that a manufacturer's market share would serve "over the run of cases," as a hypothetical proxy for causation of injury in the state. The court further admitted that use of a national market would not "provide a reasonable link between liability and the risk created by a defendant to a particular plaintiff." Instead, the court justified its application of a national market share liability by reasoning it would fairly "correspond to the over-all culpability of each defendant, measured by the amount of risk of injury each defendant created to the public-at-large." A defendant could avoid liability upon a showing that it did not market DES for pregnancy use. However, the manufacturer could not avoid liability by showing that it did not market DES in a state or region proximate to the plaintiff's mother; "it is merely a windfall for a producer to escape liability solely because it manufactured a more identifiable pill, or sold only to certain drugstores. These fortuities in no way diminish the culpability of a defendant for marketing the product, which is the basis of liability here.

Following Sindell, five states adopted some form of market share liability. However, nearly all courts have declined to extend the doctrine to any products other than DES.

72. Id. at 1076–78.
73. Id. at 1078.
74. Id. at 1076 (citing Sindell, 607 P.2d 924).
75. Id. at 1078.
76. Id.
77. Id.
78. Id.
79. Id.
A. Market Share Liability Adopted in DES Litigation

As introduced above, nine years after Sindell, the New York Court of Appeals merged the concepts of risk contribution theory with those of market share. In Hymowitz v. Eli Lilly & Co., also a DES suit, the New York Court of Appeals announced a modified version of the Sindell market share theory. The court held that a market share case must be based on the national market for the relevant product, rather than the share of the market in the state. Additionally, if the defendant is a member of the market for a product, the manufacturer will be held liable even if it did not cause the individual plaintiff’s injuries. Limiting the scope of market share liability, the New York court described the DES situation as a “singular” one. Later, in In re DES Market Share Litigation, the same New York Court of Appeals reconsidered its conclusion that DES plaintiffs should proceed in equity and concluded instead that plaintiffs injured by DES and relying on a market share theory are entitled to a jury trial on the issue of market share.

In Collins v. Eli Lilly & Co., another DES suit, the Wisconsin Supreme Court rendered another market share modification. The Wisconsin court rejected a strict application of Sindell market share liability but adopted a variation of it that, it turned out, facilitated the plaintiff’s burden of proof even more dramatically than had Sindell. The court adopted a “risk contribution” approach to assessing the potential liability of any manufacturer, relieving the plaintiff of the requirement that she bring before the court defendants representing a substantial share of the DES market at times pertinent to the litigation. The Collins court held instead that the plaintiff’s burden was merely to obtain in

82. 539 N.E.2d 1069. The decision in Hymowitz has been criticized as flawed in that liability cannot be equated to actual harm caused. See Shackil v. Lederle Labs., 561 A.2d 511, 533 (N.J. 1989) (O’Hern, J., dissenting) (recognizing Hymowitz as perhaps the most controversial of the market share decisions). But see Twerski, supra note 81, at 870 (praising Hymowitz for not “paying senseless obeisance to tradition”).
83. Hymowitz, 539 N.E.2d at 1075.
85. Id. at 230–31.
86. 342 N.W.2d 37, 46–47 (Wis. 1984) (proportioning damages among culpable defendants based upon the percentage of causal negligence attributable to each).
87. Id. at 48. The primary factor that prevented Collins from following Sindell was the practical difficulty of defining and proving market share liability. Id.
88. Id.
personam jurisdiction over only one or more manufacturers, which manufacturer(s) could, in turn, implead as many other manufacturers as jurisdictional rules might permit. Not only did the court place the burden of aggregating putative defendants upon the group—the manufacturers—most able to discharge it efficiently, but it also placed this burden on a group—those initially sued—who would be highly motivated to implead as representative a group of defendants as possible. The burden of proof would be on the manufacturers to establish that their particular product was not taken, and, for those who could not meet this burden, an apportionment of damages would be made by the jury pursuant to the state’s comparative negligence statute. The court outlined some factors that could be used to analyze the proportionate liability of defendants, including:

[W]hether the drug company conducted tests on DES for safety and efficacy in use for pregnancies; to what degree the company took a role in gaining FDA approval of DES for use in pregnancies; whether the company had a small or large market share in the relevant area; whether the company took the lead or merely followed the lead of others in producing or marketing DES; whether the company issued warnings about the dangers of DES; whether the company produced or marketed DES after it knew or should have known of the possible hazards DES presented to the public; and whether the company took any affirmative steps to reduce the risk of injury to the public.

It is this risk contribution modification of market share liability that will provide a backdrop for one of the two significant innovations in handling indeterminate defendant cases that will be described below.

B. Market Share Liability Rejected in DES Litigation

Even as the Sindell-Hymowitz-Collins line of cases prompted courts to reevaluate their state tort laws in an attempt to hold DES manufacturers responsible for injuries that their drugs had caused,
some courts have, in the name of policy, found that such refashioning of traditional tort law is better suited for legislatures than for courts. On numerous occasions, courts have rejected market share liability as a basis for relief on grounds of public policy. The extent of each court’s analysis varies, although there are certain common justifications. These courts recognized that market share liability is too great a deviation from existing tort law and, therefore, as the theory presently exists, not a viable concept.

In *Smith v. Eli Lilly & Co.*, the Illinois Supreme Court held that the market share theory of liability, in all its forms, is to be rejected as an unsound theory that represents too great a deviation from established tort principles, and the theory thus may not be applied in cases brought by the plaintiffs who were exposed to DES. The court rejected the theory on consideration of the difficulty of establishing the defendants’ percentages of the market. The court also stated its concern that application of market share liability might create the potential of disparate treatment between plaintiffs who could and could not identify the specific manufacturer responsible for DES, in that the plaintiff who could identify the reasonable manufacturer takes the risk that the particular defendant will be unable to assume financial responsibility for the injuries caused.

Likewise, in *Tidler v. Eli Lilly & Co.*, applying Maryland law, the Court of Appeals for the District of Columbia declined to adopt the market share liability theory. The court reasoned that the theory requires that courts “build on a new foundation, not on the structural underpinnings of the traditional common law of torts.”

