



January 1995

Government Seizures of Trade Secrets: What Protection Does the Takings Clause Provide

Ira S. Matsil

Recommended Citation

Ira S. Matsil, Comment, *Government Seizures of Trade Secrets: What Protection Does the Takings Clause Provide*, 48 SMU L. REV. 687 (1995)

<https://scholar.smu.edu/smulr/vol48/iss3/8>

This Comment is brought to you for free and open access by the Law Journals at SMU Scholar. It has been accepted for inclusion in SMU Law Review by an authorized administrator of SMU Scholar. For more information, please visit <http://digitalrepository.smu.edu>.

GOVERNMENT SEIZURES OF TRADE SECRETS: WHAT PROTECTION DOES THE TAKINGS CLAUSE PROVIDE?

Ira S. Matsil

TABLE OF CONTENTS

I. INTRODUCTION	688
II. APPLICATION OF THE TAKINGS CLAUSE	689
A. GOVERNMENT ACTION WHICH AMOUNTS TO A TAKING .	690
B. TAKING CONTRASTED WITH REGULATION	692
C. REGULATION WHICH REQUIRES DISCLOSURE OF TRADE SECRETS	695
D. <i>Ruckelshaus v. Monsanto Co.</i>	695
III. PROPERTY INTERESTS PROTECTED BY THE TAKINGS CLAUSE	697
A. TRADE SECRETS	698
B. FINDING A PROTECTABLE PROPERTY RIGHT IN TRADE SECRET	700
IV. GOVERNMENT TAKING OF TRADE SECRET PROPERTY	704
A. CHARACTER OF GOVERNMENT ACTION	704
B. INTERFERENCE WITH REASONABLE INVESTMENT-BACKED EXPECTATIONS	706
1. <i>Legislation Prohibits Disclosure of Trade Secret Information</i>	707
2. <i>Legislation Allows Disclosure of Trade Secret Information</i>	707
3. <i>Legislation is Silent on Disclosure of Trade Secrets</i> ...	710
C. ECONOMIC IMPACT OF GOVERNMENT ACTION	714
V. TAKING FOR PUBLIC USE	714
VI. JUST COMPENSATION FOR TRADE SECRETS THAT HAVE BEEN TAKEN	715
A. REMEDIES FOR TRADE SECRET MISAPPROPRIATION	716
B. COMPENSATION WHEN PATENTS ARE APPROPRIATED BY GOVERNMENT	718
VII. CONCLUSION.....	719

I. INTRODUCTION

THE concept of eminent domain is believed to have originated with the seventeenth century legal scholar Grotius.¹ Grotius believed that the state had the power to take property from individuals for the good of society but was required to compensate those individuals in return.² There is no question today that federal, state, and local governments possess the power of eminent domain, that is, the power to take privately owned property upon the payment of compensation. This notion is squarely established and has been firmly embodied, at least indirectly, in the law of this country in the Bill of Rights.³

In some cases it would appear that the application of the theory of eminent domain should be fairly straightforward. For instance, if the government takes a tract of land to build a highway, the remedy is clear if the value of the land is easily determinable. Unfortunately, however, not all situations are this simple. What if the government does not actually take control of the property but instead imposes some regulation that effectively eliminates any valuable use of the land?⁴ Similarly, what if the government, while allowing the owner to continue using his land, opens the land to public use as well?⁵

Owners of trade secrets are often challenged with these questions as well as others. Since a trade secret is an intangible good, its value is often difficult to determine. Trade secrets are not often sold on the open market; they are, after all, secrets. Ownership of a trade secret gives a business owner an advantage over the competition, but placing a dollar value on this competitive advantage is not a simple matter.⁶

The issues are further muddled in light of the Supreme Court's recent redefinition of many of the takings issues in land regulation cases. In 1992, the Court held in *Lucas v. South Carolina Coastal Council*⁷ that a landowner who must sacrifice all economically beneficial uses of his land is entitled to compensation.⁸ It is unclear, however, how this ruling will apply to non-land cases.

