"TAKING" INFORMATIONAL PROPERTY THROUGH DISCOVERY

GREGORY GELFAND*

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I. Introduction

There is increasing recognition today of the existence of a type of intangible property consisting of acquired, organized, and stored information.¹ This concept of information-as-property is inevitably destined to

^{*} Visiting Professor, The University of Pittsburgh Law School; Associate Professor of Law, Widener University School of Law; B.A. 1973, the State University of New York at Stonybrook; J.D., 1976, the University of Michigan. The author would like to thank Mary Ellen Roberts for typing the preliminary drafts of this Article, Jeff Eckman and Neda Biggs for research assistance, and Susan Goldberg, John Jancka, Alan Garfield, Rochelle Dreyfuss, Joseph deFuria, and Roger Cunningham for their very helpful comments on early drafts. Of course, I alone bear the responsibility for the views expressed in this Article. [The author would have preferred to capitalize constitutional amendments but this law review follows the Texas Law Review Manual on Style which requires lower case. —Eds.]

^{1.} This trend toward recognition culminated in the Supreme Court's decision in Ruckelshaus

clash with the discovery procedures of modern litigation² and, to a lesser degree, with various other disclosure requirements.³ In 1938, when the Federal Rules of Civil Procedure first introduced extensive discovery into the process of civil litigation,⁴ the drafters incorporated an underlying assumption that no person had an interest in, or a right to withhold, information needed in a judicial proceeding.⁵ Informational property—essentially a product of the computer age⁶—could not have been anticipated in the Federal Rules, which preceded the first commercially produced computer by sixteen years.⁷

Many companies now exist whose business consists solely of buying

v. Monsanto Co., 467 U.S. 986 (1984). The Court held that certain trade secret data which would be informational property, as the term is employed in this Article, is property for purposes of protection from governmental taking without compensation. Id. at 1003-04. See generally R. MILGRIM, 1 TRADE SECRETS, § 1.01 (1985); McGarity & Shapiro, The Trade Secret Status of Health and Safety Information, 93 Harv. L. Rev. 837 (1980); Note, Federal Disclosure Statutes and the Fifth Amendment: The New Status of Trade Secrets, 54 U. Chi. L. Rev. 334, 335 n.4 (1987) [hereinafter Disclosure Statutes]; Note, Compensating Manufacturers Submitting Health and Safety Data to Support Product Registrations After Ruckelshaus v. Monsanto, 61 Ind. L. J. 189, 192-94 (1986) [hereinafter Compensating Manufacturers]; Note, Constitutional Limitations on Government Disclosure of Private Trade Secret Information, 56 Ind. L. J. 347, 357 (1981).

In cases involving informational property, the value of that property may be in the facts and data stored, the organization and analysis of that data, or both.

- 2. See, e.g., FED. R. CIV. P., 26-37, 45.
- 3. A number of state and federal statutes require the disclosure of information for purposes other than litigation. Some examples are discussed *infra* at notes 15-21, 114-15, 118-52 and accompanying texts.
- 4. See C. WRIGHT, FEDERAL COURTS 402-06 (4th ed. 1983). See also id. at 539 ("Discovery was the Cinderella of the changes in procedure made by the Civil Rules. Now there are those who are saying that the carriage has turned into a pumpkin").
- 5. For example, Dean Wigmore wrote in 1904: "For more than three centuries it has now been recognized as a fundamental maxim that the public (in the words sanctioned by Lord Hardwicke) has a right to every man's evidence." 8 WIGMORE, EVIDENCE § 2192 (McNaughton rev. 1961). This assumption is clearly reflected in the broad party and nonparty discovery provisions of the Federal Rules of Civil Procedure. Yet Rule 26 gives special protection to experts. Expert witnesses may not be subject to discovery without permission of the court, and such permission is usually conditioned upon payment for the expert's time by the party requesting the discovery. See FED. R. CIV. P. 26(b)(4). See generally C. WRIGHT, supra note 4, at 545-47 (history of discovery provisions regarding experts). The reasons for giving special protection to experts are much the same as the reasons set forth in this Article for protecting informational property. Indeed, an expert's knowledge of his field is a form of informational property and the special protection given to experts presents an important and helpful analogy. See infra note 110 and accompanying text.
- 6. Informational property can, of course, exist without computers. For example, the property at issue in Ruckelshaus v. Monsanto, 467 U.S. 986 (1984) was not dependent on computer generation. The recent increase in the availability of computers, however, has produced a corresponding increase in the amount of informational property created.
- 7. See J. Soma, THE COMPUTER INDUSTRY 17 (1976). The first commercially marketed computer appeared in 1954 and met with little success.

and selling information. Serving a discovery request on such a company is, in reality, nothing short of using the legal process to steal their inventory. Further, in some cases, the result may be even more drastic. Discovery may result in the complete taking or destruction of an information service's business because the sources of information on which such companies depend may be unwilling to furnish information in the future (or may furnish inaccurate information in the future) when they realize that the information can be secured by an opposing party in litigation or by certain government officials.⁸

This use of the discovery rules brings discovery into direct conflict with the constitutional prohibitions against state⁹ or federal¹⁰ governmental taking of property without compensation. Inevitably, the constitutional values of the fifth and fourteenth amendments will prevail over the Federal Rules of Civil Procedure, state rules of procedure, and related state and federal statutes in such cases. The time is thus fast approaching when discovery rules and certain disclosure statutes will have to be redesigned to take this emerging problem into account by providing for fair compensation to the owners of informational property when compensation is feasible, and ceasing to require disclosure where compensation cannot be achieved.

This Article employs civil discovery under the Federal Rules of Civil Procedure¹¹ as its paradigm for testing the constitutionality of requiring the uncompensated disclosure of informational property. This Article does not distinguish between cases where informational property is

^{8.} This problem exists even though a party using discovery techniques often could secure the same information directly from the same sources as the information service. Compiling the raw data is often difficult, and may require expertise. Thus, many litigants will not ultimately have such data available if the information service is not compelled to provide it.

Two additional losses to information services should be noted. First, for much the same reasons that the sources of information may dry up, the customers who have, in effect, sponsored the generation of the information may cease buying it in order to discourage the information service from keeping it. Second, the agents and officers of the information service are required to spend a significant amount of paid business time testifying in order to introduce and explain the data.

^{9.} U.S. Const. amend. XIV. The fifth amendment's protection has been made applicable to the states via the fourteenth amendment. See Chicago, Burlington, & Quince R.R. v. Chicago, 166 U.S. 226, 239 (1897). Although a private citizen sends a discovery request, it is the coercive force of the state government (or federal government in the case of federal court action, see infra note 10) that takes the property. Absent that government force, a citizen sending a discovery request will be ignored.

^{10.} U.S. CONST. amend. V ("nor shall private property be taken for public use, without just compensation").

^{11.} See FED. R. CIV. P. 26-37, 45.

sought from a party or a nonparty. Both are possible under existing rules.¹² Although information services are most often pursued as nonparty witnesses, the taking analysis does not turn on the distinction.¹³ The same analysis implicitly covers state discovery rules. Differences in state procedure are, for the purposes of this Article, inconsequential.¹⁴

A number of state and federal statutes likewise compel disclosure of facts which may, at times, include informational property. Examples of such statutes include: the various C.I.D. (Civil Investigative Demand) statutes authorizing administrative agencies to conduct discovery even in the absence of specific litigation; ¹⁵ the FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) provisions that were at issue in *Ruckelshaus v. Monsanto*; ¹⁶ Freedom of Information Act provisions; ¹⁷ certain federal OSHA (Occupational Safety and Health Administration) regulations; ¹⁸ Clean Air Act provisions; ¹⁹ the Fair Credit Reporting Act provisions which require uncompensated disclosure of an applicant's credit information to the applicant under certain circumstances; ²⁰ and various

Physical and mental exams, which seldom involve informational property, are limited to parties pursuant to Rule 35. FED. R. CIV. P. 35.

^{12.} See, e.g., FED. R. CIV. P. 45 (subpoena power against nonparties); FED. R. CIV. P. Rule 30 (oral deposition of any witness); FED. R. CIV. P. Rule 45 (used to obtain the presence of non-parties); FED. R. CIV. P. Rule 31 (depositions on written questions: less frequently used, same as oral deposition as applied to nonparties).

Interrogatories employed pursuant to Rule 33 may be used only on a party, although depositions on written questions are used on nonparties for many of the same purposes. FED. R. CIV. P. 33. Requests for production of documents and the like under Rule 34 are likewise only applicable to parties, but a subpoena duces tecum may be used in conjunction with a deposition to obtain the same results. FED. R. CIV. P. 34. Further, an independent action in the nature of a bill of discovery remains available (although rarely used) for permitting inspection of places, documents, and things in possession of non-parties. See C. WRIGHT, supra note 4, at 584.

^{13.} One may argue that nonparties present a better case for objecting to the taking. Parties, especially plaintiffs, are often seen as "volunteering" for litigation. The Court, in an analogous context, persuasively rejected any such suggestion. See Schlagenhauf v. Holder, 379 U.S. 104, 112-16 (1964).

^{14.} For example, some states require that discovery questions call for an answer that is admissable, while the federal rules and most states allow any discovery question calculated to lead to information which is admissable.

^{15.} See, e.g., 15 U.S.C. §§ 1311-14 (1982). But see 86 F.R.D. 603, 647.

 ⁴⁶⁷ U.S. 986 (1984) (discussing 7 U.S.C. § 136-136y (1982) (FIFRA)). Another such example would be the Toxic Substance Control Act (TSCA) 15 U.S.C. § 2601- § 2629 (1982).

^{17. 5} U.S.C. § 552-552b (1982).

^{18.} See, e.g., 29 C.F.R. § 1910.1200 (1987).

^{19. 42} U.S.C. § 7401-7642 (1982). Another such example would be the Water Pollution Prevention and Control Act, 33 U.S.C. § 1251-1376 (1982).

^{20. 15} U.S.C. § 1681-1681t (1982). Section 1681j requires free disclosure of information to any person who has been denied credit based on negative information in a credit report.

"Right to Know" acts which provide for public disclosure of the use of toxic substances.²¹ This Article examines these disclosure-type statutes later in somewhat greater detail. Some, such as those authorizing C.I.D.'s, are sufficiently similar to discovery rules that the taking analysis is identical. Others, such as the OSHA and FIFRA disclosure provisions, often involve companies engaging in particular types of potentially dangerous activities which may permit the government to require disclosure as the price for permitting the conduct.

The section of this Article which follows defines the term "informational property" and explains the choice of that term for the purposes of the analysis of this Article. Section III sets forth the analysis employed in taking cases and the ramifications of that analysis for informational property. Section IV then considers certain counterarguments which are unique to the application of the taking analysis to informational property. Finally, Section V of this Article synthesizes the foregoing arguments, considers the appropriate remedy for bringing discovery provisions into compliance with the prohibition against uncompensated takings, and places the analysis employed in this Article in the broader context of the purpose underlying the constitutional prohibition against taking private property for public use without compensation.

II. INFORMATIONAL PROPERTY

At the outset it is necessary to explain why this Article creates and employs the term "informational property." The case law and legal literature to date deal exclusively with intellectual property. While so doing, however, a few cases and commentators have begun to notice that intellectual property is too broad a term for the type of analysis with which this Article is concerned.²² Intellectual property includes intangible

^{21.} A considerable number of these acts were cited in the Solicitor General's brief on behalf of the EPA in *Monsanto*. See Brief of Appellant Environmental Protection Agency at 40 n.29, Ruckelshaus v. Monsanto Co. 467 U.S. 986 (1984) (No. 83-196), reprinted in U. S. Supreme Court Briefs and Records, 467 U.S. 986 (1984). The New Jersey Right to Know Act is discussed in New Jersey State Chamber of Commerce v. Hughey, 600 F. Supp. 606, 609-12 (D.N.J. 1985). Michigan's Act is discussed in Sparrow & Trickey, Whose "Right to Know" What?, MICH. B.J. 668-70 (July, 1987).

^{22.} Some precedent exists for distinguishing between technical and nontechnical trade secrets (or similar terms) whereby the term "nontechnical trade secrets" appears to refer to informational property. See, e.g., Note, Disclosure Statutes, supra note 1, at 359 ("nontechnical trade secrets"); id. at 360 ("confidential business information"); id. at 361 (dichotomy between "business and technical secrets"). The Monsanto opinion mentions the categories of "trade secrets [and] commercial or financial information." Ruckelshaus v. Monsanto Co., 467 U.S. 986, 993 (1984). The latter two categories appear to include informational property.

property rights created to promote artistic endeavors,²³ advances in technology,²⁴ distinguishing concepts, designs, or names which reflect valuable advertising and accumulated goodwill,²⁵ as well as informational property as it is defined here. For many purposes it is not necessary to distinguish between these types of intellectual property and courts have not done so in the past in taking cases. The point of this Article, however, is that informational property is unique among types of intellectual property for the purposes of taking analysis.

Other types of intellectual property differ from informational property in terms of the taking analysis because each of the other types will not be "taken" if it is used or disclosed while still appropriately protected. For example, a trademark may be disclosed and displayed during litigation without "taking" its value because the law continues to prohibit its use by commercial competitors.²⁶ The value remains despite the trademark's disclosure in the course of discovery or its use as an exhibit in the courtroom. Further, and far more importantly, the discovery process has not given the litigants the type of use of the trademark for which the trademark owner would normally charge a fee to a licensee. As another example, a typical trade secret, such as a faster way of producing a particular product or the formula of a popular soft drink, may likewise be disclosed during litigation under suitable protective orders and not be "taken" by the disclosure.²⁷ Informational property, on the other hand, is, by definition, property which cannot be disclosed and yet protected. Virtually any use,²⁸ and certainly the type of use involved during litigation, is a use for which the owner would have, in the absence of compulsion by the courts, charged a fee. Thus, informational property must be

^{23.} See, e.g., 17 U.S.C. § 101-118 (1982) (copyright laws); 35 U.S.C. § 171-§ 173 (1982) (design patents).

^{24.} For example, patents and "technical" trade secrets. See 35 U.S.C. § 101-104 (1982); Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470 (1974).