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93. *Id.*

94. *Id.*

95. 560 N.E.2d 324, 345 (Ill. 1990). The court stated that “[i]t [was] tempting in this case to impose liability based on the fact that these companies profited from the sale of the type of drug which may be responsible for the plaintiff’s injuries, regardless of the manufacturers’ ability to cover these costs.” *Id.* The court considered, and rejected, policy reasons the plaintiffs proposed for adopting the theory. *Id.* at 342.

96. *Id.* at 344.

97. *Id.* *Smith* quotes Judge Richardson, who, writing for the dissenters in *Sindell*, argued that market share liability makes the entire drug industry “an insurer of all injuries attributable to defective drugs of uncertain or unprovable origin” and concluded that such a solution is an unreasonable overreaction in attempting to achieve what is perceived as a socially satisfying result. *Id.* (quoting *Sindell v. Abbott Labs.*, 607 P.2d 924, 942–43 (Cal. 1980) (Richardson, J., dissenting)).

98. 851 F.2d 418, 424 (D.C. Cir. 1988) (applying District of Columbia and Maryland law).

99. *Id.*
Plaintiffs have attempted to extend market share liability to contexts other than DES cases but with considerably less success. Most notably, plaintiffs in cases with asbestos, lead-based paint, and vaccines have attempted to apply market share liability. Courts have curtailed the reach of this theory beyond DES by emphasizing the notion that market share liability can apply only when a product is perfectly "fungible." As the following sketches of decisions illustrate, plaintiffs, unable to identify the manufacturers of vaccines, asbestos, and lead pigments, must satisfy causation in fact and have not, with rare exception, been permitted to use market share liability to overcome their difficulties. Conspicuous in its absence from most of the decisional law is any thoughtful examination of the meaning of, much less the rationale for the requirement of, fungibility as a predicate for application of market share liability or its variants.

1. Vaccines

In the vaccine cases, the courts rejected market share liability as a basis for relief, as the facts did not support recovery. The plaintiff parents in *Shackil v. Lederle Laboratories*, unable to identify the specific manufacturer of the DPT vaccine (a vaccine for diphtheria, tetanus, and whooping cough) that caused their daughter to be severely retarded, sued a number of manufacturers that produced the vaccine and could, therefore, have sold the vaccine responsible for her harm. Plaintiffs argued for adoption of a market share liability theory. The court determined that to apply market share liability in a DPT case would frustrate public policy and public health considerations and also that the absence of a generically identical product produced a major distinction between the vaccine in *Shackil* and DES because the DPT vaccine in *Shackil* involved a defective batch but lacked the generic defectiveness involved in the DES cases.

100. See 530 A.2d 1287 (N.J. Super. Ct. App. Div. 1987), rev'd, 561 A.2d 511 (N.J. 1989). The court emphasized that the collective liability approach it suggested would never come into play unless Shackil first proved that each manufacturer's vaccine was a defective product. *Id.* at 1296.

Not unlike Shackil, in Sheffield v. Eli Lilly & Co., another vaccine case, the court reemphasized and hammered home that market share liability should not apply to a nongeneric “defective batch” vaccine case, despite any difficulties of identification. The court held that recovery could not be had under market share or any other collective liability theory where the action was based on an allegedly defective batch of the vaccine and not on any joint or collective action of the manufacturers that resulted in a generically defective vaccine.103

2. Asbestos

Probably the most conspicuous category of cases in which market share or related liability theories failed to gain a foothold has been that of asbestos litigation.104 The courts overwhelmingly have found that, as asbestos is not a single mineral but instead a group of several different ones, it is not a single-formula, fungible product that might permit application of market share liability. There are six different asbestos silicates used in industrial applications, and each presents a distinct degree of toxicity in accordance with the shape and aerodynamics of the individual fibers.105

Representative of such decisions in asbestos litigation, nearly a decade after Sindell, a California appellate court decided Mullen v. Armstrong World Industries, Inc. In that suit, three homeowners filed a statewide class action suit against numerous manufacturers

102. 144 Cal. App. 3d 583, 583 (Cal. Ct. App. 1983). The Sheffield court reasoned that the defect was not a design defect, as in Sindell, but that a manufacturer had distributed a defective product. Id. at 594. Additionally, unlike Sindell, the delay in discovering the alleged causation was in no way related to the nature of the defective product or any other act or omission of the unknown tortfeasor. Id.

103. Id. Furthermore, the “deep pocket” theory may be socially desirable as a vehicle to insure that all victims of a defective product will be compensated, but if applied indiscriminately to penalize the careful and careless producer alike, it fails to act as a deterrent to the latter and may result in keeping beneficial but potentially dangerous products (like vaccines) off the market. Id. at 597.


106. Id. at 250.
of asbestos products used in residential housing construction, alleging personal injury and property damage to their homes from both the use of such products and the cost of asbestos removal.\textsuperscript{107} Alleging the asbestos products were "functionally interchangeable" and that no testing procedures existed to identify which defendant made a particular asbestos-containing product, the complaint sought to impose liability on defendants under a \textit{Sindell} market share theory.\textsuperscript{108}

Distinguishing DES litigation from that involving asbestos, the \textit{Mullen} court observed that DES, manufactured by hundreds of companies pursuant to one formula, had "identical physical properties and chemical compositions, and consequently all DES prescribed to pregnant women created the same risk of harm."\textsuperscript{109} Asbestos products, in contrast, the court wrote, "have widely divergent toxicities . . . caused by a combination of factors, including: the specific type of asbestos fiber, the physical properties of the product itself, and the percentage of asbestos used in the product."\textsuperscript{110}

The \textit{Mullen} decision would be joined by holdings of courts of several other jurisdictions that determined that market share liability should not be recognized in asbestos cases. The Ohio Supreme Court rejected its application in \textit{Goldman v. Johns-Manville Sales Corp.},\textsuperscript{111} in which the court reasoned that market share liability is inappropriate where it cannot be shown that the products are completely fungible.\textsuperscript{112} On similar facts, a Delaware court rejected market share liability and reasoned further that any change to market share liability should be left to the legislature.\textsuperscript{113}

It is seen that given the nature of asbestos, a majority of courts has refused to extend the doctrine of market share liability and its

\textsuperscript{107} \textit{Id.} at 253.

\textsuperscript{108} Plaintiffs' argument that market share liability should be extended from the DES field of \textit{Sindell} to the asbestos industry proceeds on the premise that DES and asbestos are simple equivalents. \textit{Id.} at 255.