1. JOHN E. NOWAK, CONSTITUTIONAL LAW § 11.11 (1986).

2. *Id.* (citing GROTIUS, DE JURE BELLI ET PACIS lib. III. C. 20 VII 1 (1625), in J. THAYER, 1 CASES ON CONSTITUTIONAL LAW (1895)).

3. See U.S. CONST. amend. V.

4. See, e.g., *Lucas v. South Carolina Coastal Council*, 112 S. Ct. 2886 (1992) (finding state regulation prohibiting a taking if land becomes valueless); *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393 (1922) (finding state regulation that would destroy coal company's mining rights a taking); *Mugler v. Kansas*, 123 U.S. 623 (1887) (finding state prohibition of alcohol not a taking of beer company's assets).

5. See *Kaiser Aetna v. United States*, 444 U.S. 164 (1979) (holding government must pay just compensation to owner of private marina if government opens to free public access).

6. See generally David G. Oberdick, *The Taking of Trade Secrets: What Constitutes Just Compensation?*, 48 U. PITT. L. REV. 247 (1986).

7. 112 S. Ct. 2886 (1992).

8. *Id.* at 2895.

Further, just last year the Supreme Court announced the "rough proportionality" test to determine the necessary nexus between the property owner's loss and the government's goal.⁹ Once again, this rule was described in the context of land use regulation. But how will it apply to intangible property such as trade secrets?

This comment will first review the Takings Clause¹⁰ and its application in other contexts. In 1984, the Supreme Court clearly established that intangible property rights, such as trade secrets, deserve the protection of the Takings Clause of the Fifth Amendment if they are recognized by state law.¹¹ This comment will analyze how the traditional taking doctrine is applied to these intangible property rights.

The second section of this comment reviews how the determination is made as to whether a trade secret is a property right. First, the definition of trade secrets throughout the states will be briefly reviewed. This comment then looks at how courts apply these principles in finding property that is protected by the Fifth Amendment.

The third section reviews whether a taking has occurred given that a property right exists. Three factors are considered when analyzing whether a taking has occurred. These are the character of the government action, any interference with reasonable investment-backed expectations, and the economic impact of the government's action.

In the fourth section, the public use doctrine will be reviewed. The courts tend to be extremely deferential to the other branches and consider most takings to be for a public use.

Finally, the compensation issue will be addressed in the fifth section. Private misappropriation cases will be reviewed, as well as government takings of patent rights, to determine the types of compensation that may be available.

II. APPLICATION OF THE TAKINGS CLAUSE

The government's right of eminent domain is not specifically enumerated in the original Constitution. The right is, however, implicitly stated in the Fifth Amendment, which requires just compensation whenever private property is taken for a public use.¹² Taking is "constitutional law's expression for any sort of publicly inflicted private injury for which the Constitution requires payment of compensation."¹³ The Fifth Amendment's guarantee of compensation for government takings is designed to bar the government from "forcing some people alone to bear public bur-

9. *Dolan v. City of Tigard*, 114 S. Ct. 2309, 2319 (1994).

10. U.S. CONST. amend. V.

11. *Ruckelshaus v. Monsanto Co.*, 467 U.S. 986, 1004-14 (1984).

12. "No person shall . . . be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation." U.S. CONST. amend. V.

13. Frank I. Michelman, *Property, Utility and Fairness: Comments on the Ethical Foundations of 'Just Compensation' Law*, 80 HARV. L. REV. 1165, 1165 (1967).

dens which, in all fairness and justice, should be borne by the public as a whole."¹⁴

Although the Fifth Amendment only applies to the federal government, the requirement of compensation for the taking of private property has also been applied to state and local governments through the Fourteenth Amendment.¹⁵ Early on, the Supreme Court held that compensation for private property taken for public use is an essential element of due process of law as prescribed by the Fourteenth Amendment.¹⁶ But rather than simply incorporating the Fifth Amendment requirements into Fourteenth Amendment jurisprudence, the Supreme Court appears to have found independent public use and just compensation requirements within the definition of Fourteenth Amendment due process.¹⁷ In any event, there is no question today that local governments can only take private property if that taking is for a public use and just compensation is provided to the aggrieved.