^{25.} See, e.g., 15 U.S.C. § 1051-1127 (1982) (trademarks). A number of state law doctrines deal with protection of commercial identity as well.

^{26.} The value of a trademark consists only of being able to use it to identify and advertise a product.

^{27.} See, e.g., Wearly v. Fed. Trade Comm'n., 462 F. Supp. 589, 594, 598-99 (D.N.J. 1978), vacated on other grounds, 616 F.2d 662 (3rd Cir. 1980), cert. denied, 449 U.S. 822 (1980). See also Exxon Corp. v. Federal Trade Comm'n., 589 F.2d 582 (D.C. Cir. 1978). But see Truswal Systems Corp. v. Hydro-Air Eng., Inc., 813 F.2d 1207, 1213-16 (Fed. Cir. 1987) (Rich, J., dissenting).

^{28.} Cf. infra text subsequent to note 35 (unusual hypothetical case where informational property is not "taken" because litigation process does not use it as information).

treated here separately from other intellectual property for the purposes of the taking analysis.

Informational property, then, consists of a property interest in information which is stored, acquired, and organized for its value as information. The same information may be both intellectual and informational property. By way of example, telephone books, which are presently protected through the copyright laws under "sweat of the brow" theory, present a close case.²⁹ This example, however, suffers from the fact that the phone companies presently do not sell phone books to readers, and it is therefore difficult to complain that a taking would occur if a court compelled a phone company to give a litigant a free phone book. The property interest nevertheless remains, and the taking question would arise if companies charged for phone books.

In a sense, the key to the taking argument of this Article and, therefore, the definition of informational property employed by it, lies in a comparison of the use for which the owner of the property would normally be compensated and the use for which it is being taken by forced disclosure. Contrasting two examples will illustrate this point. Consider first a typical trade secret, such as the formula for a well-known soft drink, Coca-Cola.³⁰ If a person sues the manufacturer for an injury caused by an alleged defect in the product, that person may genuinely need to know the formula used in making the soft drink in order to prove his case. Courts typically order that such trade secrets be disclosed under protective restrictions designed to present the trade secret from becoming available to competitors.³¹ The formula is simply intellectual

^{29.} See Hutchinson Tel. Co. v. Frontier Directory Co., 770 F.2d 128 (8th Cir. 1985); Leon v. Pacific Tel. Co., 91 F.2d 484, 486 (9th Cir. 1937); Sampson & Murdock Co. v. Seaver Radford Co., 140 F. 539, 542 (1st Cir. 1905).

Many of the problems discussed in Francione, Facing the Nation: The Standards for Copyright, Infringement, and Fair Use of Factual Works, 134 U. PA. L. REV. 519 (1986), Jackson, "Fact Works": Copyrightability and Infringement, 45 J. PAT. OFF. Soc'Y. 833 (1963), suggest that the sweat of the brow theory should be abandoned. The recent disaster in West Publishing Co. v. Mead Data Central, Inc., 799 F.2d 1219 (8th Cir. 1986) (Page numbers, in West Law reporters, other than the first page of each case, held to be copyrightable because of the considerable labor involved in assembling west's reporter system, despite the fact that no labor goes into creating the page numbers, the actual words of the opinions West publishes are not copyrighted, and despite the fact that the page on which a particular statement appears is a fact of independent significance which lawyers are required to cite in briefs.) certainly demonstrates the dangers of taking this theory too far.

^{30. &}quot;Coca-Cola" is a registered trademark of The Coca-Cola Company. Note that this use of the trademark "Coca-Cola" is not one for which the trademark owner would normally charge a fee. Thus, for example, if a court were to refer to it in a published opinion, no taking would occur.

^{31.} See supra note 27 and accompanying text.

property; it is being used for a purpose (proving the cause of an alleged defect) entirely different from that for which the owner would require payment (licensing the means for making a popular soft drink). Provided that the formula is not "leaked" to Coke's competitors, no taking occurs when the formula is obtained through discovery.³² The plaintiff is not using judicial process to obtain a free license to make a similar soft drink.

As a second hypothetical case, however, consider a litigant's attempt to discover data held by a company which services the real estate sales industry by maintaining detailed information concerning all real estate sales. Such a company may contract with many or all realtors to obtain access to the sale price, description, location, sales agent, and other information involved in every real estate transaction. Persons in the real estate business could find this information useful in appraising properties, deciding where to make future investments, evaluating the effectiveness of particular sales agents or branch offices, and in various other capacities.33 Such information could likewise prove helpful in some types of litigation. For example, in an antitrust case against a large realty company, one could deduce that company's market share from the data. Under current rules of procedure, a litigant could discover the information for free if the information service is a named defendant,34 and at a nominal cost if the information service is not a party.³⁵ In such a case involving informational property, a litigant is thereby able to use the information for free in exactly the same way a paying customer would—to ascertain trends and facts concerning the sale of real estate and various persons selling real estate.

The focus of the taking analysis is not so much that particular data bases are informational property, as it is the context in which the taking

^{32.} A significant problem remains, however, because courts often cannot effectively guarantee that trade secret protective orders will be followed. An exploration of this problem is beyond the scope of this Article. Because of this problem, many companies that own valuable trade secrets frequently choose to default with regard to certain issues in litigation rather than risk unauthorized disclosure.

^{33.} Likewise, a prospective real estate purchaser or seller could, for a fee, use the same data to select a broker. Indeed, the government might pay for the same data if it used the data to select a broker to buy or sell government property.

^{34.} The normal practice under Rule 34 is for each party to bear his own costs. FED. R. CIV. P. 34. The court may use its power under Rule 26 to issue protective orders to force an opponent to pay such costs only in an unusual case. FED. R. CIV. P. 26.

^{35.} In such cases the court would use its Rule 45 subpoena power and the litigant would pay a nominal witness fee. FED. R. CIV. P. 45.

occurs—the comparison between the coerced use and the use for which the data are valuable in the marketplace. A modification of the second hypothetical involving the real estate information service can further illustrate this point. Imagine instead that the information service is suing its computer programmer or the manufacturer of its computers over an alleged defect in computer storage. If the computer company used the discovery process to obtain access to the database for the purpose of checking its accuracy (and, therefore, the effectiveness of the computers or the programming) no taking would exist. The database would still constitute informational property, but this highly unusual type of disclosure would not "take" it. The circumstances of virtually all litigation, however, require that information services give the litigants information for uses that the information service would otherwise charge a fee.

If NASA needed data from an information service concerning, for example, the consumption rate of rocket fuels in order to aid in the space program, it would have to pay the market price to obtain that information from a consultant. Why, then, should the FTC, if it uses a C.I.D., not have to pay for data that shows market shares if the company providing access to that data would otherwise charge for it? In either case, the inventory of a business dealing in information is being taken by a governmental agency for a public purpose.

The term informational property, then, refers to a property interest in information. If a litigant can acquire the information for free or at a nominal cost under present litigation procedures, but the information is used in a similar manner at a much higher cost when the coercive effect of discovery rules or related statutes is not invoked, an unconstitutional taking has occurred.

III. TAKING PROPERTY UNDER THE FIFTH AND FOURTEENTH AMENDMENTS

The fifth amendment's command, "nor shall private property be taken for public use without just compensation," and applicable to the states through the fourteenth amendment, is generally analyzed in four steps. First, one must determine whether the affected item is "property." Second, the government must have "taken" it. Third, the taking must be for a "public purpose" or it cannot occur, even with compensation.

^{36.} U.S. CONST. amend. V.

^{37.} U.S. CONST. amend. XIV. See supra note 9.

Fourth, one must ascertain whether the government has provided "just compensation". This Article examines these four inquiries seriatim, and follows with a brief discussion of waiver doctrines which might be employed to circumvent the taking analysis entirely.

A. Defining Protected Property

Although the Constitution protects property, it does not explicitly define the property protected. The source of law that defines such property interests is a matter of some controversy³⁸ into which the scope of this Article limits but a brief foray. The Court often identifies that source with a flowery inexactitude similar to that found in *Board of Regents v. Roth*: protected property interests "are created and their dimensions are defined by existing *rules or understandings* that stem from an independent source *such as* state law."³⁹

Oddly enough, the *Monsanto* decision relied solely on Missouri (state) law.⁴⁰ In truth, state law per se cannot be the source. Rather, it was because Missouri law reflected a broader consensus that the Court recognized it as a matter of constitutional judicially created law. A minor problem with the reliance on Missouri law in *Monsanto* lies in the monstrous and debatable assumption the Court made concerning choice of

^{38.} For example, in Pruneyard Shopping Center v. Robins, 447 U.S. 74, 84 (1980), the Court claimed, "The United States, as opposed to the several States, [is not] possessed of residual authority that enables it to define 'property' in the first instance." Justice Blackmun, however, concurred in the opinion of the Court but dissented from this one sentence. Id. at 88-89. See generally, Annotation, Federal Courts: Federal or State Law as Applicable in Determining What is Property for Which Compensation Must be Paid Upon its Taking by the Federal Government, 1 A.L.R. FED. 479 (1972 & Supp. 1986).

Even if the view as to the source of property rights presented in this Article is not accepted, most of the analysis with regard to the taking of informational property remains intact. I have, therefore, endeavored to avoid detracting from the main theme of the Article by delving too deeply into the source(s) of property for the purpose of takings analysis. If state law defines property, no problem is presented. A clear trend in state law exists. See infra notes 71-82 and accompanying text. If slight variations in state law become crucial, however, an insurmountable choice of law question will be presented in every case of national or multi-state application, such as Monsanto.

^{39. 408} U.S. 564, 577 (1972).

^{40. 467} U.S. at 1003-4. See Reddi-Whip, Inc. v. Lemay Valve Co., 354 S.W.2d 913, 917 (Mo. App. 1962). Commentators have accepted the Court's statement at face value, questioning neither the assumption that state law defines federal constitutional obligations nor the assumption that Missouri law would be the particular state law to govern. See, e.g., Note, Compensating Manufacturers, supra note 1, at 193 ("In Ruckelshaus v. Monsanto, the Supreme Court decided for the first time that trade secrets could be considered property if state law made them so." (footnote omitted, emphasis added)).

law doctrines.⁴¹ A far more major problem occurs because Missouri, if it possessed the final word as to the definition of property, would be the final arbiter of the Constitution. Missouri could redefine property to exclude land just before beginning an ambitious highway project. Further, it is clear that federal law also may create property interests.⁴²

The Court may rely on both federal and state law to *create* property. Neither, strictly speaking, *defines* property, however, because neither may *abrogate* property interests created by either.

One thing is clear: A court can never use the very law that is challenged as a taking to define the property rights at issue. The Court in *Monsanto* recognized this "taking circularity" and therefore rejected the EPA's argument that FIFRA had "pre-empted" state law:

If Congress can "pre-empt" state property law in the manner advocated by EPA, then the Taking Clause has lost all vitality. This Court has stated that a sovereign, "by *ipse dixit*, may not transform private property into public property without compensation. . . . This is [what] . . . the Taking Clause of the Fifth Amendment was meant to prevent."⁴³

Thus, the ultimate power to define property lies at the federal constitutional level, beyond legislative and ordinary common law⁴⁴ alteration.

^{41.} The courts and parties involved in *Monsanto* appear to have assumed that Missouri law would govern either because Monsanto has its headquarters there or because the suit was filed there. The latter proposition is, of course, frightening when applied to questions of constitutional law because it gives the party selecting the forum absolute power. The former proposition is not desirable either as companies could alter their constitutional rights by moving their headquarters.

The modern choice of law theories weigh everything from contacts with the transaction or governmental interests of the state(s) involved to which of the competing rules of law is the "better" rule. Any attempt to imagine a court intelligently applying these doctrines to multi-state property questions determining constitutional rights evokes memories of the late Dean Prosser's famous comment: "The realm of the conflict of laws is a dismal swamp, filled with quaking quagmires, and inhabited by learned but eccentric professors, who theorize about mysterious matters in a strong and incomprehensible jargon. The ordinary court, or lawyer, is quite lost when engulfed and entangled in it." William L. Prosser in Interstate Publications, part of the Cook lectures at the University of Michigan. See Comment, Workman's Compensation and the Conflict of Laws 11 BAYLOR L. REV. 202, 202 n.1 (1959).

^{42.} See, e.g., Mathews v. Eldridge, 424 U.S. 319, 332 (1976)(federal Social Security disability benefits are property). But see supra note 38.

^{43.} Monsanto, 467 U.S. at 1012 (quoting Webb's Fabulous Pharmacies, Inc. v. Beckwith, 449 U.S. 155, 164 (1980)). In the face of this language the subsequent analysis in Monsanto, which used FIFRA to define the property and defeat property interests at will, is astounding. See infra notes 119-25, 134-39 and accompanying texts. For a more plausible explanation of Monsanto, see infra text accompanying notes 140-46.

^{44.} See infra text accompanying note 51. In a comment on a preliminary draft of this Article, John Jancka questioned whether this assertion was always true, asking whether a statute prohibiting the possesion of certain drugs or firearms would be an unconstitutional taking under my analysis.

Any other approach makes the taking clause a nullity. Perhaps the states and the federal government can create (but not abrogate) property rights, but it is more likely that state law (by consensus, rather than from a particular state)⁴⁵ is best treated as *evidence* of what the constitutional rule is.

"The" source of law defining property for purposes of taking analysis is most easily understood if it is viewed as having two sources because there are actually two types of property at issue. In the absence of existing terminology, I will describe these as "general" and "special" property. General property consists of property which exists in all jurisdictions and may not be abrogated by the law of any state or by federal law. General property is defined by a federal constitutional common law emanating from the fifth and fourteenth amendments. It consists of property that the drafters of the Constitution, if they could have

Any assertion pushed to its extreme encounters difficulties, but I believe that the answer depends on the timing of the acquisition of the property, and the degree to which the law permits a profitable disposal of the property. For example, it is currently illegal to possess heroin. A person who purchases heroin under the present state of the law does not acquire a property interest because the purchase is prohibited. A more difficult case is presented when a new statute makes owning firearms illegal. Those who purchased firearms prior to the enactment of the statute have a property right. If they may still sell the firearms to persons living in other areas where firearms are legal, I would not find the law to be an unconstitutional taking. In the most extreme hypothetical, where the firearms are made illegal, and must be turned in to the police for destruction, I believe that a taking has occurred. The owners of the firearms must be compensated or the statute is unconstitutional. Cf. Mugler v. Kansas, 123 U.S. 623, 668-69 (1887) (state prohibition laws do not take property of brewery owner, but only because land and buildings continue to have other uses).