\textsuperscript{109} \textit{Id.} at 253.

\textsuperscript{110} The asbestos family consists of more than thirty different minerals of fibrous structure. \textit{See In re Related Asbestos Cases}, 543 F. Supp. 1152, 1158 (N.D. Cal. 1982) (declining to extend market share liability to the field of asbestos). The minerals' physical properties vary so that only six varieties are of substantial economic value. \textit{Id.} These six minerals are chrysotile, crocidolite, amosite, anthophyllite, tremolite, and actiolite. \textit{Id.} These minerals are used in various percentages depending on whether a primary, secondary, or consumer use is being made of the asbestos product. \textit{Id.}

\textsuperscript{111} 514 N.E.2d 691, 692 (Ohio 1987).

\textsuperscript{112} \textit{Id.}

\textsuperscript{113} Nutt v. A.C. & S. Co., 517 A.2d 690, 694 (Del. 1986) (exercising judicial restraint in the products liability area).
burden-shifting rules to actions brought against multiple suppliers of asbestos products. However, in *Wheeler v. Raybestos-Manhattan*, a California appeals court, on the particular facts of an automobile brake pads case, applied market share liability. The plaintiffs therein were allegedly exposed to asbestos fibers in brake pads during an inspection and replacement of worn pads, a process shown to release amounts of friable asbestos in the form of dust containing asbestos generated by friction on the pads during braking. The plaintiffs alleged that the pads were sufficiently fungible for the purpose of application of market share liability since all of the brake pads were composed solely of chrysotile asbestos fiber, a specific member of the asbestos family of minerals, and all contained between forty and sixty percent asbestos by weight. The *Wheeler* court recognized that plaintiffs who could meet the fungibility hurdle, seemingly specific to chrysotile asbestos, were entitled to invoke the market share theory of liability.

3. Lead-Based Paint Pigments

As with asbestos litigation, courts throughout the country have been reluctant to adopt market share liability in lead paint litigation. Ingestion of the lead carbonate component of lead pigment that previously enjoyed widespread use in residences works dreadful neurological damage to persons, particularly to the infants and young persons most likely to ingest it in the form of wood chips or to otherwise be exposed to it. Here too plaintiffs are generally unable to identify the manufacturers of the pigment that they ingested and have sought to rely on market share theory to overcome that difficulty.

Representative of such litigation is *Skipworth v. Lead Industries Association, Inc.*, in which the Pennsylvania Supreme Court held that the lead paint to which the plaintiff was exposed, causing lead poisoning, was not a fungible product, as lead pigments had different chemical formulations, contained different amounts of lead, and differed in potential toxicity. The court

115. *Id.* at 1155–56.
116. *Id.*
117. 690 A.2d 169 (Pa. 1997). Parents of a minor brought a personal injury action for injuries sustained allegedly due to ingestion of lead paint in their home against manufacturers of lead pigment. *Id.* Testing of Skipworth's residence revealed the presence of lead-based paint at various locations throughout the home. *Id.*
118. *Id.* at 172–73.
noted that adoption of market share liability would represent a significant departure from the general rule requiring proof of causation.\footnote{119} The court also distinguished the relevant time period in question in the case before it. The house in which the plaintiff resided was built over one hundred years prior to the injury, making identification of relevant markets for various time periods a far greater task than was true of the already challenging task before courts and litigants in DES litigation.

IV. THE MEANING OF "FUNGIBILITY"

The Sindell opinion is sparing in its references to DES as a "fungible" product and did not place great emphasis on that term.\footnote{120} As a result, "fungibility" has been used in several different senses throughout the case law, with these different meanings continually jumbled and confused.\footnote{121} Although the success or failure of plaintiffs to show the "fungibility" of the harmful agent soon became the pole star of market share analysis, only recently, in the Wisconsin Supreme Court's lead pigment decision \textit{Thomas ex rel. Gramling v. Mallett},\footnote{122} discussed below, did a state high court ever explain thoroughly what "fungibility" means or why it is important. The leading treatise on tort law simply observed that market share liability requires injury caused by a "fungible" or "identical-type" product, without further explanation.\footnote{123} Various dictionary editions offer broad definitions, such as that something is fungible when it is "of such a kind or nature that one specimen or part may be used in place of another or equal part in the satisfaction of any obligation . . . capable of

\footnote{119} Id. Because of the differences in bioavailability of lead pigment, a child who ingests dust or chips of lead paint containing equal amounts of lead will not generally develop equal elevation in internal lead level from the two paints. \textit{Id.} at 173. The differing formulae of lead paint has a direct bearing on how much damage a lead paint manufacturer's product would cause. \textit{Id.} at 173 & n.5.

\footnote{120} Rostron, \textit{supra} note 5, at 163 n.68. \textit{See also In re Dow Corning Corp.,} 250 B.R. 298 (E.D. Mich. 2000). \textit{In re Dow Corning} found that an absolute predicate to application of the market share theory of products liability is that the product in question be fungible and generic in nature; that is, one defendant manufacturer's product must be indistinguishable from the next manufacturer's product. \textit{Id.} at 363.

\footnote{121} \textit{See, e.g., In re New York State Silicone Breast Implant Litig.,} 631 N.Y.S.2d 491 (N.Y. App. Div. 1995). In that action, a theory of market share liability was not applied to an action brought by silicone implant recipients against the manufacturers of the implants, as the implants differed in design and manufacture and, therefore, were not generic. \textit{Id.} at 494.

\footnote{122} 701 N.W.2d 523, 560 (Wis. 2005) (citing Rostron, \textit{supra} note 5, at 163).

\footnote{123} \textit{See PROSSER AND KEETON ON THE LAW OF TORTS § 103, at 714 (W. Page Keeton et al., eds., 5th ed. 1984).}
mutual substitution: interchangeable.”124 As is set out below, the Wisconsin court in Gramling was taken by the logic, the scientific basis, and the fairness of the fungibility analysis contained in an article of Allen Rostron entitled Beyond Market Share Liability: A Theory of Proportional Share Liability for Nonfungible Products,125 which prompted its conclusion that “a product can be ‘fungible’ in several different senses significant to application of market share liability.”126

A. Functional Interchangeability

When the California Supreme Court referred to DES as a “fungible” product in Sindell, it was using the term in the sense that each manufacturer’s version of the product at that time was functionally interchangeable with other DES produced by myriad other DES manufacturers.127 Whether a product is fungible in the sense of being functionally interchangeable obviously depends on the function that one has in mind. As one judge put it, “for signalling New Year’s Eve, a blast from an auto horn and one from a saxophone may be equivalent as noise, but few would want to dance to the former.”128 Whether a product is fungible is also a matter of degree and is dependent on context.