In analyzing whether the constitutional requirements have been met, three major issues must be determined: (1) whether there was a taking, (2) whether the taking was for a public use, and (3) whether just compensation was provided.¹⁸ The next sections will review these three categories as well as the determination of the claimant's property interest.

A. GOVERNMENT ACTION WHICH AMOUNTS TO A TAKING

In general, a taking may be found when governmental activity results in significant physical damage to property that impairs its use.¹⁹ A taking has clearly occurred when the government physically seizes tangible property from its owner. In addition, a taking can also occur in other situations. To determine if a taking has occurred, courts concentrate upon the effect of the government action upon the citizen as opposed to the benefit gained by the state.²⁰ In fact, if the loss to the individual is great enough, he can be compensated even though the government has not actually "taken" anything.²¹

14. *Armstrong v. United States*, 364 U.S. 40, 49 (1960).

15. "No state shall . . . deprive any person of life, liberty or property without due process of law." U.S. CONST. amend. XIV, § 1.

16. *Chicago, B. & Q. R.R. v. Chicago*, 166 U.S. 226, 234 (1897). See also *Webb's Fabulous Pharmacies, Inc. v. Beckwith*, 449 U.S. 155, 159 (1980) (applying the takings clause to action by a state).

17. NOWAK, *supra* note 1, § 11.11, at 399-400.

18. For trade secrets, a fourth criteria will also arise, namely whether the claimant has a property interest.

19. NOWAK, *supra* note 1, § 11.12 (citing *Pumpelly v. Green Bay Co.*, 80 U.S. (13 Wall.) 166, 179-80 (1871)).

20. *United States v. General Motors Corp.*, 323 U.S. 373, 378 (1945) ("[C]ourts have held that the deprivation of the former owner rather than the accretion of a right or interest to the sovereign constitutes the taking.").

21. *Id.* ("Governmental action short of acquisition of title or occupancy has been held, if its effects are so complete as to deprive the owner of all or most of his interest in the subject matter, to amount to a taking.") (citations omitted).

In determining if a taking has occurred the courts tend to look at several factors. Although there is no set formula for determining when justice and fairness require compensation for a private burden, considerations may include the economic impact of the regulation and the character of the government action.²² In particular, the extent to which the government has interfered with distinct investment-backed expectations must be considered.²³

Whether the government has interfered with reasonable investment-backed expectations turns out to be an important factor in many of the cases in which it is alleged that a trade secret has been taken.²⁴ Therefore, it will be useful to contrast two cases in which a central issue turns on whether there has been an interference with reasonable investment-backed expectations.

*Kaiser Aetna v. United States*²⁵ and *Pruneyard Shopping Center v. Robins*²⁶ each deal with the property right to exclude others and whether there has been a compensable government taking when this right has been infringed. In *Kaiser Aetna*, a developer owned a private pond in a shallow lagoon in Oahu, Hawaii. The owners invested substantial amounts of money in dredging and developing this area into an exclusive, private marina. The federal government later sought to compel free public use of the private marina on the ground that the marina was connected to navigable water. The Court held that the "right to exclude" is so universally held to be a fundamental element of the property right, that this interest falls within the category of interests the government cannot take without compensation.²⁷ In reaching this conclusion, the Court weighed the large investment made by the developers after being allowed to dredge the waterway. Although the government could have prohibited the dredging, they did not. When the government allowed the construction, they created a number of important expectations.²⁸ As a result, the government must condemn and pay for the ability to manage the landowner's property.²⁹

On the other hand, *Pruneyard Shopping Center* provides a different scenario. In *Pruneyard Shopping Center*, the owner of a shopping center was sued by a group that wished to pass petitions within the shopping center. Among other arguments, the owner alleged that any government ruling allowing the petitioners on private property would be a taking under the Fifth Amendment. The Court rejected this argument.³⁰ There simply was no indication that the petitioners' activities would "unreason-

22. *Penn Cent. Transp. Co. v. New York City*, 438 U.S. 104, 123-24 (1978).