- 45. This observation is particularly compelling in a case, such as *Monsanto*, where the events and holding are not tied to any particular state. See infra notes 56-58 and accompanying text. Such an approach is wise, lest the constitutionality of FIFRA's provisions or the Federal Rules of Civil Procedure vary from jurisdiction to jurisdiction. Further, in national cases such as *Monsanto*, the result would depend upon clever forum shopping, possibly even by using the dreaded rule of Klaxon Co. v. Stentor Elec. Mfg. Co., 313 U.S. 487 (1941) by analogy.
- 46. Although terms of analysis have never been developed to express the dichotomy between the two types of property, past terminology does reflect, at least in part, an awareness of the two distinct areas. For example, some cases have suggested a category of "core common law" rights which appears to correspond to the term general property as used in this Article. The term "quasi property" has been used on rare occasions in ways which appear to correspond to the concept of special property as used in this Article. See Note, Disclosure Statutes, supra note 1, at 352-53, especially n.86. Further the cases finding forms of property in terms of the "vested rights" doctrine, or by an equitable estoppel appear to strikingly parallel the special property analysis of this article. See D. Callies & R. Freilich, Land Use 199-201 (1986); Callies, Land Use: Herein of Vested Rights, Plans, and the Relationship of Planning and Controls, 2 U. Haw. L. Rev. 167 (1979); Callies, Nukolii and Vested Rights, 36 Land Use L. & Zoning Dig. 14 (1983) Heeter, Zoning Estoppel: Application of the Principles of Equitable Estoppel and Vested Rights to Zoning Disputes, 1971 Urb. L. Ann. 63.

seen modern economic circumstances, would have protected. Thus, the fact that the law of most or all states defines something as property is strong evidence that it is general property.⁴⁷

It is important to realize that the judicially created law which defines general property results from *constitutional* interpretation. It cannot be reversed by legislation or nonconstitutional federal common law. In other words, federal law exists at two levels: constitutional⁴⁸ and nonconstitutional.⁴⁹ In the legislative branch this distinction is clear because the procedure used to change the law differs so radically. Congress changes nonconstitutional federal law by passing a new statute—a fairly routine event requiring only a majority vote. To effectuate a change in constitutional federal law, however, Congress must work through the cumbersome amendment process provided in Article V.⁵⁰

In the judicial arena, the distinction between decisions of constitutional and nonconstitutional magnitude tends to blur. Both can be changed by subsequent judicial decision.⁵¹ In contrast, as stated above,

^{47.} See, e.g., R. EPSTEIN, TAKINGS: PRIVATE PROPERTY AND THE POWER OF EMMINENT DOMAIN 24-25 (1985). However, the purposes of the takings clause must still be taken into account. Thus, even though most states recognize goodwill as a form of property, taking analysis does not. See, e.g., Community Redev. Agency v. Abrams, 15 Cal.3d 813, 543 P.2d 905, 126 Cal. Rptr. 473, cert. denied, 429 U.S. 869 (1976). This treatment of goodwill may be justified because goodwill is something which will necessarily build up over time in every business, with or without assurance that it will not be taken away.

^{48.} In the legislative arena, the only examples of making law that is constitutional in nature and magnitude are the various amendments to the Constitution. In the judicial arena, examples include Roe v. Wade, 410 U.S. 113 (1973); Brown v. Board of Educ., 347 U.S. 483 (1954); and Mapp v. Ohio, 367 U.S. 643 (1961), but compare Weeks v. United States, 232 U.S. 383 (1914) which is a federal common law supervisory power decision preceding *Mapp*.

^{49.} In the legislative arena, the examples of federal nonconstitutional law are all federal statutes. In the judicial arena, examples of nonconstitutional federal common law include Clearfield Trust Co. v. United States, 318 U.S. 363 (1943); and Osborn v. Bank of the United States, 22 U.S. (9 Wheat.) 738 (1824). Osborn was subsequently overruled by statute. See 28 U.S.C. § 1349 (1982). If Osborn had been constitutional in magnitude it could only have been overruled by an amendment. See, e.g., Oregon v. Mitchell, 400 U.S. 112 (1970) (ruling of constitutional magnitude, based on tenth amendment, overruled by the twenty-sixth amendment).

^{50.} U.S. Const. art. V. Article five requires that either two thirds of both houses proposes an amendment or two thirds of the legislatures of the states make an application. Ratification of an amendment then requires agreement by three-fourths of either the legislatures of the states or conventions held in the states. Congress may specify either mode of ratification. State conventions have been used only once—to repeal the eighteenth amendment (prohibition).

^{51.} The Court's practice has been, however, to change its decisions that are of constitutional magnitude only in unusual cases and after the greatest deliberation. Thus, the Court perceives a greater need for stability in its constitutional decisions than it does in its ordinary common law decisions. Only twice has the Court ever declared one of its own decisions unconstitutional. See Erie R. Co. v. Tompkins, 304 U.S. 64 (1938), overruling Swift v. Tyson, 41 U.S. (16 Pet.) 1 (1842);

legislative action by subsequent statute, however, can change only non-constitutional court-made law; judicially created constitutional law requires an amendment. Further, of course, only federal constitution judicial decisions can set aside inconsistent statutes.⁵² The difference between constitutional and nonconstitutional federal law thus becomes quite real when applied to judicially created law. In the context of taking analysis this distinction is important because the takings clause, as a constitutional provision, thus has the power to set aside statutes, and it is impossible to legislate the takings clause out of existence. Thus, the law defining general property is judicially created, but it is federal and constitutional in nature and magnitude, and it should not be confused with nonconstitutional federal court-made law.

The law defining general property creates a federal constitutional "floor" below which state or federal law may not go in defining property. State law (whether common law or statutory)⁵³ or nonconstitutional federal law (whether judicially-created or statutory),⁵⁴ however, may grant *more* rights than are protected by notions of general property. These grants create what the Court sometimes calls "reasonable investment-backed expectations." If such expectations are created, the takings clause may be used to protect investments made in reliance on the law.

Brown v. Bd. of Educ., 347 U.S. 483 (1954), overruling Plessy v. Ferguson, 163 U.S. 537 (1896). The Court has occasionally changed its constitutional rulings without declaring the prior ruling unconstitutional. See, e.g., Mapp v. Ohio, 367 U.S. 643 (1961), changing the rule of Wolf v. Colorado, 338 U.S. 25 (1949), because the states had not acted to protect the fourth amendment rights as Wolf had suggested they would. Yet cases such as Mapp and Garcia v. San Antonio Metro. Transit Auth., 469 U.S. 528 (1985), where the Court "flip flops" on a question of constitutional magnitude only because of the change of one member of the Court, are rare because they receive heavy criticism and damage the legitimacy of the Court. Changes in nonconsitutional doctrine are made far more easily.

^{52.} This is most clearly true in cases involving inconsistent federal statutes. In cases involving inconsistent statutes (or state common law), supremacy clause and preemption questions beyond the scope of this Article arise, and state law may have to give way to non-constitutional federal common law. Even in such cases, however, the demise of state law is not automatic as it is when the federal law is of constitutional magnitude.

^{53.} See, e.g., United States Trust Co. v. New Jersey, 431 U.S. 1, 19 n.16 (1977) (property interest in state common law contract rights). Examples of state statutory interests creating special property rights include horse trainers' licenses, utility services, disability benefits, high school education, and the like. See cases cited in Logan v. Zimmerman Brush Co., 455 U.S. 422, 431 (1982).

^{54.} An example of a federal statute creating special property rights is Mathews v. Eldridge, 424 U.S. 319 (1976) (federal social security disability benefits). An example of federal non-constitutional court-made law creating special property rights is Perry v. Sindermann, 408 U.S. 593 (1972) (untenured state college professor's right not to be dismissed in complex context).

^{55.} Pruneyard Shopping Center v. Robins, 447 U.S. 74, 83 (1980); Penn Cent. Transp. Co. v. New York City, 438 U.S. 104, 124 (1978); see also Ruckelshaus v. Monsanto Co., 467 U.S. 986, 1005 (1984).

These rights, then, are a "special" form of property.⁵⁶ Existing takings clause analysis notwithstanding, state or nonconstitutional federal law directly "creates" them, and they can easily vary from jurisdiction to jurisdiction. Further, "special" property may be abrogated *prospectively* by a change in law, because the concept of special property in takings analysis protects only reliance-based interests.⁵⁷ General property, in contrast, cannot be legislatively abrogated, even prospectively. Only a change in the constitutional definition could abrogate general property.⁵⁸

Note that, in the context of special property, the reliance-based analysis is being employed in the novel analysis of this Article to define the property. The same type of analysis, and some of the same terminology, is usually employed (in connection with general property) to determine if a taking has occurred.⁵⁹ Thus, the reader who is accustomed to existing analysis must be careful not to confuse these two distinct uses of reliance-based analysis.⁶⁰

The holding in *Monsanto* that trade secrets, which constituted informational property as this Article employs that term, are property seems eminently correct.⁶¹ Indeed, in so stating, the Court wisely held informational property to be general property, as that term is used in this Arti-

^{56.} The analytical basis for special property presented here more closely parallels existing analysis for "vested rights" takings. See supra note 46.

^{57.} An example of this analysis is found in Ruckelshaus v. Monsanto Co., 467 U.S. 986, 1006 (1984). This aspect of *Monsanto* is discussed *infra* notes 136-44 and accompanying text. *See also* Connolly v. Pension Ben. Guar. Corp., 475 U.S. 211 (1986).

^{58.} One can only hypothesize a society in the future where ownership of land, as we presently know it, is irrelevant. In such a case, land might cease to be property under the constitutional common law. The definition of property is a product of economic realities at the time. See infra text accompanying note 64.

^{59.} In determining whether a claimed right constitutes special property, a court looks to whether state or federal law has created "reasonable investment-backed expectations." This factor is also one of three factors the Court considers in cases involving general property that is only partially acquired to determine whether a taking has occurred which requires compensation. The three factors are; "the character of the governmental action, its economic impact, and its interference with reasonable investment-backed expectations." Penn. Central Transp. Co. v. New York City, 438 U.S. 104, 124 (1978) (emphasis added).

^{60.} The Court's principal mistake in *Monsanto* was to confuse these two uses of the reliance factor. Purporting to determine whether a taking had occurred, the Court actually determined whether Monsanto had a property interest. See infra notes 131-39 and accompanying text.

^{61.} Monsanto, 467 U.S. at 1003-4. The property at issue was data on the safety of certain chemicals in pesticides. The EPA proposed to use the data to aid companies, other than Monsanto, applying for permission to market pesticides containing the chemicals. Clearly those companies would, in the absence of EPA compulsion under FIFRA, have to choose between the cost of generating the same data themselves or buying it from Monsanto. Thus, although Monsanto generally does not act as an information service, it was an owner of informational property in this context.

cle. 62 The Court has always given general property a broad definition; one which is "not [limited to] the vulgar and untechnical sense of the physical thing with respect to which the citizen exercises rights recognized by law. . . . The Constitutional provision is addressed to every sort of interest the citizen may possess." Property rights in informational property are presently protected under trade secret law. This protection is necessary because it provides the incentive for information to be created, organized, and stored. Without that incentive, information which is socially useful would not be available for anyone's use. Thus, informational property fits the classic model around which rights in intangible and tangible property are justified and created. For example, the exclusive ownership of land is justified because the use by one person is inconsistent with use by others. 64 Without this exclusive ownership our

The Monsanto Court held that trade secrets including informational property, have the essential characteristics of more tangible property. 467 U.S. at 1002. Also, the Court noted by way of further evidence that "Congress reasoned that submitters of data are 'entitled' to 'compensation' because they 'have legal ownership of the data.'" Id. (citing H.R. Conf. Rep. No. 1560, 95th Cong., 2d. Sess., 29 (1978), reprinted in 1978 U.S. Code Cong. & Admin. News 1966, 2045).

64. See, e.g., R. CUNNINGHAM, W. STEOBUCK, & D. WHITMAN, THE LAW OF PROPERTY 1-3 (1984). It may be that this invocation of the Coase theorem oversimplifies the analysis if viewed from the perspective of all information gatherers, rather than simply the perspective of information services. Refusal to extend legal protection to informational property would not result in the creation of such information; it will only lead to a greatly less than optimum amount of such information (in the Pareto sense of optimality). Information will still be created if (but only if) its value to a single user exceeds its cost of creation and if its subsequent disclosure to others does not eliminate its value or affirmatively harm the creator of the information. Clearly, very little of such information will be created and companies in the business of selling such information would probably cease to exist.

One might argue that agricultural and other development will still occur without any legal recognition of ownership rights. For example, such development occurs in communist countries. While strictly communist countries have no private property rights, however, they do have property ownership. The government owns the property, and therefore only the government invests in improvements. The distinction which is crucial here is not the distinction between private property and communism, but rather between recognition of property and anarchism.

^{62.} See infra notes 143-44 and accompanying text.

^{63.} Pruneyard Shopping Center v Robins, 447 U.S. 74, 82 n.6 (1980) (quoting United States v. General Motors Corp., 323 U.S. 373, 377-78 (1945) (citations omitted)). In cases prior to Monsanto, the Court accorded the status of constitutionally protected property to a wide range of intangible interests. See, e.g., Logan v. Zimmerman Brush Co., 455 U.S. 422 (1982) (property interest in statutorily created cause of action for discrimination against handicapped); United States Trust Co. v. New Jersey, 431 U.S. 1 (1977) (property interest in common law contract rights); Mathews v. Eldridge, 424 U.S. 319 (1976) (property interest in social security benefits); Perry v. Sindermann, 408 U.S. 593 (1972) (property interest in continued employment); Armstrong v. United States, 364 U.S. 40 (1960) (property interest in materialman's lien); Louisville Joint Stock Land Bank v. Radford, 295 U.S. 555 (1935) (property interest in real estate lien); Lynch v. United States, 292 U.S. 571 (1934) (property interest in contract rights). See also cases cited in Logan, 455 U.S. at 428, 431.

society would have little agricultural development and no permanent substantial buildings.