Significant for market share liability purposes, this can pose severe identification problems. Products that are functionally interchangeable will often be intermingled. Knowing that all DES products had the same effect, pharmacists filled prescriptions with whatever brand of DES they had in stock in the correct dosage.129 This exacerbated the difficulties for plaintiffs trying to prove the manufacturer of the DES consumed by their mothers.

B. Physical Indistinguishability

Courts have also used the term “fungible” to describe products that are physically indistinguishable from others.130 Like

124. Gramling, 701 N.W.2d at 560 n.48 (setting forth other judicially relied-upon dictionary definitions) (citing WEBSTER’S THIRD NEW INTERNATIONAL DICTIONARY 922 (1986)).
125. See Rostron, supra note 5.
126. Id. at 163.
129. Sindell, 607 P.2d at 926.
130. See Rostron, supra note 5, at 164.
functional interchangeability, this sort of fungibility is a matter of degree.\textsuperscript{131} The ability to physically distinguish two products matters to market share liability and explains one reason a product might be difficult for a plaintiff to attribute to a particular manufacturer.\textsuperscript{132} DES was by no means perfectly fungible in this sense because it came in different forms, shapes, sizes, colors, and sometimes carried unique lettering or scoring.\textsuperscript{133} It was not the similar appearance of DES that made for a severe identification dilemma. The passage of time also made physical identification more problematic.

C. Uniformity of Risk

DES was "fungible" in another crucial aspect. The sharing of an identical or virtually identical chemical formula, as in DES, meant that each manufacturer’s product posed the same amount of risk as every other manufacturer’s product.\textsuperscript{134} The products, therefore, were "identically defective" with none being more or less dangerous than the rest. This uniformity of risk was crucial to market share liability. It is what made market share data the right measure to use to apportion liability among DES manufacturers. With all DES posing identical risk, each manufacturer’s share of overall sales should correspond roughly to its share of the overall harm caused.\textsuperscript{135}

While the Sindell court used the term "fungible" to mean functionally interchangeable, it is arguable that the uniformity of risk posed by DES was the true key to the court’s decision, even though the court phrased it in terms of the "comparability" of "the

\textsuperscript{131} Id. Rostron offers the example of the difference between two brands of a cola drink: in their original packaging they have an obvious physical distinction, whereas after being poured from the can or bottle, the two beverages might be completely indistinguishable in appearance. Id.

\textsuperscript{132} Id.

\textsuperscript{133} See McCormack v. Abbott Labs., 617 F. Supp. 1521, 1530 (D. Mass. 1985). In McCormack, the plaintiff's testimony was that the DES taken by her mother during pregnancy was in the form of "little white pills" about the size of saccharin tablets, and "little orange or little red pills," which were described as very small, like "M & M's." Id. at 1527. The Upjohn Company, a defendant in the case, had never developed, manufactured, advertised, sold, or resold DES in any form other than a spherical gelatinous perle filled with fluid. Id.

\textsuperscript{134} See Rostron, supra note 5, at 165.

\textsuperscript{135} Id. at 166. Rostron explains fungibility requirements as applied by the courts and argues for the elimination of the fungibility requirement in favor of a broader concept he calls “proportional share liability.” Id. at 151.
damage that each manufacturer's product would do." While the court's application of a "comparability of damage" measure in *Sindell* provided clarity in terms of the resolution of the litigation before it, it did not bestow a very parochial and scientifically recognizable reference point for courts to follow thereafter, particularly in disputes involving products containing varying amounts of a hazardous or toxic substance.

V. NOVEL MARKET SHARE LIABILITY APPROACHES

Twenty-six years have passed since the California Supreme Court first applied market share liability in *Sindell*. With limited exceptions, market share liability has remained largely a singular response isolated to DES litigation. In 2005, two courts reexamined market share liability, setting new precedent that invites new ways of evaluating liability involving indeterminate defendants in products liability or pollution claims. The first, a products liability suit applying a risk contribution-market share liability theme, examines the scientific integrity of defining "fungibility" more broadly than the "chemical interchangeability" standard as suggested in *Sindell* and as applied in several subsequent decisions. The second, involving widespread actual and threatened underground water contamination by accidental release of a gasoline additive, applies market share liability to a range of damage actions by holding that even though the pollution in multiple sites involved pollutants of varying concentrations, the final product in each case could fairly be characterized as a new, "commingled product" to which market share liability could be justly applied.

A. Thomas ex rel. Gramling v. Mallett

This action was brought on behalf of Thomas, a minor, against lead carbonate manufacturers to recover damages for serious
neurological disorders. Thomas, contending the disorders were caused by ingestion of paint pigment with white lead carbonate, alleged claims of strict liability, negligence, civil conspiracy, and enterprise liability. The Wisconsin Court of Appeals granted the manufacturers' motion for summary judgment and concluded that because Thomas had pursued remedies against one or more landlords for their negligence in failing to abate lead paint hazards in his prior residences, and had reached settlements in those cases, there was no policy reason to extend Collins's risk contribution theory. The Wisconsin Supreme Court reversed, identifying the opportunity to extend the risk contribution-market share liability doctrine advanced in Collins, theretofore reserved for DES cases, to the claims of lead-based paint poisoning.

In Gramling, the majority acknowledged that even in those jurisdictions that were willing to apply some form of market share liability to DES claims, the majority of courts that had heard lead pigment poisoning claims by that date had declined to do so. The reasons such decisions had given fell generally into three categories. First, some courts based their refusal on the fact that the various lead pigment formulations marketed over pertinent time periods varied. Second, the periods of time that would be presented for determining the relevant market might be eighty or ninety years, insofar as an infant of a modern family might ingest or be exposed to lead paint fragments (or dust during home remodeling) that could represent, layer by layer, decades of application of paint from different paint and pigment manufacturers. Third, the window of time during which the child could have been exposed would often be measured in years, particularly if families resided in multiple homes or apartments over a period of time. In contrast, in a DES case, the relevant window of exposure would be a single term of a mother's pregnancy, or twelve weeks. Each of these three considerations would bear, in an interconnected way, upon the accessibility of records and other evidence that might be summoned to show the

138. Id.
140. 701 N.W.2d 523.
likelihood that a particular manufacturer's product was a (let alone the) likely cause of a child's lead poisoning.