23. *Id.* at 124.

24. *See infra* part IV.B.

25. 444 U.S. 164 (1979).

26. 447 U.S. 74 (1980).

27. *Kaiser Aetna*, 444 U.S. at 179-80.

28. *Id.* at 179.

29. *Id.*

30. *Pruneyard Shopping Ctr.*, 447 U.S. at 83. The Court held that "[h]ere the requirement that appellants permit appellees to exercise state-protected rights of free expression

ably impair the value or use of the property as a shopping center."³¹ The shopping center was not built with the expectation that petitioners would be excluded.

The Court distinguished *Kaiser-Aetna* by noting that, unlike the marina owners, the shopping center owners failed to show that the right to exclude others was essential to the use or economic value of the property.³² The marina owners depended upon the exclusiveness of the marina, whereas the shopping center was already open to the public. It is likely the shopping center would have been built even if the owners knew petitioners would be allowed, and therefore the owner could not have had an investment-backed expectation. On the other hand, the marina probably would not have been built if it could not be exclusive.

B. TAKING CONTRASTED WITH REGULATION

It is well established that the government has the authority to regulate the actions of private citizens through its police powers.³³ Police power is the inherent power of government to regulate in order to promote the public health, safety, welfare, or morals; generally no compensation is required.³⁴ The question that often arises is: When does a regulation go far enough to constitute a taking and, therefore, require compensation for the aggrieved?³⁵ Since the eminent domain cases tend to be decided based upon the circumstances of the case, it is difficult to fully predict how individual cases will be decided.³⁶

The debate over what differentiates government action that constitutes a taking from government action that constitutes regulation is epitomized in the views of the elder Justice Harlan and Justice Holmes.³⁷ On the one hand, Justice Harlan literally interpreted the taking requirement, believing compensation was not due unless the state actually appropriated pri-

and petition on shopping center property clearly does not amount to an unconstitutional infringement of appellants' property rights under the Taking Clause." *Id.*

31. *Id.*

32. *Id.* at 84.

33. See NOWAK, *supra* note 1, § 11.12.

34. *Id.* § 11.10 (stating that the "police power" is what allows government to restrict individual freedom unless specifically forbidden by the Constitution). See also E. CORWIN, *LIBERTY AGAINST GOVERNMENT* 88, 173 (1948) (stating that police power is inherent for state governments but not federal government, which must rely on enumerated powers).

35. See NOWAK, *supra* note 1, § 11.12; GEOFFREY R. STONE ET AL., *CONSTITUTIONAL LAW* 1579-82 (1991).

36. See *Penn Cent. Transp. Co. v. New York City*, 438 U.S. 104, 123 (1978).

[T]his Court, quite simply, has been unable to develop any "set formula" for determining when "justice and fairness" require that economic injuries caused by public action be compensated by the government, rather than remain disproportionately concentrated on a few persons. Indeed, we have frequently observed that whether a particular restriction will be rendered invalid by the government's failure to pay for any losses proximately caused by it depends largely "upon the particular circumstances [in that] case."

Id. (alterations in original) (citations omitted).

37. See NOWAK, *supra* note 1, § 11.12, at 402-04.

vate property.³⁸ On the other hand, Justice Holmes had a much broader interpretation, believing compensation was required whenever the state imposed significant restrictions on private property.³⁹ These two opposing views can be seen in the turn of the century cases of *Mugler v. Kansas*⁴⁰ and *Pennsylvania Coal Co. v. Mahon*.⁴¹

In *Mugler*, Kansas adopted a constitutional amendment prohibiting the manufacture and sale of intoxicating liquors and the legislature enacted a statute to enforce this prohibition. The proprietor of a brewery was subsequently indicted for violating this statute. In an opinion by Justice Harlan, the Court rejected the brewer's argument that he was entitled to compensation because his property was required to be devoted to public use.⁴² The Court stressed that the state had the right to regulate in order to promote the benefit of the public.⁴³ Unless the legislature intended to "deprive the owner of his property and liberty" under the guise of police regulation, compensation is not required.⁴⁴