Intangible property depends, for its creation and development, on a guarantee that the cost of creating it will be spread over all of its users. Thus, intangible property depends on the absence of what are often called "free riders," rather than on exclusivity of use, as the means by which society uses property law to enhance economic productivity. A simple example will make this point clear. Assume that Bank A wants to know my credit history. Bank A's access to that information does not interfere with Bank B's access to it or even with the credit information company's (C's) use of it. B and A do not harm C by looking at the information for free. The only problem is that no one will have the incentive to collect credit information unless they know in advance that their property interest will be protected from all such free riders.

Any individual free rider can persuasively argue that his use is costing the information owner nothing. Yet the law is rapidly recognizing that the right to restrict access provides the necessary incentive for making useful information available in our society.

For example, computer crime statutes are now commonplace because of the need to protect against private takings of the right to restrict access to information. The events involved in *United States v. Seidlitz* illustrate the difficulties faced prior to the enactment of computer crime statutes. Seidlitz accessed his former employer's computer without permission and read and copied a valuable computer program. State prosecutors in Maryland were unsuccessful in prosecuting because Maryland law at the time did not consider anything to have been taken. Because of the fortuitous fact that Seidlitz accomplished some of the acts via phone lines from nearby Virginia he was ultimately convicted of wire

^{65.} See D. Parker, Crime by Computer (1976); D. Parker, Fighting Computer Crime (1983); T. Whiteside, Computer Caper, Imbezzlement, and Fraud (1983); Fetterley, Historical Perspectives on Criminal Laws Relating to the Theft of Trade Secrets, 25 Bus. Law 1535 (1970); Sullival & Shaw, Criminal Penalties for Misappropriation of Computer Technology, Computer Law, Jan. 1985, at 19 (1985); Thackeray, Computer-Related Crimes, 25 Jurimetrics J. 300 (1985); Vandevoort, Trade Secrets: Protecting a Very Special "Property", 26 Bus. Law. 681 (1971); Note, Criminal Liability for the Misappropriation of Computer Software Trade Secrets, 63 U. Det. L. Rev. 481 (1986); Note, A Suggested Legislative Approach to the Problem of Computer Crime, 38 Wash. & Lee L. Rev. 1173 (1981); Comment, Legislative Issues in Crime, 21 Harv. J. Legis. 239 (1984).

^{66. 589} F.2d 152 (4th Cir. 1978), cert. denied, 441 U.S. 922 (1979).

^{67.} Maryland is among the many states that have subsequently enacted applicable legislation. See Note, Criminal Liability for the Misappropriation of Computer Software Trade Secrets, 63 U. Det. L. Rev. 481, 493-94 n.110 (1986).

fraud in federal court. If the defendant had stayed in Maryland, no conviction would have occurred.⁶⁸

To solve this problem a number of states enacted statutes which define the willful unauthorized accessing of a computer as a crime in and of itself.⁶⁹ Further, some speak in terms of theft by reading, while defining property as "[i]nformation, including electronically produced data, and computer software and programs in either machine or human readable form, and any other tangible or intangible item of value."⁷⁰

Trade secrets, which would include informational property as well as more commonplace or technical trade secrets, have long been treated as property. Reported cases treating trade secrets as property extend back to the late 1700s,⁷¹ and trade secrets were surely part of English and American business practice at the time of the adoption of the fifth amendment. Informational property is a branch of trade secret property which drastically increased in value and significance with the advent of computers. No reason exists, however, to believe that the constitutional definition of property should remain static.

The Monsanto holding that trade secrets constitute fifth amendment property is the culmination of a trend in that direction. Prior to Monsanto courts occasionally denied that trade secrets were property, relying on unfortunate dicta by Justice Holmes in a 1917 decision:

The word property as applied to trade-marks and trade secrets is an unanalyzed expression of certain secondary consequences of the primary fact that the law makes some rudimentary requirements of good faith. Whether the plaintiffs have any valuable secret or not the defendant knows the facts, whatever they are, through a special confidence that he accepted. The property may be denied but the confidence cannot be. Therefore the

^{68.} See also Comment, supra note 65, at 249 n.56:

The problem raised by intangible property is further illustrated by the case of Commonwealth v. Yourawski, 1981 Mass. Adv. Sh. 1954, 425 N.E.2d 298. There the defendant owned a cassette tape containing a pirated copy of Stars Wars, raising the question of whether images and sounds on the tape were property subject to larceny under Massachusetts law. The court determined they were not and dismissed the indictment. The Yourawski case was one of the reasons behind the Massachusetts legislature's amendment to its larceny statute defining property to include "electronically processed or stored data, either tangible or intangible, data while in transit. Act of May 31, 1983, ch. 147, [1983] 3 Mass. Adv. Legis. Serv. 38 (Law Co-op) (to be codified at Mass. Gen. Laws. Ann. ch. 266, § 30).

See also United States v. Sampson, 6 Computer L. Serv. Rep. (Callaghan) 879 (N.D. Cal. Apr. 4, 1978), discussed in Comment, supra note 65, at 252.

^{69.} See, e.g., Comment, supra note 65, at 250 n.62.

^{70.} See id. at 249.

^{71.} See Note, Disclosure Statutes, supra note 1, at 353-54 especially nn.87-89.

starting point for the present matter is not property or due process of law, but that the defendant stood in confidential relations with the plaintiffs. ...⁷²

This statement has not been widely followed.⁷³ Further, it does not actually negate property rights for "taking" purposes to say that the rights are contractual, for rights existing because of contracts may not be taken without running afoul of the fifth or fourteenth amendments.⁷⁴ In the end, however, Holmes' dicta, however logical when taken in its limited context,⁷⁵ did not stand the test of experience.

In addition to frequent recognition in federal statutes of trade secret property which includes informational property,⁷⁶ virtually every state now recognizes such property as a subset of trade secret property. The

Even the manner in which Congress referred to trade secrets in the legislative history of FIFRA supports the general perception of their property-like nature. In discussing the 1978 amendments to FIFRA, Congress recognized that data developers like Monsanto have a "proprietary interest" in their data. S. Rep. No. 95-334, at 31. Further, Congress reasoned that submitters of data are "entitled" to "compensation" because they "have legal ownership of the data." H. R. Conf. Rep. No., 95-1560, p. 29 (1978). U.S. Code Cong. & Admin. News 1978, pp. 1966, 2045. This general perception of trade secrets as property is consonant with a notion of "property" that extends beyond land and tangible goods and includes the products of an individual's "labour and invention." 2 W. Blackstone,

^{72.} E. I. DuPont deNemours Powder Co. v. Masland, 244 U.S. 100, 102 (1917). The Monsanto Court discussed the Holmes dicta and paid it little heed. 467 U.S. at 1004 n.9. Prior to Masland the Court and Holmes had spoken of trade secrets in property terms and, thus, the Masland dicta is difficult to explain. See Board of Trade v. Christie Grain & Stock Co., 198 U.S. 236, 250-53 (1905) (Holmes, J.).

^{73.} See 1 R. MILGRIM, TRADE SECRETS § 1.01(1) (1985).

^{74.} See, e.g., United States Trust Co. v. New Jersey, 431 U.S. 1 (1977); Lynch v. United States, 292 U.S. 571 (1934).

^{75.} The Masland case was a suit by DuPont seeking to enjoin a former employee from disclosing or using trade secrets related to the manufacture of artificial leather. Masland denied that his proposed manufacturing project would use any trade secrets not otherwise known in the trade. He proposed to call several expert witnesses and revealed that he would disclose to those witnesses the trade secrets in order to enable them to testify meaningfully. The trial court enjoined the proposed disclosure to his expert witnesses and the injunction was ultimately upheld. The Third Circuit Court of Appeals reversed the trial court but the Supreme Court reversed and re-instated the trial court's ruling. The distinction Holmes made between a property right and a contract right is disjointed from the remainder of the opinion, and appears to be a response to a tangential theoretical discussion about the Third Circuit's analysis. Masland, 244 U.S. 100 (1917).

^{76.} See, e.g., 5 U.S.C. § 552(b)(4) (1982) (Freedom of Information Act exemption from disclosure protecting "trade secrets and commercial or financial information obtained from a person and privileged or confidential."); 15 U.S.C. § 2603(c)(4)(A) (1982) (Toxic Substances Control Act provision for compensation for health and safety data if taken); 15 U.S.C. § 46(f) (1982) (restriction prohibiting public disclosure by F.T.C. if trade secrets); 29 C.F.R. § 1910.1200(i)(1) (1987) (exempting trade secrets from OSHA "Right to Know" program); FED. R. Civ. P. 26(c) (giving incomplete protection to trade secrets and confidential information); various F.D.A. statutes discussed in Note, Compensating Manufacturers, supra note 1, at 212. Further, the Monsanto Court noted:

majority of states follow section 757 of the first Restatement of Torts which defines a "trade secret" as "any formula, pattern, device, or compilation of information which is used in one's business, and which gives him an opportunity to obtain an advantage over competitors who do not know or use it." The Restatement (Second) of Torts does not include a

COMMENTARIES 405; see generally J. LOCKE, THE SECOND TREATISE OF CIVIL GOVERNMENT, ch. 5 (J. Gough ed. 1947).

467 U.S. at 1002-3.

Footnote eight gives considerable support to the argument set forth in this Article that the source of law for defining general property is not simply the law of one state. Indeed, the *Monsanto* Court pointed to other indicators that trade secrets are generally considered property:

Trade secrets have many of the characteristics of more tangible forms of property. A trade secret is assignable. See, e.g., Dr. Miles Medical Co. v. John D. Park & Sons Co., 220 U.S. 373, 401-02 (1911); Painton & Co. v. Bourns, Inc., 442 F.2d 216, 225 (CA 2 1971). A trade secret can form the res of a trust, Restatement (Second) of Trusts § 82, Comment E (1959); 1 A. Scott, Law of Trusts § 82.5, p. 703 (3d ed. 1967), and it passes to a trustee in bankruptcy. See In re Uniservices, Inc., 517 F.2d 492, 496-97 (CA 7 1975).

Id. at 1002.

77. RESTATEMENT (FIRST) OF TORTS § 757 (1939) (emphasis added). For an illustration of the application of § 757 to confidential business information which this Article would classify as informational property see Dynamics Research Corp. v. The Analytic Sciences Corp., 9 Mass App. Ct. 254, 400 N.E.2d 1274, 207 U.S.P.Q. 321 (1980). Twenty states have adopted the Restatement's analysis on this point. Drill Parts and Service Co., Inc. v. Joy Manufacturing Co., 439 So.2d 43 (Ala. 1983); Chanay v. Chittenden, 115 Ariz. 32, 563 P.2d 287 (1977); Kendall/Hunt Publishing Co. v. Rowe, 424 N.W.2d 235 (Iowa 1988); Operations Research, Inc. v. Davidson & Talhird, Inc., 241 Md. 550, 217 A2d 375 (1966), USM Corp. v. Marson Fastener Corp., 392 Mass. 334, 467 N.E.2d 1271 (1984), Hayes-Albion v. Kuberski, 421 Mich. 170, 364 N.W.2d 609 (1985), Rice Researchers, Inc. v. Hiter, 512 So. 2d 1259 (Miss. 1987); National Rejectors, Inc. v. Trieman, 409 S.W.2d 1 (Mo. 1966); Henkle & Joyce Hardware Co. v. Maco, Inc., 195 Neb. 565, 239 N.W.2d 772 (1976); Greenspun v. Eighth Judicial Dist. Court, 91 Nev. 211, 533 P.2d 482 (1975); Sun Dial Corp. v. Rideout, 16 N.J. 252, 108 A.2d 442 (1954); Leo Silfen, Inc. v. Cream, 29 N.Y.2d 387, 328 N.Y.S.2d 423, 278 N.E.2d 636 (1972); Valco Cincinnati, Inc. v. N & D Machining Service, Inc., 24 Ohio St.3d 41, 429 N.E.2d 814, 59 A.L.R.4th 629, 24 Ohio B. Rep. 83 (1986); North Pacific Lumber Co. v. Moore, 275 Or. 359, 551 P.2d 431 (1976); Felmlee v. Lockett, 466 Pa. 1, 351 A.2d 273 (1976); Lowndes Products, Inc. v. Brower, 259 S.C. 322, 191 S.E.2d 761, 177 U.S.P.Q. 209 (1972); 1st Am. Systems, Inc. v. Rezatto, 311 N.W.2d 51 (S.D. 1981); Data Processing Equip. Corp. v. Martin, No. 87-230-II slip op. (Tenn. Ct. App., Dec. 31, 1987) (see also Hickory Specialties, Inc. v. B & L Laboratories, Inc., 592 S.W.2d 583 (Tenn. App. 1979)); Luccous v. J.C. Kinley Co., 376 S.W.2d 336, 141 U.S.P.Q. 78 (Tex. 1964); J & K. Computer Systems, Inc. v. Parrish, 642 P.2d 732 (Utah 1982). Seven additional states have the same coverage for the purposes of this Article, but do not use the Restatement. See State v. Alaska Int'l. Air, Inc., 562 P.2d 1064 (Alaska 1977) (statement limited to partial protection in discovery context); Evans Laboratories, Inc. v. Melder, 262 Ark. 868, 562 S.W.2d 62 (1978); Keel v. Quality Med. Sys., Inc., 515 So.2d 337 (Fla. Dist. Ct. App. 1987); Vigitron, Inc. v. Ferguson, 120 N.H. 626, 419 A.2d 1115, 215 U.S.P.Q. 354 (1980); Lovelace Clinic v. Murphy, 76 N.M. 645, 417

^{8.} Of course, it was not necessary that Congress recognize the data at issue here as property in order for the data to be protected by the Taking Clause. We mention the legislative history merely as one more illustration of the general perception of the property-like nature of trade secrets.

section on trade secrets, but only because the authors felt that trade regulation had evolved into a separate area of the law.⁷⁸ Sixteen states have adopted the Uniform Trade Secrets Act which defines trade secrets in a way which, being of more recent origin, is more closely geared to informational property:

- (4) "Trade secret" means information, including a formula, pattern, compilation, program, device, method, technique, or process, that:
 - (i) derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use, and
 - (ii) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.⁷⁹

Georgia, on the other hand, has used in some of its decisions an older definition of trade secrets which was taken from *Corpus Juris Secundum*. This definition does not appear to include information for its own value. According to these Georgia cases, a trade secret "is a *plan, process, tool, mechanism or compound*, known only to its owner and those of his employees to whom it must be confided in order to apply it to the uses

P.2d 450 (1966); United Laboratories, Inc. v. Kuykendall, 87 N.C. App. 296, 361 S.E.2d 292 (1987) aff'd in part, rev'd in part, 370 S.E.2d 375; Campen v. Stone, 635 P.2d 1121, 32 A.L.R.4th 410 (Wyo. 1981) (statement limited to partial protection in discovery context). Kentucy law also recognizes trade secret rights, but the Kentucky courts have not defined trade secrets. Proctor & Gamble Distributing Co. v. Vasseur, 275 S.W.2d 941, 944 (Ky. 1955).