The majority began its analysis with a discussion of its noteworthy decision in *Collins v. Eli Lilly & Co.* In *Collins*, the court wrote that in order for a plaintiff to prove the typical tort prima facie case against any particular manufacturer, she was required to show by a preponderance of the evidence that her mother took DES while pregnant, that DES caused her mother's injuries, that defendant drug company manufactured DES during her mother's pregnancy, and that defendant's production or marketing of DES breached a legal duty. It was obvious to the Wisconsin court, as it had been to the California court in *Sindell*, that on the facts of DES litigation, preservation of the orthodox burden of proof presented an insurmountable obstacle to the daughter whose mother was unable to identify the specific manufacturer of the drug she took. In the interests of justice and fundamental fairness, the court was faced with a choice either to fashion a method of recovery, which would deviate from traditional notions of tort law, or to permit possibly negligent defendants to escape liability to an innocent, injured plaintiff. The *Collins* court, as would the majority in *Gramling*, chose the former.

*Collins*, of course, was a DES case and involved a pharmaceutical compound that was produced according to a chemically identical formula that allegedly caused harm. The white carbonate used in paint pigment, in contrast, was made from three different chemical formulas. The *Gramling* court readily recognized this distinction. The question left unanswered by *Collins* was whether fungibility required chemical identity, and the *Gramling* court concluded that it did not. The court elected to accept the invitation in *Collins* that risk contribution as a "method of recovery could apply in situations which are factually similar to the DES cases." The majority conceded that while

142. *Gramling*, 701 N.W.2d at 548–49.
143. *Collins*, 342 N.W.2d at 50.
144. *Id.*
145. 701 N.W.2d at 559.
146. *Id.* Justice Wilcox's dissent incorrectly construes *Collins* as requiring plaintiffs to prove the type of DES taken by the mother, ignoring the fact that in *Collins*, the plaintiff need only allege and prove that the defendant drug company produced or marketed the drug if the plaintiff could not prove the type of DES the mother took. Compare *id.* at 575–76 (Wilcox, J., dissenting), with *Collins*, 342 N.W.2d at 50.
147. 342 N.W.2d 37.
148. *Id.* at 49.
Gramling was not identical to Collins, its facts were sufficiently similar to permit adoption of the Collins analysis, as were its principal policy objectives.

Lacking any body of decisional authority for defining fungibility, the court referenced Allen Rostron's article in which he writes that a product can be fungible in at least three different ways. To Rostron, a product can be "functionally interchangeable," and a product can be "physically indistinguishable." Interchangeability is heavily reliant on context and does not have precise definition. Whether a product is fungible is a matter of degree and context for both the function at issue and physical similarly reported. Additionally, a product can be fungible if it presents a uniformity of risk, thus sharing an identical or virtually identical chemical formula. For example, "while each milligram of DES presented the same amount of risk, each DES pill did not, because the pills came in different dosages." Thus, as in the lead pigment cases, the products may contain different concentrations of hazardous substances but that does not render them nonfungible. This approach, the Gramling court determined, is flexible enough to accommodate situations where products pose varying degrees of risk.

Gramling is not the first to fail to require absolute interchangeability, and the dissent's unwillingness to recognize

149. Gramling, 701 N.W.2d at 557. In Collins, the Wisconsin court noted that Article I, Section 9 had been interpreted as permitting under the constitution a court-fashioned adequate remedy when an adequate remedy or forum does not exist to resolve disputes or provide due process. 342 N.W.2d at 49. Like DES, the entirely innocent plaintiffs may have been severely harmed by a substance they had no control over and they may never know or be able to prove with certainty which manufacturer produced or promoted the white lead carbonate that caused the injuries. Id.

150. Gramling, 701 N.W.2d at 558. It was noted and discussed in Gramling that "[w]hile 'fungibility' [has] become an obsession for courts discussing market share liability, no court has ever explained thoroughly what 'fungibility' means or why it is important." Id. at 560 (citing Rostron, supra note 5, at 163).

151. Id. at 560–61.

152. Id. at 561 (citing Rostron, supra note 5, at 163–65).

153. Id. See also discussion supra Part IV.A–C and accompanying notes.

154. Gramling, 701 N.W.2d at 562.

155. Id. at 561. It is the common dominator in the various white lead carbonate formulas that matters, namely, lead. Id. at 562.

156. Wheeler v. Raybestos-Manhattan, 8 Cal. App. 4th 1152 (Cal. Ct. App. 1992). In Gramling, the dissent argues that the majority creates an irrefutable presumption of causation and extends Collins to a point where every paint manufacturer that produced white lead carbonate at one time or another is absolutely liable because there is no realistic opportunity to prove that they did not make the product that injured the plaintiff. 701 N.W.2d at 575 (Wilcox, J., dissenting).
this weakens its position. In *Wheeler v. Raybestos Manhattan*, the court held that while brake pads are not absolutely interchangeable, and thus are not fungible from the viewpoint of an auto mechanic, because they contain "roughly comparable" quantities of chrysotile, they are sufficiently fungible for purposes of market share liability as adopted in *Sindell*.\textsuperscript{157} The potential harm from brake pads of the manufacturers were "more nearly equivalent."\textsuperscript{158} The *Wheeler* court distinguished *Mullen* because the brake pads at issue were composed of a "single type of asbestos fiber, . . . and the amount of asbestos by weight in the pads varied within a limited range."\textsuperscript{159} Thus, although brake pads containing asbestos chrysotile fibers were not all manufactured from one single chemical formula, it was held that "they are fungible . . . by virtue of containing roughly comparable quantities of the single asbestos fiber."\textsuperscript{160} The outer limits of what would constitute a varying degree or status of being "roughly comparable" or "nearly equivalent" were not considered by the court.\textsuperscript{161}