Illinois once followed the approach originating in CORPUS JURIS SECUNDUM. See infra note 80 and accompanying text. Illinois has a recent statute taking the modern view. See infra note 79. Of the 50 states, Hawaii, Idaho, Maine, and Vermont appear to have no decisions on point.

78. See Restatement (Second) of Torts \S 1 (1979). See also 1 R. Milgrim, supra note 73, \S 2.01 n.2.

79. UNIV. TRADE SECRETS ACT § 7(4), 14 U.L.A. 541, 542 (1980) (emphasis added). The following sixteen states have adopted the UTSA: California, Colorado, Connecticut, Delaware, Indiana, Kansas, Louisiana, Minnesota, Montana, North Dakota, Oklahoma, Rhode Island, Virginia, Washington, West Virginia, and Wisconsin. See generally Klitzke, The Uniform Trade Secrets Act, 64 MARQ. L. REV. 277 (1980). For an example of how the Uniform Act protects confidential business information which this Article would call informational property, see American Totalisator Co. v. Autotote, Ltd., No. 7268 (Del. Ch. Oct. 11, 1983) (LEXIS, states library, Del. file).

Many additional states have statutes other than the UTSA. Milgrim lists thirty-eight states with some form of explicit statutory protection as of 1985. 1 R. MILGRIM, supra note 73, § 1.01[2] app. at B, B-1 (1985). As an example of an act which is too recent to appear in Milgrim, Illinois recently passed the Illinois Trade Secrets Act, Ill. Ann. Stat. ch. 140 ¶¶ 351-59 (Smith-Hurd 1985). Paragraph 352(d) defines a "Tradesecret" as: "information, including but not limited to, technical or non-technical data, a formula, pattern, compilation, program, device, method, technique, drawing, process, financial data, or list of actual or potential customers or supppliers . . . [which is] sufficiently secret to derive economic value . . . from not being generally known. . . ."

intended [sic]."⁸⁰ Although some subsequent decisions have relied on the Restatement, as recently as 1979 the Georgia Supreme Court chose by way of dicta to maintain this definition rather than adopt a more modern one.⁸¹

Nonetheless, a clear consensus in favor of recognizing informational property exists among the states, 82 and is also reflected in a number of federal statutes. 83 More importantly, the Supreme Court's recent *Monsanto* decision explicitly accorded informational property fifth amendment protection. Most importantly, treating information as property furthers the purposes served by providing legal protection to other types of property.

B. Establishing a Taking

The bundle of rights associated with informational property is not complex. Rather, it consists of only one stick; the right to charge people for allowing them to read⁸⁴ information. The aspect of informational

Some may argue, however, that allowing *one* free reader (or free rider) does not take the property. Allowing someone to take part of an information service's inventory is still a taking, even if the rest remains for sale. If a store had 100 widgets for sale and the government took one widget, it would have to pay for that widget even though the other 99 remain available for sale. Thus, if an information service has 100 customers and the government enables one customer who would otherwise pay

^{80.} See Taylor Freezer Sales Co., Inc. v. Sweden Freezer Eastern Corp., 224 Ga. 160, 164, 160 S.E.2d 356, 359 (1968) (quoting 43 C.J.S. Injunctions § 148 at 750 (1955)) (emphasis added). See generally Quittmeyer, Trade Secrets and Confidential Information Under Georgia Law, 19 GA. L. REV. 623 (1985). In Textile Rubber & Chem. Co. v. Shook, 243 Ga. 587, 589, 255 S.E.2d 705, 707 (1979), the Georgia Supreme Court retained the C.J.S. definition by way of dicta and without explanation. Subsequent state and federal decisions applying Georgia law have applied the Restatement, although evincing no awareness that they were breaking new ground. Yet, in some of these cases, the difference was crucial. See, e.g., Am. Photography Equipment Co. of Atlanta v. Henderson, 250 Ga. 114, 115, 296 S.E.2d 573, 575 (1982); Robert B. Vance & Associates, Inc. v. Baronet corp., 487 F. Supp. 790, 799 (N.D. Ga. 1979) (six months after Textile Rubber). Other state and federal decisions, while not calling informational property a "trade secret," nonetheless accord it protection as "confidential business information." See, e.g., Prudential Ins. Co. v. Baum, 629 F. Supp. 466, 470 (N.D. Ga. 1986); Wesley-Jessen, Inc. v. Armento, 519 F. Supp. 1352, 1361 (N.D. Ga. 1981); Rollins Protective Services Co. v. Palermo, 249 Ga. 138, 142, 287 S.E.2d 546, 550 (1982); Jenkins v. Jenkins Irrigation, Inc., 244 Ga. 95, 101, 259 S.E.2d 47, 52 (1979) (four months after Textile Rubber) (dicta).

^{81.} See Textile Rubber & Chemical Co. v. Shook, 243 Ga. 587, 589-90, 255 S.E.2d 705, 707-08 (1979). But see cases cited supra note 80.

^{82.} Of the fifty states and the District of Columbia, forty-six protect informational property. Four have no decisions on point. Only Georgia law is uncertain and may reject such property. See supra notes 77-79 and accompanying text.

^{83.} See supra note 76.

^{84.} Of course, in the context of computer data storage and retrieval, the word "read" has gained a broader meaning.

property which is most unusual and, indeed, separates it from other types of intellectual property, is that anyone who reads the information has taken it and must pay for it—because the reader has taken the *entire* bundle of rights that the owner has.

The question of whether a taking has occurred depends on the degree to which the government's action deprives the owner, rather than the degree to which it benefits the government.⁸⁵ In addition, "[g]overnmental action short of the acquisition of title" can amount to a taking.⁸⁶ Thus, although the beneficiary may be a private litigant, and although the information itself remains in the hands of the information service, it is clear that discovery "takes" informational property.

The complex issues associated with the taking question need not long detain us. The taking analysis turns on the degree of taking; "[i]f the property owner loses too many important sticks from his bundle, his property has been taken." Not all governmental regulations are takings, but the line between regulation and taking has varied. Professor Sax, with good reason, has chided the Court for "introducing its uniformly unsatisfactory opinions in this area with the understatement that 'no rigid rules' or 'set formula' are available to determine where regulation ends and taking begins." When we deal with a one-stick bundle of rights, however, and that stick is taken, the line-drawing exercise becomes unnecessary.

to have the information for free, the fact that 99 customers remain does not rectify the taking of one percent of the inventory. See also infra notes 89-92 and accompanying text.

^{85.} See, e.g., Note, Disclosure Statutes, supra note 1, at 341 nn.41-42. The benefit to the government is relevant in the taking analysis when considering whether a taking is for a public purpose, rather than whether a taking has occurred.

^{86.} United States v. General Motor Corp., 323 U.S. 373, 378 (1945) (footnote omitted).

^{87.} Note, Disclosure Statutes, supra note 1, at 342. Cf. R. EPSTEIN, TAKINGS: PRIVATE PROPERTY AND THE POWER OF EMINENT DOMAIN 155 (1985). Professor, now Judge, Epstein persuasively argues that there is no meaningful distinction between partial and complete takings. This Article heartily endorses, but does not depend on, Epstein's view.

^{88.} Sax, Takings and the Police Power, 74 YALE L.J. 36, 37 (1964). Professor Ross, however, views the ad hoc nature of takings analysis as the healthy product of an ongoing competition between the values underlying the analysis. He believes that any attempt to create a clearer and more predictable approach will result in the disguising of the real reasons behind difficult takings decisions. See Ross, Modeling and Formalism in Takings Jurisprudence, 61 Notre Dame L. Rev. 372 (1986); Ross, Taking Takings Seriously, 80 Nw. U.L. Rev. 1591 (1986). On the other hand, while the Court's ad hoc decision making process allows it the flexibility necessary to properly balance the competing interests in each individual case, it provides no basis for predicting the outcome of future cases. The ramificiations of this argument are explored in Comment, Solving the Problem by Making it Worse: Land-Use Takings Jurisprudence After Hamilton Bank, Lutheran Church, and California Coastal, 59 U. Colo. L. Rev. 105 (1988).

Informational property is taken whenever the government forces its owner to disclose it to anyone who will use it as information. I have earlier set forth a hypothetical case where the recipient of the information would put it to another use (to test computer accuracy) and, in that unlikely case, the information is not taken. In the context of informational property no middle-ground taking exists—there is no case where some of the value is taken and some remains. The Court's struggles to define taking in the middle-ground cases are thus irrelevant.

One may argue that litigation is, in some sense, in a special category. As long as the litigator seeking discovery is not a customer for the information outside the litigation context, or a competitor who could use the information outside the litigation context, why not let him have it for free? His use does not interfere with the use by others or the right to charge those others. The argument underlying this question contains several flaws. First, the basic idea underlying trade secret property and informational property is that a blanket prohibition on free riders is needed to encourage the creation of the property. Every would-be free rider can argue that his use does not harm the owner or interfere with other uses. The law must enable a producer to spread the cost of generating the information among all users. If good reason exists for one user to have the information, sufficient to merit governmental aid, that

^{89.} In separate comments on preliminary drafts of this Article, Professors Dreyfuss and Garfield raised this argument, and I am indebted to both of them for their contributions. See supra, introductory footnote.

^{90.} In answering this argument at a theoretical level, I have, for the sake of simplicity, ignored the marginal cost of producing the information, and the cost to an information service of having its employees testify as to the authenticity of the data, as will be necessary if it is to be admitted at trial. These serious impositions cannot normally be imposed on expert witnesses except upon bargained-for compensation.

^{91.} Otherwise we must face the "and then there were none" problem that will result. As each user persuasively argues that his use does not deprive the owner of the right to charge others, and thereby escapes payment, the owner finds that no one has paid.

A persuasive analogy may be drawn to the "per se taking" rule the Court has enunciated for cases involving physical invasion. See Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419 (1982). No matter how little space is actually appropriated, a taking will be found. Any other rule would drag the courts into embarrassing line-drawing over whether any given number of square feet or percentage of available area is sufficient to trigger the taking analysis. See also supra note 84 and accompanying text.

Further, the argument against applying the taking analysis, if examined carefully, depends on an unstated assumption that only one person or a small number of persons want the information service's data for litigation while a much larger number of paying customers remain to absorb the cost. This assumption is open to serious doubt in many cases.

fact merely shows the public purpose,92 and not the negation of a taking.

Second, the counterargument seems to assume that litigants are not a market for information.⁹³ The most obvious example of a business making a market out of locating information for litigants would be private detectives. Information services are likely to be a growing field, and they will gather information designed to help litigants if they have an incentive to do so.

Third, and most important, why should the law give litigation such favored status?⁹⁴ Lawyers and judges tend to develop a form of tunnel vision which causes them to view the litigation process as if it were the most vital part of our society. We must avoid such "legocentricism." If the government must pay for property needed during wartime for the national defense, then it certainly must not expect to be given free property to aid the litigation process. The essence of informational property is the elimination of all free riders; even the riders who will use the information for good purposes⁹⁵ take the property and, therefore, must pay for it.

A final question arises when the information is in the possession of a customer of the information service. In connection with the hypothetical real estate information service discussed earlier, for example, imagine that XYZ Realty Co. paid for the use of the data on market share and has the data in its office when XYZ Realty is served with a discovery request. The actual contractual terms between the information service and XYZ Realty would determine whether this discovery request would constitute a taking of the information service's property. Gommon sense dictates, however, that the information service will usually retain

^{92.} See infra notes 100-01 and accompanying text.

^{93.} The fact that litigants are seldom viewed as a market for information today is used to justify giving information to litigants for free. Thus, it becomes a self-fulfilling prophecy. *Cf. infra* text following note 155, and Section V of this Article (arguing that payment will cause more information to become available).

^{94.} For example, one can hardly contend that free access to discovery is a constitutional right. See infra notes 157-62 and accompanying texts. Indeed, prior to 1938 discovery was largely unavailable. See supra note 4. Accordingly, to contend that discovery is a constitutional right, one would have to contend that all litigation prior to 1938 violated the Constitution.

^{95.} This Article will assume, for the sake of discussion, that litigation in general, and in particular the role of discovery in developing facts necessary for litigation, are "good" purposes. In the author of this Article's view "the carriage has turned into a pumpkin." See supra note 4.

^{96.} If the information, by virtue of the terms existing between the information service and XYZ, has become the property of XYZ, no taking would occur if XYZ is required to give the information to a litigant unless XYZ, itself, is a reseller of such information.

title to the information, only allowing XYZ Realty to use it in ways that do not destroy its confidentiality. In such cases the taking remains, just as if the information service has been served, XYZ's possession being analogous to that of a bailee.