The majority in *Gramling* recognized that the window during which the possible injury causing white lead carbonate was placed in a house that eventually harmed Thomas was drastically larger than a nine month pregnancy. Equity, the majority concluded, did not support reversing the balance established in *Collins* simply because the "[p]igment [m]anufacturers benefited from manufacturing and marketing white lead carbonate for a significant amount of time."\textsuperscript{162}

The majority also acknowledged the backdrop of relevant court decisions declining the extension of market share liability under these circumstances in order to determine whether *Collins*’s risk contribution theory should be recognized for white lead carbonate claims. And yet, the court in *Collins* had written specifically that its "method of recovery could apply in situations which are factually similar to DES cases."\textsuperscript{163} Choosing to emphasize the

\begin{itemize}
  \item \textsuperscript{157} \textit{8 Cal. App. 4th} at 1155.
  \item \textsuperscript{158} \textit{Id.} at 1157.
  \item \textsuperscript{159} \textit{Id.}
  \item \textsuperscript{160} \textit{Id.} In *Gramling*, the dissent was unwilling to concede that the *Wheeler* court’s consideration of "nearly equivalent" risk of harm provided support for fungibility and application of market share liability. 701 N.W.2d at 586 (Wilcox, J., dissenting). \textit{See also} Zafft v. Eli Lilly & Co., 676 S.W.2d 241, 246–47 (Mo. 1984) (declining the opportunity to adopt the risk contribution theory on the grounds that the theory has the potential of producing injustices through delayed recoveries and inconsistent results).
  \item \textsuperscript{161} *Wheeler*, 8 Cal. App. 4th at 1152.
  \item \textsuperscript{162} *Gramling*, 701 N.W.2d at 563.
  \item \textsuperscript{163} \textit{Id.} at 557 (citing *Collins v. Eli Lilly & Co.*, 342 N.W.2d 37, 49 (Wis. 1984)). The majority adopted a straight application of the Wisconsin court’s
\end{itemize}
similarities over the differences, the majority found *Collins* sufficiently similar on its facts to warrant application of the risk contribution theory. As or more important than the factual similarities, the *Gramling* court recognized that market share liability was suited to lead pigment litigation for the same policy reasons that had justified risk contribution—market share in DES claims.

"While each milligram of DES contained the same amount of risk, each DES pill did not, because the pills came in different dosages." Thus, as in the lead pigment cases, the products may contain different concentrations of hazardous substances, but that does not render them nonfungible. This approach is flexible enough to accommodate situations where products pose varying degrees of risk. In *Wheeler*, although brake pads containing asbestos chrysotile fibers were not all manufactured from one single chemical formula, "they [were] fungible . . . by virtue of containing roughly comparable quantities of the single asbestos fiber." The outer limits of what would constitute a "varying degree" or "roughly comparable" were not considered by the majority.

Even under the relaxed causation standards announced in *Collins*, the court still required plaintiff to prove "that the defendant drug company reasonably could have contributed in some way to the actual injury." Where *Collins* involved a nine month pregnancy, *Gramling* involves a much longer time frame within which the product alleged to have caused injury may have been manufactured and distributed. Using the reasoning of *Skipworth v. Lead Industries Association, Inc.* and the factually uncertain time frame of seventy-five to eighty years, many of the defendants in this case were not participants in the white lead carbonate market for significant periods of time from 1900 to 1980. *Gramling*'s inability to identify a narrow time frame in which to apply the *Collins* risk contribution theory is dispositive because, without a definitive time frame, the defendants will be

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burden-shifting analysis in *Collins* and applied it to the lead carbonate claims. See id.

164. *Id.* at 565.
165. *Id.* at 561 (citing Rostron, supra note 5, at 166).
166. *Id.* See also *Wheeler*, 8 Cal. App. 4th at 1155–56.
168. *Gramling*, 701 N.W.2d at 575 (Wilcox, J., dissenting).
169. *Id.* at 577 n.10 (Wilcox, J., dissenting).
unable to prove that they did not produce the injury causing product in question.\textsuperscript{171}

The dissent argues that \textit{Collins} explicitly rejected a broader theory of risk contribution that would have held manufacturers of DES liable without regard to whether they produced the product during the nine months the mother was exposed to it.\textsuperscript{172} In reality, however, the dissent distorts the majority opinion as holding that for risk contribution-market share, each defendant will have “contributed to the risk of injury to the public and, consequently, the risk of injury to individual plaintiffs . . . .”\textsuperscript{173} The majority merely recognized that in shaping market share liability in \textit{Collins}, the court looked at the measure of culpability of the defendant drug companies for producing and marketing the drug.\textsuperscript{174}

\textbf{B. In Re Methyl Tertiary Butyl Ether (“MTBE”) Products Liability Litigation}

In \textit{In re Methyl Tertiary Butyl Ether (“MTBE”) Products Liability Litigation},\textsuperscript{175} the federal district court for the Southern District of New York, in an opinion by Judge Scheindlin, applied the principles of market share liability, fashioning a new collective liability to encompass the action before the court.\textsuperscript{176}

Tracing MTBE and other groundwater contaminants into the hands of a particular defendant is often a difficult task because, once released into the environment, chemicals generally lack characteristics that differ from manufacturer to manufacturer. MTBE manufactured by one defendant is impossible to distinguish from MTBE manufactured by another entity once in the aquifer.\textsuperscript{177} As a result of these difficulties, MTBE plaintiffs, be they owners of private wells or persons whose municipal water has been contaminated, have sought to impose on defendants a variety of

\textsuperscript{171} \textit{Gramling}, 701 N.W.2d at 558. The majority notes that “given the disturbing number of victims of lead poisoning from ingesting lead paint and given that white lead carbonate was the overwhelming pigment added to that paint, it is clear from the summary judgment record that [the court is] not dealing with an isolated or unique set of circumstances.” \textit{Id.}

\textsuperscript{172} \textit{Id.} at 576 (Wilcox, J., dissenting).

\textsuperscript{173} \textit{Id.} at 558.

\textsuperscript{174} \textit{Id.} at 550.

\textsuperscript{175} 379 F. Supp. 2d 348, 348 (S.D.N.Y. 2005).

\textsuperscript{176} \textit{Id.} at 377–78. The gasoline additive MTBE (methyl tertiary butyl ether) is a “chemical compound produced from methanol and isobutylene, a byproduct of the gasoline refining process. It is highly soluble in water and does not readily biodegrade,” meaning it is capable of existing in an underground aquifer for many decades. \textit{Id.} at 364–65.

\textsuperscript{177} \textit{Id.} at 365.
collective liability theories that would permit recovery without the necessity of product identification.\textsuperscript{178}

\textit{In re Methyl Tertiary Butyl Ether ("MTBE") Products Liability Litigation} arose from the alleged current and threatened contamination of groundwater with the additive from plaintiffs in fifteen states.\textsuperscript{179} MTBE is a particularly virulent pollutant. A byproduct of the refining process, it is carcinogenic in animals and is "highly soluble in water and does not readily biodegrade."\textsuperscript{180} Its solubility permits it to invade any water source with which it comes into contact, and its persistence, potentially decades long, is greater than that of other gasoline components. It renders water unfit for consumption, and, adding insult to injury, MTBE contamination "imparts a foul taste and odor to water."\textsuperscript{181} Compounding, if you will, a plaintiff's problem in identifying the producer or producers of the contaminant, it lacks any chemical signature. This impediment to identifying a responsible producer is magnified by the fact that industry practice "involves complex arrangements whereby defendants trade, barter or otherwise exchange product[s] for delivery," and that gasoline containing MTBE "is commingled during its transmission via pipeline from refineries to distribution centers."\textsuperscript{182}

At some point after 1979, gasoline producers began to take the opportunity to modify waste MTBE into a product that had a commercial value, and they did so by oxygenating it to boost octane levels. While it was true that the Clean Air Act of 1990\textsuperscript{183} required the use of oxygenates, alternatives to oxygenated MTBE existed.\textsuperscript{184} The defendants knew of the contamination "crisis" associated with underground storage tanks and other sources and

\textsuperscript{178} \textit{Id.} at 371-77. \textit{See also} RESTATEMENT (SECOND) OF Torts § 433B(2) cmt. e (1965).

\textsuperscript{179} 379 F. Supp. 2d at 362. The plaintiffs involved in the multi-district litigation arising from the defendants' alleged contamination filed suit in fifteen states: Connecticut, Florida, Illinois, Indiana, Iowa, Kansas, Louisiana, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Vermont, Virginia, and West Virginia. \textit{Id.} The court's task included the prediction of how the pertinent legal issues would be determined under the individual law of these states. \textit{Id.} at 367 ("Where the substantive law of the forum state is uncertain or ambiguous, the job of the federal courts is to carefully predict how the highest court of the forum state would resolve uncertainty or ambiguity."). \textit{See also} Travelers Ins. Co. v. 633 Third Assoc., 14 F.3d 114, 119 (2d Cir. 1994).

\textsuperscript{180} \textit{In re MTBE}, 379 F. Supp. 2d at 365.

\textsuperscript{181} \textit{Id.} "MTBE is carcinogenic in animals and may be carcinogenic in humans, as well." \textit{Id.}

\textsuperscript{182} \textit{Id.}


\textsuperscript{184} \textit{In re MTBE}, 379 F. Supp. 2d at 365.
not only shared this information with their trade association, including the American Petroleum Institute ("API"), but also acted in concert "to mislead plaintiffs, the EPA, [Congress], downstream handlers, and the public about the hazards of adding MTBE to gasoline."  

The defendants moved pursuant to the Federal Rules of Civil Procedure for the complete dismissal of all the complaints. While raising many issues, defendants’ motion to dismiss focused in particular on the problem of product identification.  

Defendants argued that the complaints from all fifteen states must be dismissed because the plaintiffs failed to identify which defendant’s MTBE-containing gasoline proximately caused their harm. If plaintiffs could not show which product was responsible for causing their injuries, their cases could not survive unless they could proceed on a theory of collective liability. The plaintiffs, in turn, asserted that they could not identify the wrongdoer based on the fungible nature of the MTBE and that their litigation was suited for application of some variation of the familiar devices for shifting of the conventional burden of proof.  

The court went through a detailed discussion of various forms of collective liability, describing in turn: (1) alternative liability; (2) concert of action liability; (3) enterprise liability; and (4) market share liability. With regard specifically to the theory of alternative liability, the court described the theory now embodied in Restatement (Second) of Torts Section 433B(3), which is underpinned by a policy that proven wrongdoers should not be permitted "to escape liability merely because the nature of their conduct and the resulting harm has made it difficult or impossible to prove which of them caused the harm."  

The court acknowledged that alternative liability might not be perfectly suited to the MTBE litigation, in that the doctrine had traditionally been applied in cases where defendants’ conduct was simultaneous
in time, was of the same character, created the same risk of harm, and where all potential tortfeasors were joined as defendants.\textsuperscript{193}

Turning to market share liability, the court examined the language of Restatement (Third) of Torts: Products Liability,\textsuperscript{194} in which the American Law Institute offers these considerations to courts evaluating the suitability of applying market share liability to a particular law suit:

In deciding whether to adopt a rule of [market share] liability, courts have considered the following factors: (1) the generic nature of the product; (2) the long latency period of the harm; (3) the inability of plaintiffs to discover which defendant's product caused plaintiff's harm, even after exhaustive discovery; (4) the clarity of the causal connection between the defective product and the harm suffered by plaintiffs; (5) the absence of other medical or environmental factors that could have caused or materially contributed to the harm; and (6) the availability of sufficient "market share" data to support a reasonable apportionment of liability.

Judge Scheindlin suggested that "MTBE contamination presents as compelling a circumstance for the application of market share liability as does DES."\textsuperscript{195} The court concluded that great weight should be given to factor one: "the fungible nature of the goods creates the necessity for using the market share theory and ensures fairness in apportioning liability."\textsuperscript{196} The court concluded that at the very least, factors one, three, and four applied in the MTBE context.\textsuperscript{197} MTBE-containing gasoline is a fungible product because the brands are interchangeable and because different concentrations of MTBE in different batches of gasoline do not affect its ability to contaminate ground water. The court went so far as to say that the fungible nature of MTBE was perhaps even more evident than in DES cases because while DES pills could be distinguishable by appearance (e.g., color, shape, or size of pills), it is inherently difficult to identify the refiner that caused plaintiffs' injuries from MTBE, as it lacks even a chemical

\textsuperscript{193} Id. "Market share liability is uniquely suited to fungible product cases because such products (1) create the problem of non-identification in the first place and (2) pose equal risks of harm to those exposed to the product." Id. at 376.