C. The Public Use Requirement

In theory, at least, the government may not take property—even if compensation is provided—if the taking is not for a "public use."⁹⁷ Property may not be taken for private use.

In practice, however, it is almost impossible to imagine a use which is not a public use as courts have defined the term in recent cases. For example, in *Poletown Neighborhood Council v. City of Detroit*, 98 the State of Michigan condemned an entire ethnically unique neighborhood so that General Motors could build a new factory. As the saying goes, "What's good for General Motors is good for the nation," or, at least, the State of Michigan, so the court found a public purpose was found in the economic benefits to the public. 99 In *Monsanto*, taking Monsanto's safety

^{97.} See, e.g., Shizas v. City of Detroit, 333 Mich. 44, 52 N.W.2d 589 (1952); City of Owensboro v. McCormich, 581 S.W.2d 3 (Ky. 1979); Opinion of the Justices, 152 Me. 440, 131 A.2d 904 (1957); Karesh v. City Council of Charleston, 271 S.C. 339, 247 S.E.2d 342 (1978); Hogue v. Port of Seattle, 54 Wash. 2d 799, 341 P.2d 171 (1959).

^{98.} Poletown Neighborhood Council v. City of Detroit, 410 Mich. 616, 304 N.W.2d 455 (1981). General Motors did not believe that its other plants were efficient enough, so it closed down two other plants in the area to build the Poletown plant. The leveling of Poletown sent a large and well-established Polish-American community on a diaspora. In many cases, elderly Poles who were limited in their travel would never see life-long friends again.

See also Prince George's County v. Collington Crossroads, Inc., 275 Md. 171, 339 A.2d 278 (1975); Minneapolis v. Wukele, 291 N.W.2d 386 (Minn. 1980); Hawaii Housing Auth. v. Midkiff, 467 U.S. 229 (1984); Oakland v. Oakland Raiders, 32 Cal. 3d 60, 183 Cal. Rptr. 673, 646 P.2d 835 (1982); Mayor of Baltimore v. Chertkof, 441 A.2d 1044 (Md. 1982).

^{99.} Poletown, 410 Mich. 616, 632, 304 N.W.2d 455, 458. Since G.M. was closing two other plants located in Detroit in exchange for the Poletown plant because, among other things, those plants were not suited to robotics, the argument that Poletown was needed to improve employment is unsupportable. The economy has not improved since the taking, and no improvement is ever likely to be attributable to the taking.

Although a full exploration of the subject is beyond the scope of this Article, my dissent from the watering down of the public use requirement, of which *Poletown* is typical, should be noted. Use of such analysis throughout this article reflects only my recognition of the fact that courts have abandoned the public use requirement. A serious rebirth of that requirement would mean that informational property could not be taken for private discovery at all.

I have borrowed somewhat loosely in the text from a statement made by Charles Wilson to Congress in 1953 that has become a popular syaing. His actual statement was "What is good for the country is good for General Motors, and vice versa." See S. James, A Dictionary of Economic Quotations 9 (2d ed. 1984).

data to help another company obtain permission to sell its product was held to constitute a public use. ¹⁰⁰ The Court relied on the benefit to the public's health that would inure from having the information. Because the other company could be required to generate the same information at its own cost (or buy it from Monsanto) before it would receive permission to market the product, it is obvious that the Court accepted a weak argument on this point. ¹⁰¹

In comparison, the public benefit derived from more accurate litigation seems to qualify easily. Taking informational property through discovery might primarily benefit a particular litigant, in the same sense as the primary recipient of the benefit of the condemnation of Poletown was General Motors, but the secondary benefit to society is equally clear. Unless the courts are prepared to put new teeth into the public use requirement, informational property can be taken by the courts, with compensation, for the benefit of litigants.

D. Just Compensation and Alternate Remedies

The just compensation provision requires that the owner be paid the market value of the property the government has taken.¹⁰² The ideal measure of market value is an examination of recent sales prices of similar or identical property transferred between willing sellers and willing buyers dealing at arm's length.¹⁰³ A company operating exclusively as an information service which has been in business for some time will

^{100.} Ruckelshaus v. Monsanto Co., 467 U.S. 986, 1014-16 (1984).

^{101.} Indeed, the recent cases where a party has raised the public use issue reveal an attitude prevalent in the courts of complete deference to the legislative judgment as to the public nature of the use at issue. See, e.g., Ruckelshaus v. Monsanto Co., 467 U.S. 986, 1014 (1984) ("So long as the taking has a conceivable public character, 'the means by which it will be attained is . . . for Congress to determine.'"). Poletown Neighborhood Council v. City of Detroit, 410 Mich. 616, 632, 304 N.W.2d 455, 458 (1981) ("The Legislature has determined that governmental action of the type contemplated here meets a public need and serves an essential public purpose. The Court's role after such a determination is made is limited."). Such an approach amounts to a complete abdication of judicial review.

^{102.} See, e.g., D. CALLIES & R. FRIEDLICH, supra note 46, at 1030-31; L. ORGEL, VALUATION UNDER THE LAW OF EMMINENT DOMAIN (2d ed. 1953); Aloi & Goldberg, A Reexamination of Value, Good Will and Business Losses in Emminent Domain, 53 CORNELL L. REV. 604 (1968); Bigham, "Fair Market Value," "Just Compensation," and the Constitution: A Critical View, 24 VAND. L. REV. 63 (1970); Blum & Rubinfeld, Compensation for Takings: An Economic Analysis, 72 CALIF. L. REV. 569 (1984); Note, Compensating Manufacturers, supra note 1, at 201, especially n.81 and accompanying text.

^{103.} See United States ex rel T.V.A. v. Powelson, 319 U.S. 266 (1943); D. CALLIES & R. FRIED-LICH, supra note 46, at 1030.

often have established prices. These established prices, paid by normal customers, should apply to a government taking. In other cases where prices are not readily available, the court will have to estimate the market value through the use of expert evaluators, as is presently done in many condemnation cases. Note that in the context of informational property there will be a wide gap between the marginal cost of newly producing the information, and its market value in cases where existing data banks are used. Market value includes overhead, profit, and the pro rata share of the cost of generating the data base, as well as the marginal cost of displaying or preparing the data for its imminent use.

In some cases the requirement of disclosure will cost the owner of informational property a great deal more than simply the market price of the information itself. In very unusual cases a particular information service may actually find that it is so involved in responding to discovery requests that it is unable to continue in business. This could happen if a particular industry, such as the asbestos industry, suddenly becomes the focus of a great deal of litigation, or if the information service is the only such service of its type, or both.

A more likely problem is that the government may ultimately take the entire business because the sources that provide the information on which the information service relies—which are often its customers themselves or persons in business with its customers—either cease supplying information or begin supplying inaccurate information once they realize that the information can be used to their disadvantage in litigation. Courts have wisely held that the takings clause requires compensation in other analogous fact situations when government action has caused incidental damage to property beyond a basic taking. For example, where the incidental result of the government's actions was to flood nearby land, rendering it valueless, the Court held that the property had been taken even though title had not passed to the government and the government did not want the land. The Court has repeatedly asserted that "the deprivation of the former owner rather than the accretion of the right or interest to the sovereign constitutes the taking." Accord-

^{104.} Pumpelly v. Green Bay Co., 80 U.S. 166 (1871). See also Sutfin v. State, 261 Cal. App. 2d 50, 67 Cal. Rptr. 665 (1968) (taking occurs when flood waters from state highway project damage automobiles). See generally Spies & McCoid, Recovery of Consequential Damages in Emminent Domain, 48 VAL. U. L. REV. 437 (1962); Note, Emminent Domain Valuations in an Age of Redevelopment: Incidental Losses, 67 YALE L.J. 61 (1957).

^{105.} E.g., United States v. General Motors Corp., 323 U.S. 373, 378 (1945).

ingly, in cases where compelling disclosure of informational property produces grave incidental damage, that loss requires compensation as well, or else disclosure may not be required.¹⁰⁶

Present court rules do not provide for compensation as a matter of right. ¹⁰⁷ If compensation is not available, any law which produces a taking is unconstitutional and therefore void. Thus, the first possible remedy an owner of informational property might seek when faced with a discovery request is a ruling that such discovery is not possible because, as applied to such cases, the discovery rules are invalid.

One may argue that courts are unlikely to enjoin discovery under the federal rules because a subsequent suit for compensation could be brought against the federal government under the Tucker Act which provides:

The United States Claims Court shall have jurisdiction to render judgment upon any claim against the United States founded either upon the Constitution, or any Act of Congress, or any regulation of an executive department, or upon any express or implied contract with the United States, or for liquidated or unliquidated damages in cases not sounding in tort. 108

This argument gives the owner of informational property a monetary remedy in a subsequent Claims Court action against the United States. Likewise, in state court cases, discovery could continue unabated where a similar right of action against the state is available, although discovery would have to be prohibited in states where a similar right of action did not exist.

The difficulty with this argument is that neither the federal government nor the various state governments is likely to be willing to pay for the information in cases involving private litigants. There is a public in-

^{106.} Fear that the price of information might be high is, at best, irrelevant as an argument against the taking analysis urged here. Land taken for highways is often so expensive as to deter highway projects. At worst, the high price of such information cuts in favor of the taking analysis urged here in that it dramatizes the injuries that are presently being permitted.

^{107.} See supra notes 2, 4-5, 11-14, 34-35 and accompanying texts. Professor Dreyfuss, in a comment on a draft of this Article, suggested an argument that the data bank might qualify for treatment as an expert and, therefore, require payment under present practice. I endorse this approach as I believe our present practice with regard to experts is constitutionally required.

^{108. 28} U.S.C. § 1491 (1982). The Tucker Act has no relevance to disclosures compelled by state law.

Injunctive relief to prohibit an uncompensated taking is not available if the use is for a public purpose and authorized by law, when a subsequent suit for compensation is possible. Ruckelshaus v. Monsanto Co., 467 U.S. 966, 1016-17, 1020 (1984); Larson v. Domestic & Foreign Commerce Corp., 337 U.S. 682, 697 (1949). The fifth and fourteenth amendments do not require that compensation precede a taking. See also Hurley v. Kincaid, 285 U.S. 95, 104 (1932).

terest in accurate litigation, but not a very strong interest.¹⁰⁹ A decision that Tucker Act relief should be invoked would keep discovery constitutional, but would produce an immediate change in the discovery rules.

The only viable alternatives involve having the party seeking the discovery pay for it. Some existing disclosure statutes employ this mechanism, and the Federal Rules of Civil Procedure use it in limited areas, such as the rather analogous area of discovery of the opinions held by hired expert witnesses. Payment by the party seeking discovery could be achieved by altering the discovery rules to explicitly deal with informational property. Alternatively, this result could be achieved, at least as a stopgap measure, by reading the Rule 26 discretionary power to grant protective orders 111 as a mandatory protective power when informational property is at issue.

E. Waiver Doctrines

Companies that do business in ways that affect the people around them may be called upon to conform to a reasonable degree of regulation. In such cases that regulation often "takes" some of their property. Such

^{109.} The fact that the government would be so clearly unwilling to pay for the information tends to undercut the conclusion, stated earlier, that such a taking would be for a public use. See supra notes 97-101 and accompanying text. Because such an argument was rejected in, for example, the Poletown case, where General Motors was to pay for the state's purchase of the property at issue, see supra note 98 and accompanying text, this Article assumes that having the private litigant pay the compensation presents no problem.

^{110.} See supra note 5. A number of federal statutes including FIFRA, which was at issue in Monsanto, and TSCA also contain provisions for interparty compensation. See supra note 76.

^{111.} FED. R. CIV. P. 26(c), provides the judge with authority to charge the cost of discovery to the requesting party. The rule provides the following eight options for the judge in fashioning an order once "good cause" is shown:

⁽¹⁾ that the discovery not be had;

⁽²⁾ that the discovery may be had only on specified terms and conditions, including a designation of the time or place;

⁽³⁾ that the discovery may be had only by a method of discovery other than that selected by the party seeking discovery;

⁽⁴⁾ that certain matters not be inquired into, or that the scope of discovery be limited to certain matters;

⁽⁵⁾ that discovery be conducted with no one present except persons designated by the court;

⁽⁶⁾ that a deposition after being sealed be opened by order of the court;

⁽⁷⁾ that a trade secret or other confidential research, development, or commercial information not be disclosed or be disclosed only in a designated way;

⁽⁸⁾ that the parties simultaneously file specified documents or information enclosed in sealed envelopes to be opened as directed by the court.

Id. (emphasis added).

takings, however, do not require compensation. This result is most often reached by claiming that no taking is occurring. An artificial dichotomy is created between takings and regulations. Such feats of semantics simply express the conclusion that compensation is, or is not, respectively, required. The underlying analysis resembles a kind of waiver doctrine far more than a sensible categorical distinction. By choosing to do a certain type of business which affects others, a company waives its right to compensation to the degree necessary to regulate that business. Some degree of regulation, then, is a cost of doing business. If the company does not wish to endure the regulation, it can avoid regulation by not engaging in profitable actions which have the potential to affect others.

Whether disclosure of informational property may be required under this "waiver" or "regulation" analysis will depend on whether the information company fits the logical paradigm for such a waiver. Credit reporting services, for example, can do great harm to the public if their records carry false information. Thus, federal and state laws requiring disclosure of a credit applicant's file to the applicant¹¹⁴ "take" the credit reporting services' informational property because, in the absence of government compulsion, a fee would be charged for the information disclosed. In effect, however, the credit services waive the right to compensation by engaging in an activity which can seriously harm others if done improperly.

A more typical information service, such as the hypothetical real estate information service employed earlier in this Article, would not be subject to such waiver or regulation doctrines. If one assumes that a discovery

^{112.} See, e.g., Sax, supra note 88; Note, Disclosure Statutes, supra note 1, at 354-56.

^{113.} See, e.g., Note, Disclosure Statutes, supra note 1, at 354 ("In effect, the Court reasoned that Monsanto bought a license to sell pesticides... and paid for it by disclosing its data pursuant to the post-1978 statute."); Note, Compensating Manufacturers, supra note 1, at 213-14 ("The cost of health and safety data should be viewed as an inevitable cost of doing business in a society which is concerned about the health and safety of its citizens.") (footnote omitted).

^{114.} See, e.g., supra note 20 (federal act: disclosure when credit report is basis of adverse action). Notably, in the absence of adverse action the subject of the report must pay a reasonable fee to receive a copy of the report. This provision is entirely consistent with the analysis in this Article in that no basis for waiver is present where the report is not harmful. If the act required a free disclosure in the absence of adverse action (here, denial of credit), it would have taken informational property from the credit reporting company without compensation and the statute would be unconstitutional.

^{115.} At the time of this writing, T.R.W., the best known credit reporting agency, has begun aggressively advertising its new service through which a person may examine his own file for a fee. Whether such a market will prove substantial is not yet known.

order can take their information at will, the only way to avoid waiving the right to compensation would necessarily be to have no business at all which deals in information. Such companies do not endanger those around them and a blanket right to discovery, as presently exists, cannot be justified under a waiver or regulation doctrine.

IV. APPLYING TAKING ANALYSIS TO INFORMATIONAL PROPERTY

A. Distinguishing Monsanto and the Protective Order Cases

A few lower courts, dealing with disclosure requirements other than discovery, have held that compelled disclosure of trade secrets constitutes a taking. These cases, however, dealt with traditional trade secrets, such as the processes for making a particular product, rather than informational property. Therefore, it was possible to avoid any taking by issuing protective orders prohibiting disclosure to competitors. If Company X has a trade secret which allows it to manufacture widgets at twice the normal speed, disclosure of that secret to OSHA officials who are interested in worker safety in a higher speed plan constitutes no taking. Company X's ownership rights bundle of sticks is still intact. If OSHA shows Company Y (a competing widget manufacturer) the secret, a taking has occurred. X could have charged Y a fee for the right to use the process. Thus, a protective order prohibiting OSHA officials from disclosing the secret to competitors, at least in theory, 117 prevents a taking from occurring.

These trade secret/protective order cases, while helpful in establishing the property right and laying some of the groundwork for taking analysis, do not provide a useful remedy in cases involving informational property. Even in cases where OSHA forces disclosure of informational property to OSHA, alone, the taking occurs in the initial disclosure. Republication to a potential customer is not needed because OSHA is a potential customer. Thus, the only protective order sufficient to prevent

^{116.} See, e.g., Wearly v. Fed. Trade Comm'n., 462 F. Supp. 589 (D.N.J. 1978), vacated on ripeness grounds, 616 F.2d 662 (3rd Cir. 1980), cert. denied, 449 U.S. 822 (1980); Truswal Systems Corp. v. Hydro-Air Eng., Inc., 813 F.2d 1207 (D.C. Cir. 1987).

^{117.} In cases involving extremely valuable trade secrets some parties have chosen to default on some or all issues rather than trust such a protective order. If someone violated the order and disclosed the secret, proof of that fact would sometimes be difficult to find. Further, if such proof were available, no remedy could ever replace the exclusivity that now exists with regard to, for example, the formula for Coca-Cola (Classic, of course).

a taking of informational property would be one requiring compensation or interdicting the requirement of disclosure.

The leading case dealing with compelled disclosure of informational property is Ruckelshaus v. Monsanto Co. 118 FIFRA authorizes the Environmental Protection Agency to approve pesticides. At issue in Monsanto was the EPA's ability to use without compensation confidential data, submitted in support of one company's pesticide, in evaluating subsequent pesticide applications submitted by other companies. A further complication was that amendments to FIFRA created three relevant statutory periods. Concerning period one, the period prior to October 22, 1972, FIFRA contained no guidance as to whether the EPA could use data from one application in another application. ¹¹⁹ In period two. October 22, 1972 to September 30, 1978, the statute specifically protected trade secrets, including informational property, from disclosure unless the later applicant compensated the first applicant for the value of the confidential data used. 120 The statute provided an arbitration arrangement to resolve questions as to the value of the information. Finally, for period three, the period after September 30, 1978, the statute granted applicants a ten year period of exclusive use of data submitted after that date. At the conclusion of the ten year period, the EPA may freely use and disclose the data. 121 With regard to data submitted prior to September 30, 1978, applicants were given a fifteen year period during which a subsequent applicant would have to pay compensation to them for use of

^{118. 467} U.S. 986 (1984).

^{119. 467} U.S. at 991-92. The Court's characterization is employed here in the text and the analysis based on *Monsanto*. The Court's assertion that federal law was silent with regard to disclosing trade secrets during this period, however, is difficult to believe. During this period, the United States Department of Agriculture (which had jurisdiction under FIFRA before the EPA) had a formal policy of non-disclosure on which an applicant could rely. See 7 C.F.R. § 370.13(d) (1968). Further, the Trade Secrets Act provided criminal penalties for a government employee who disclosed trade secret information revealed to him during the course of his official duties. 18 U.S.C. § 1905 (1982). The Court unpersuasively distinguished this latter section. 467 U.S. at 1008. Justice O'Connor dissented in part in *Monsanto*. She disagreed with the Court's analysis on this point, saying "[i]t seems to me that the criminal sanctions in the Trade Secrets Act . . . created at least as strong an expectation of [confidentiality of trade secret data] . . . before 1972 as the precatory language of § 10 created after 1972." 467 U.S. 1022. See generally, 467 U.S. 1021-24. In order to permit further exploration of the analysis in *Monsanto*, the remainder of this Article will assume that the Court's conclusion that federal law was silent with regard to trade secrets is correct.

^{120.} FIFRA was amended by the Federal Environmental Pesticide Control Act of 1972, Pub. L. No. 92-516, 86 Stat. 973 (1972) (codified as amended at 7 U.S.C. §§ 136-136y (1982)).

^{121. 7} U.S.C. § 136a(c)(1)(D) (1982). See Monsanto 467 U.S. at 994. The idea of the exclusive use period is endorsed in McGarity & Shapiro, The Trade Secret Statús of Health and Safety Information, 93 HARV. L. REV. 837 (1980).

the data. The EPA may use and disclose data older than fifteen years without compensation. Further, the 1978 amendments added a new section with the potential to undermine even the ten and fifteen year periods. Section $10(d)^{124}$ provides for disclosure of all health, safety, and environmental data to the public, notwithstanding the (limited) protection afforded to trade secrets elsewhere in the Act. The amendments gave functional trade secrets and some informational property protection from public disclosure unless the EPA "determines that such disclosure is necessary in the public interest." Obviously, Monsanto was unhappy with such a flimsy guarantee.

Monsanto was able to show that the development of a pesticide typically requires the expenditure of \$5 million to \$15 million annually for several years. The development process may take up to twenty-two years and it is usually fourteen to twenty-two years before any return on investment is realized. For every pesticide actually marketed, a typical company will have screened and tested 20,000 others. Monsanto demonstrated, and the trial court found, that it had incurred costs in excess of \$23.6 million in developing the health, safety, and environmental data at issue, and that that data had continuing value to Monsanto beyond its use in gaining approval for particular pesticides. The district court found that the amended FIFRA provisions "give Monsanto's competitors a free ride at Monsanto's expense," and enjoined the EPA from disclosing the information. 129

Justice Blackmun wrote for a nearly unanimous Court. First, he examined whether "commercial data of the kind involved in this case" 131

^{122. 7} U.S.C. § 136a(c)(1)(D)(ii) (1982).

^{123. 7} U.S.C. § 136a(c)(1)(D)(iii) (1982).

^{124. 7} U.S.C. § 136h(d) (1982).

^{125. 7} U.S.C. § 136h(d)(2) (1982). The Court did not discuss this provision, although the opinion quotes it as part of a lengthy quote from the statute in its footnote 5. 467 U.S. at 996.

^{126.} Monsanto Co. v. Acting Administrator, United States Environmental Protection Agency, 564 F. Supp. 552, 555 (E.D. Mo. 1983).

^{127.} Id. Monsanto had a significantly better than average success ratio; successfully marketing one in 10,000 chemicals tested. Id.

^{128.} Id. at 560.

^{129.} Id. at 566-68.

^{130.} Justice White did not participate, and Justice O'Connor concurred in part and dissented in apart. O'Connor took a stronger view that the taking required compensation even during period one. See supra note 119. The remaining justices joined in the Blackmun opinion.

^{131. 467} U.S. at 1001. The terminology suggests an awareness by Blackmun that he was dealing with what this Article calls informational property rather than a traditional trade secret. See supra note 22 and accompanying text.

is property for the purposes of the takings clause. He concluded that "to the extent that Monsanto has an interest in its health, safety, and environmental data cognizable as a trade-secret right under Missouri law, that property right is protected."¹³²

Given that the data is property, the only questions remaining, according to the Court, were whether a taking had occurred, whether it was for a public purpose, or whether just compensation was provided. ¹³³ As a student commentator has pointed out, each of these questions has an utterly obvious answer. ¹³⁴ Nonetheless, Blackmun began a convoluted analysis of whether a taking had occurred, and got lost along the way.

Blackmun decided that the taking question depended on whether Monsanto had a "reasonable investment-backed expectation" with which the FIFRA disclosure provisions interfered. This analysis led Blackmun to focus on the provisions in FIFRA during the three time periods as the source of any and all expectations Monsanto could have. In period one, when the Act was silent, it could induce no such expectation. Accordingly, data submitted during period one was not protected. Likewise, in period three, when the Act allowed disclosure, no such expectations were possible. In period two, however, when the Act guaranteed protection, property rights arose and the subsequent retroactive abandonment of those rights by the 1978 amendments was a taking that required compensation. In the subsequent retroactive abandonment of those rights by the 1978 amendments was a taking that required compensation.

What is most puzzling here is that the Court employed the "reasonable investment-backed expectations" analysis not to determine if a taking occurred, but rather to unnecessarily re-decide whether the information is property. In cases involving trade secrets, where the bundle of rights consists of only one stick, the taking question is always clear. If a trade secret is disclosed to a free rider, it is taken.¹³⁹ Thus, the usual purpose

^{132. 467} U.S. at 1003-04.

^{133.} The Court says as much at 467 U.S. at 1000-01. See also supra text following note 37.

^{134.} Note, *Disclosure Statutes*, supra note 1. Accordingly, the Note concludes that *Monsanto* should have followed its own analysis and held that disclosure of information from all three periods constitutes a taking.

^{135. 467} U.S. 1005-08. The student Note points out that this analysis is only relevant to cases involving *partial* takings. Trade secrets cannot be partially taken. Thus, under traditional analysis Blackmun never should have addressed such matters. Note, *Disclosure Statutes*, *supra* note 1, at 347.

^{136. 467} U.S. at 1009-10. Justice O'Connor dissented as to this point. See supra note 22.

^{137. 467} U.S. at 1013.

^{138.} Id. at 1011, 1013.

^{139.} Implicit in the conept of "free rider" is that he uses the trade secret in a manner for which he could otherwise have paid. See supra text following note 35. If a trade secret is not protected by

of the "reasonable investment-backed expectations" analysis—to determine whether a taking has occurred—is irrelevant. Further, the very law which is challenged cannot, itself, set the expectations. Otherwise, with the exception of retroactive application cases, takings would never occur and the Constitutional protection could be legislated away.

Yet the Court may have reached the right result in *Monsanto*, even if by the wrong reasoning. Reconstructing the opinion, we find that the Court first held that the informational property involved was general property. The obvious result, reached by the trial court, that any EPA disclosure would take that property, however, must overcome a waiver argument not clearly enunciated but likely assumed by the Court.¹⁴¹ The safety data may be eligible for the waiver analysis¹⁴² because Monsanto is

the court, it is logically indistinguishable from informational property. See supra notes 26-28 and accompanying text.

140. See supra note 43 and accompanying text. The statement quoted in the text at note 43, is from *Monsanto* itself, and makes the Court's use of FIFRA to redefine the property impossible to explain.

141. For example, the *Monsanto* opinion begins with a lengthy explanation of the problems pesticides present to the environment, and the history of regulatory control. These facts are relevant to a waiver argument, in order to decide whether the enforced waiver is permissable. *See infra* note 146. Yet these facts have no bearing whatsoever on the analysis used by the Court.

Also note that the Court dismissed an argument that FIFRA preempts state law. 467 U.S. at 1012. The EPA's reasons for raising such a claim remain unclear. A void statute cannot preempt state law. Any federal statute that attempted to preempt state law creating constitutionally protected property rights would necessarily be void under the fifth amendment. This author can imagine no situation where preemption would be relevant.

Federal statutes often preempt previously existing state law and, in so doing, may eliminate priviously existing state-law-based causes of action. Thus, it may be asked whether preemption of a new area by Congress would be an unconstitutional taking of an individual's property rights in a chose of action. I believe that if such preemption works retroactively to eliminate causes of action created by state law which were within the valid reach of state law when created, a taking has occurred. I am not aware of any cases where federal preemption has been given such a retroactive effect. Most often Congress provides a future effective date when enacting legislation.

142. A persuasive argument that the waiver imposed is unacceptable is found in Note, Federal Disclosure Statutes, supra note 1, at 354-56. Because the governmental need at issue in Monsanto was the need to aid a competitor in avoiding the cost of duplicating the research, rather than safety, I must likewise express some reluctance in approving the Court's use of the waiver analysis. In my view the Court could have saved vital statutes, such as the "Right to Know" acts, under the waiver analysis, but probably ought not apply the waiver analysis to FIFRA provisions addressed more to efficiency than safety.

Nonetheless, other commentators have applied the waiver analysis. For example, one commentator notes,

Monsanto, on the other hand, can be seen as creating the risk that prompted the regulation. A "creation of the harm" or "noxious use" test was first introduced by the Supreme Court in holding railroads responsible for the costs of building grade separations necessitated by the fear of accidents where trains intersected public highways. The Court reain a dangerous and heavily regulated business which, as Rachel Carson demonstrated over a generation ago, 143 affects the health and safety of everyone. Monsanto could keep its data secret by simply not choosing to market new potentially dangerous chemicals. Otherwise, the disclosure of the data becomes a necessary cost of doing a type of business from which society must protect itself.