\textsuperscript{194} Id. (citing RESTATEMENT (THIRD) OF TORTS § 15 cmt. c (1998)).

\textsuperscript{195} Id. at 377.

\textsuperscript{196} Id.

\textsuperscript{197} Id. at 376.
signature. Factor two, on the other hand, can be considered to cut against application of market share liability because "MTBE does not have a long latency period of harm." It contaminates wells soon after it has reached the underground water. Consideration of factors five and six seemingly suggested that there were no additional impediments to imposition of some form of market share liability. Contamination occasioned by MTBE is readily discerned. The presence of other pollutants does not require a finding of nonliability if the MTBE remains a producing cause of the contamination. Also, the modern nature of the entire problem ensures that industry and other records are and will remain indefinitely available.

Despite the apparent support that the Restatement provision might give to the application of some form of market share liability, the court saw its task as the fashioning of a theory of multiple liability that would best suit the circumstances of jointly caused environmental harm, and one which the court could predict that states that had entertained the rationale of market share liability would adopt. Judge Scheindlin named it the "commingled product" theory. It would be applicable when "certain gaseous or liquid products (e.g., gasoline, liquid propane, alcohol) of many suppliers were present in a completely commingled or blended state at the time and place that the risk of harm occurred, and the commingled product caused a single indivisible injury." "Under this theory, each refiner actually caused the injury." Liability

198. Id. Defendants have repeatedly represented that petroleum products are mixed during transportation and that gasoline may be provided by any refiner whose product is in the chain of supply. Id. at 377 n.105. But see Conley v. Boyle Drug Co., 570 So. 2d 275, 285 (Fla. 1990) (noting that some DES plaintiffs had been able to identify the manufacturer of the injury-causing DES).


200. Id.

201. Id.

202. Id. at 377–78. The court offered this illustration:

[A]ssume that the petroleum products of ten refiners are commingled in an underground storage tank. These ten products are completely fungible and blended, combined or commingled into a single batch. Each refiner supplied ten percent of the total volume of product in the tank. If twenty percent of the petroleum in the tank leaks into the ground, it is not reasonable to assume that the harm resulting from this leak was caused by the products of only two refiners (each supplying ten percent), and to require plaintiffs to prove which two proximately caused the harm. Because the petroleum products were commingled to form a new mixture, each of the ten refiners contributed to the injury in proportion to the amount of product that each supplied.

Id. at 378.

203. Id.
would be several only, due to the risk that defendants whose contribution might be "small and insignificant" in relation to the total harm would be caused "disproportionate hardship." As for the other defendants, "[d]amages should be apportioned by proof of a defendant's share of the market at the time a risk of harm was created to a class of potential victims."\(^{200}\) The defendant could exculpate itself with proof that "its product was not present at the relevant time or in the relevant place, and therefore could not be part of the new commingled or blended product."\(^{205}\) For the commingled product-market share theory to apply, plaintiffs would be required to identify those defendants "whom they believe contributed to the commingled product that caused their injury[,]" a task that would require "investigation so that they can make a good faith identification of the defendants whom they believe caused their injury."\(^{206}\) While it would not be necessary that plaintiffs name all potential tortfeasors, they would have an incentive to name as many as they could "to maximize recovery as defendants would only be liable for their share of the damages."\(^{207}\)

The cases applying some form of collective liability all have one commonality: they allow for judicial discretion. Accordingly, "from time to time courts have fashioned new approaches in order to permit plaintiffs to pursue a recovery when the facts and circumstances of their actions raised unforeseen barriers to relief."\(^{208}\) Such as the existing parameters of liability theories stand, the court suggests that In re Methyl Tertiary Butyl Ether ("MTBE") demands one more theory—a modification of market share liability.\(^{209}\)

VI. CONCLUSION

Those predicting that Sindell v. Abbott Laboratories\(^{210}\) would presage a tidal surge of adoptions in seemingly related collective liability litigation would be disappointed as they learned that the California Supreme Court had simply, while innovatively, decided the case before it—a potential collective liability action involving a fungible (physically interchangeable) product. It would take many years for the Wisconsin Supreme Court to revisit Sindell and its own adoption of a risk contribution variant of market share liability.

\(^{200}\) Id.
\(^{205}\) Id.
\(^{206}\) Id.
\(^{207}\) Id.
\(^{208}\) Id. at 377.
\(^{209}\) Id.
\(^{210}\) 607 P.2d 924 (Cal. 1980).
liability\textsuperscript{211} that would propose a renewed inquiry into the meaning of the talismanic fungibility requirement of market share liability and that fungibility meant not only physical indistinguishability but also functional interchangeability and uniformity of risk. One cannot tell at this time, but \textit{Thomas ex rel. Gramling v. Mallett}\textsuperscript{212} at the very least invites courts, and particularly those courts that have already adopted one or another form of market share liability, to consider its suitability to litigation involving substances other than DES.

\textit{In re Methyl Tertiary Butyl Ether ("MTBE") Products Liability Litigation}\textsuperscript{213} stands likewise as an innovative and promising treatment of environmental contamination litigation. On its facts, the litigation presented two features that might otherwise preclude recovery for plaintiffs: (1) the product had no chemical signature that would aid in defendant identification; and (2) by the industry's very method of marketing and distribution, gasoline containing MTBE would be mixed, blended, and exchanged into indistinguishability by the time any potential contamination might occur. By her adoption of a "commingled product" approach to market share liability, Judge Scheindlin suggested that states could avoid the denial of recovery to plaintiffs theretofore disappointed by the fortuity of an industry practice of blending and mixing its products \textit{inter se}.

Courts applying common law have always been charged with considerations not only of applying the established law of a jurisdiction but also with reaching just and equitable decisions when application of existing law might preclude it. The thoughtful decisions of the Wisconsin Supreme Court's \textit{Thomas ex rel. Gramling v. Mallett} and the federal district court's \textit{In re MTBE Products Liability Litigation} provide that justice and equity and, in so doing, open (and reopen in turn) very important means of achieving justice in collective liability suits beyond the boundaries of DES litigation.

\textsuperscript{211} Collins v. Eli Lilly Co., 342 N.W.2d 37, 48 (Wis. 1984).
\textsuperscript{212} 701 N.W.2d 523, 567 (Wis. 2005).