Thus, the fact that the information was general property becomes irrelevant.¹⁴⁴ The Court seems to have unknowingly continued beyond the general property analysis, however, to the realization that FIFRA created special property during period two by its voluntary promise of greater protection. The use of a reliance-based analysis, so inappropriate to the determination of whether a taking has occurred in trade secret cases, is quite correct for determining whether special property has been created.¹⁴⁵ Likewise, the use of federal statutes not merely as evidence of what is property, but to determine whether the information is property, although entirely circular in cases involving general property, is appropriate to special property. Thus, *Monsanto* is really a special property decision.

A full exploration of the waiver doctrine, which must be invoked in *Monsanto* before the terms of FIFRA obtain any relevance, is beyond the scope of this Article. Certainly the government may not require an utterly unreasonable waiver before it will grant a privilege such as the right to market a pesticide. The FIFRA provisions which permit EPA disclo-

soned in those cases that "[h]aving brought about the problem, the railroads are in no position to complain because their share in the cost of alleviating it is not based solely on the special benefits accruing to them from the improvements." Like the railroads, the chemical industry presents special risks to safety even though it plays an essential role in the economy.

Note, Compensating Manufacturers supra note 1, at 199 (footnote omitted). See also id. at 213. 143. See R. CARSON, SILENT SPRING (1962).

144. The rights created, according to the Court, by Missouri law and, according to this Article, by a federal constitutional court-made law, have become irrelevant because the federal government is able to require that Monsanto waive any taking claim in exchange for the right to market potentially dangerous chemicals. Thus, if congress had not promised during period two that it would not exact such a waiver, no compensation would be due.

145. As an aside, note that a student commentator has also pointed out that the Court's application of the reliance-based analysis is seriously inaccurate in that it fails to take into account the time delay between the expenditure to create "investment-backed expectations" and the actual application. Thus, investments which were made during period two, but which came to fruition during period three (and resulted in an application during period three) would be taken by uncompensated disclosures authorized by the Court. Because the developmental periods of the chemicals at issue range from fourteen to twenty-two years, such an overlap between periods would be commonplace. See Note, Disclosure Statutes supra note 1, at 350.

sure of Monsanto's data to persons interested in overseeing government environmental protection are more readily justified than the provision which permit subsequent applicants to use the data. Yet the latter provisions were the focus of the discussion in *Monsanto*. Therefore, one could argue that the *Monsanto* Court incorrectly rejected the argument that FIFRA placed unconstitutional conditions on the privilege of marketing a pesticide. 147

This Article has employed civil discovery under the Federal Rules of Civil Procedure as a paradigm for investigating the taking question. These discovery provisions apply to everyone, and do not reflect a waiver in exchange for the right to engage in an unusual or dangerous activity. Thus, the waiver analysis which is so crucial to the *Monsanto* decision

The importance of the public disclosure or "Right to Know" provisions, on the other hand, relates most directly to safety. One student commentator explains:

The recent disaster in Bhopal, India, reinforces society's need to have adequate information about the health effects of industrial chemicals. The chemical involved in the Bhopal accident, methyl isocyanate, was responsible for injuring or killing more than 200,000 people. Workers on duty at the time of the accident believed the chemical was harmful only as an eye irritant. N.Y. Times, Jan. 30, 1985, at 56, col. 2 (midwest edition).

Note, Compensating Manufacturers, supra note 1, at 189 n.2.

147. See supra note 142. The standard applicable for determining when the government-imposed terms are too harsh is uncertain. The Court unrealistically applied a "voluntary" standard, stating:

Because the market for Monsanto's pesticide products is an international one, Monsanto could decide to forgo registration in the United States and sell a pesticide only in foreign markets. Presumably, it will do so in those situations where it deems the data to be protected from disclosure more valuable than the right to sell in the United States.

467 U.S. at 1007 n.11. More realistically assessing the facts, however, a student commentator concludes:

In effect, the Court reasoned that Monsanto bought a license to sell pesticides in the United States and paid for it by disclosing its data pursuant to the post-1978 statute. This argument might be persuasive if the bargain recognized by the Court were of the type that two parties, negotiating freely, could be expected to reach. But the "bargain" in *Monsanto* was not voluntary.

Note, Disclosure Statutes, supra note 1, at 354. Yet both of these views agree on the wrong standard. If the bargain was truly voluntary, the force of law would never be required. The "unconstitutional conditions" doctrine exists so that some limit may be imposed on the government's power to impose (not "negotiate for") conditions. That limitation is not based on voluntariness; it is based on the reasonableness of the relationship between the magnitude of the possible harm the law seeks to control or prevent and the condition(s) imposed. Nollan v. California Coastal Comm'n, 107 S. Ct. 3141, 3147-48 (1987); Costonis, Presumptive and Per Se Takings: A Decisional Model for the Takings Issue, 58 N.Y.U.L. Rev. 465, 487 (1983). The Monsanto opinion contains no such analytical justification for the FIFRA disclosures. In this regard Nollan appears to have overruled Monsanto.

^{146.} The provisions that allow a competitor to use the data to obtain permission to market another product are not safety provisions. The EPA will require the competitor to produce safety data, in any event, before it will grant permission. These provisions aim at efficiency and cost savings.

with regard to periods one and three has no bearing on discovery questions. In a case involving a simple discovery request, the analysis would begin and end with the recognition that informational property is general property.

Federal C.I.D. statutes,¹⁴⁸ for example, appear to be governed by the same analysis. These are simply discovery provisions which operate without the need for existing litigation. Other statutory disclosure provisions, such as those in FIFRA,¹⁴⁹ the Fair Credit Reporting Act,¹⁵⁰ certain OSHA provisions,¹⁵¹ Clean Air provisions,¹⁵² and various "Right to Know" acts,¹⁵³ are subject to individual discussion and analysis that is beyond the scope of this Article. These statutes deal specifically with conduct that has the potential to endanger others and certain conditions may be placed on the right to engage in such conduct. Subject to the unconstitutional conditions doctrine, the government may require a waiver of fifth or fourteenth amendment rights when permitting such conduct.

B. The Importance of Information to the Litigation Process and Other Vital Societal Objectives

A final argument against the taking analysis set forth in this Article stresses the importance of information to the litigation process. One may argue that the taking analysis urged here will seriously reduce the accuracy of civil and even criminal adjudication.¹⁵⁴ The answer to this argument is both to traverse and demur.

By way of traverse, the taking argument is limited to cases involving informational property. Ordinary information remains entirely unaffected; even more customary trade secrets are only guaranteed a protective order prohibiting their disclosure or use by competitors. Thus, this taking analysis affects only a small share of the information used in

^{148.} See supra note 15. See also Note, Compensating Manufacturers, supra note 1, at 189-90 (partial listing of other statutes resulting in disclosure). See also id. at 192, 212.

^{149.} See supra note 16.

^{150.} See supra note 20.

^{151.} See supra note 18.

^{152.} See supra note 19.

^{153.} See supra note 21.

^{154.} This Article has focused on civil discovery rather than discovery and the subpoena power in the context of criminal adjudication. The takings analysis would not vary in the criminal context, although certain cases involving indigent defendants and crucial information might require that the government pay for the information.

^{155.} See supra notes 115-17 and accompanying text.

litigation. Further, even informational property may be taken if the need is genuine, but it must be paid for. Thus, the discovery rules should be amended to provide for payment by the requesting party. This will undoubtedly eliminate "fishing expedition" discovery in this small category of cases, 156 but parties who genuinely need the information will pay for it. Finally, and most importantly, because the requirement of payment provides an incentive, companies will generate, preserve and make available more information that litigants tend to find useful. Thus, in the long run, there will be an increase rather than a decrease in the information available to litigants.

By way of demurrer, the argument that the application of taking analysis to informational property will reduce the accuracy of litigation must be treated as two arguments: a policy argument and a constitutional argument. At the policy level, such an argument is legally insufficient because a clear constitutional command cannot be overcome by a showing that some would say it is unwise.¹⁵⁷ Further, many highly valuable societal objectives could be more easily attained if the takings clause did not exist. Schools, highways, and hospitals, would all be far more affordable, and one could make a pressing argument for exempting each such type of public use from the takings clauses. The idea implicit in the policy argument against applying taking analysis to informational property so that litigation should come before public health, for example, is an absurd product of lawyers' tunnel vision.

At the constitutional level such an argument likewise fails. One may not plausibly suggest that due process¹⁵⁸ gives a right to full discovery for

^{156. &}quot;Fishing expedition" discovery is normally allowed. See, e.g., Hickman v. Taylor, 329 U.S. 495, 507 (1947) ("No longer can the time-honored cry of 'fishing expedition' serve to preclude a party from inquiring into the facts underlying his opponent's case."). When balanced only against inconvenience, courts have thought it best to allow litigants to ask questions that appear irrelevant if there is a chance of turning up useful information. The mounting pressure against the excessive cost of discovery is gradually changing courts' attitudes on fishing expeditions. Clearly, where a fishing expedition can only be had by paying for the information, such forays will be less common.

^{157.} Cf., e.g., Curtis v. Loether, 415 U.S. 189, 198 (1974) (Marshall, J.) (stating, in context of policy argument against applying jury trial guarantee to race discrimination actions under Title VIII: "We are not oblivious to the force of petitioner's policy arguments... the possibility that jury prejudice may deprive a victim of discrimination of the verdict to which he or she is entitled... More fundamentally, however, these considerations are insufficient to overcome the clear command of the Seventh Amendment.") (footnote omitted, emphasis added).

^{158.} See U.S. Const. amend. V (applicable to federal courts), XIV (applicable to state courts). See supra note 94. Further, the sixth amendment may play a role in some criminal cases. See supra note 153. The equal protection clause might also be urged in civil and criminal cases by arguing that the requirement of paying for information discriminates against the poor, cutting off their access to

a number of reasons. First, discovery is discretionary. Also, discovery as we know it today did not exist when either the fifth or fourteenth amendments were drafted. Further, even at the absolute limits allowed by judicial discretion, discovery and the right to information is not absolute. Most notably, discovery is unavailable where information is privileged. In the unusual case of the privilege against self-incrimination, the privilege itself is of constitutional magnitude. If all privileges were of constitutional magnitude, one might plausibly assert that the right to information for litigation is a constitutional right. One constitutional right may be outbalanced by another. But if a common law privilege can outbalance the right to information, the right to information cannot be constitutional in nature. Certainly, then, the right to free information must fall before the explicit constitutional protection of the takings clause.

V. SOLUTIONS AND SYNTHESIS: OBEYING THE CONSTITUTION EVEN WHEN IT IS COSTLY TO DO SO

This Article has demonstrated that a property interest can exist in information. Further, in today's world, informational property constitutes one of the most rapidly growing types of property. Clearly, our present approach to discovery can result in a prohibited taking of informational

the courts. Such an argument is not likely to succeed. The poor are not even guaranteed an attorney under the equal protection clause. In criminal cases only, they are guaranteed an attorney under the sixth amendment, and this might require that the government pay for some informational property when needed by a poor criminal defendant.

- 159. See, e.g., Herbert v. Lando, 441 U.S. 153, 177 (1979); Pollack, Discovery—Its Abuse and Correction, 80 F.R.D. 219 (1979). Indeed, the trial court's discretion over discovery matters is very broad.
- 160. Extensive discovery became generally available in the federal courts in 1938 with the advent of the Federal Rules of Civil Procedure. See supra notes 4, 94. States gradually began copying the federal rules, and many did not have extensive discovery for years after 1938.
 - 161. See FED. R. CIV. P. 26; C. WRIGHT, supra note 4, at 549-50.
- 162. See U.S. Const. amend. V. Indeed, the priest-penitent privilege may be rooted in the religion clauses. See U.S. Const., amend. I. The physician-patient privilege might be seen as rooted in the penumbra-based right to bodily and medical privacy. See Roe v. Wade, 410 U.S. 113 (1973). This seems unlikely, as extending the constitutional right to medical privacy that far would certainly render Rule 35's provision for court-ordered medical exams unconstitutional. The attorney-client privilege is but one example of a privilege that is not constitutional in nature.
- 163. See, e.g., Haig v. Agee, 453 U.S. 280 (1981) (subordinating first amendment right to criticize the government to constitutional foreign affairs power); Nebraska Press Ass'n v. Stuart, 427 U.S. 539 (1976) (subordinating sixth amendment concerns); In re Japanese Electronic Products Antitrust Litigation, 631 F.2d 1069 (3d Cir. 1980) (subordinating seventh amendment right to jury trial to fifth amendment right to due process).

property without compensation. Using discovery mechanisms to obtain free data, otherwise available for the same use only upon payment, amounts to using the legal process to steal the inventory of a business that sells information. A pair of shoes on the shelf of a shoe store would receive constitutional protection from such a taking; no reason appears why valuable information should not.

The likely short term cost to litigants of having to pay for information where informational property is involved will be offset by increased availability of information for litigants in the future. The market incentive will produce a wide range of sources with protection from free riders. However, the rights guaranteed by the Constitution do not depend on this increased availability. Thus, even if the payment for use of informational property becomes very costly to litigants, the Constitution requires such compensation. Compensation is neither convenient nor inexpensive when property is taken to build schools, roads, military bases, or hospitals. No reason appears why litigation should be treated differently.

Although the assertion that the use of information to benefit private litigations is a public use seems tenuous, past decisions¹⁶⁴ have made it clear that the public interest in effective litigation would make such a taking possible if compensation was provided. Yet the government's interest is so limited that the private litigants will be the ones to pay for the information. Thus, the Tucker Act remedy¹⁶⁵ of a claim against the government creates more problems than it solves. It now seems clear that the discovery rules should be amended to provide that the requesting party must compensate the owner of informational property when such property is the subject of compelled disclosure. At times this compensation requirement may prove costly either because it involves a great deal of money or because a litigant may decide to do without information that could aid in truth seeking. Even when compliance is costly, the Constitution must be obeyed.

^{164.} See supra notes 97-101 and accompanying text.

^{165.} See supra notes 108-111 and accompanying text. Takings of informational property for the government's use, as in, for example, the case of C.I.D. statutes would be satisfactorily dealt with under the Tucker Act remedy.