The Court took a contrary view thirty-five years later in *Pennsylvania Coal Co. v. Mahon*.⁴⁵ In *Pennsylvania Coal Co.*, a Pennsylvania statute limited coal mining in certain circumstances. After being sued to cease mining as per the statute, a coal company sued claiming that the statute exacted a taking of property. In a famous passage, Justice Holmes wrote that "[t]he general rule at least is that while property may be regulated to a certain extent, if regulation goes too far it will be recognized as a taking."⁴⁶ The difference between regulation and taking "is a question of degree—and, therefore, cannot be disposed of by general propositions."⁴⁷ As a result, the Court held for the coal company,⁴⁸ making it clear that the acquisition of property to the exclusion of the owner is not

38. *Id.*

39. *Id.*

40. 123 U.S. 623 (1887)

41. 260 U.S. 393 (1922).

42. *Mugler*, 123 U.S. at 669.

43. *Id.*

44. *Id.* The court stressed that the determination turns on whether a taking has occurred.

The exercise of the police power by the destruction of property which is itself a public nuisance, or the prohibition of its use in a particular way, whereby its value becomes depreciated, is very different from taking property for public use, or from depriving a person of his property without due process of law. In the one case, a nuisance only is abated; in the other, unoffending property is taken away from an innocent owner.

Id.

45. 260 U.S. 393 (1922).

46. *Id.* at 415.

47. *Id.* at 416.

48. *But cf.* *Keystone Bituminous Coal Assoc. v. DeBenedictis*, 480 U.S. 470 (1987). The Court upheld a modern day analogue of the statute overruled in *Pennsylvania Coal Co.* The Court distinguished *Pennsylvania Coal Co.* on the grounds that the government action was designed to arrest a significant threat to public welfare rather than simply balance the interests of coal miners and the neighboring surface owners. *Id.* at 483. In addition, the regulation in *Pennsylvania Coal Co.* made mining "commercially impracticable" while the coal miners in *Keystone* had not made a similar showing. *Id.* at 484 (quoting *Pennsylvania Coal Co.*, 260 U.S. at 414).

a requirement to finding a taking.⁴⁹ In fact, government permit requirements may now constitute a taking, depending upon the economic impact of the action.⁵⁰

In its recent decision in *Lucas v. South Carolina Coastal Council*,⁵¹ the Supreme Court reaffirmed the position that a regulation that denies all economically beneficial use of land will be a taking and must be compensated.⁵² In *Lucas*, a developer purchased two lots of land for \$975,000. Subsequent to his purchase, the state passed a regulation that forbade him from building on the land. The trial court determined that the regulation had rendered his land valueless.

The Court categorically held that "when the owner of real property has been called upon to sacrifice all economically beneficial uses in the name of the common good, that is, to leave his property economically idle, he has suffered a taking."⁵³ A state must compensate an owner for any regulation that prevents "all economically beneficial use" of property unless "the proscribed use interests were not part of [the owner's] title to begin with."⁵⁴

Although the landowner is entitled to compensation when the taking is complete, when the taking is partial, the aggrieved must look to an analysis based on certain factors.⁵⁵ Some factors which will be considered are the nature of the intrusion, the balance between the state's interest and the private owner's interest, and the legitimacy of the state's interest.⁵⁶ The regulating body must show that an "essential nexus" exists between a legitimate state interest and the regulation being proposed.⁵⁷ The impact upon property owner loss must be roughly proportional "in nature and extent" to the government goal.⁵⁸

49. See *Pennsylvania Coal Co.*, 260 U.S. at 413-16.

50. *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985).

A requirement that a person obtain a permit before engaging in a certain use of his or her property does not itself "take" the property in any sense. . . . Moreover, even if the permit is denied, there may be other viable uses available to the owner. Only when a permit is denied and the effect of the denial is to prevent "economically viable" use of the land in question can it be said that a taking has occurred.

Id. at 127.

51. 112 S. Ct. 2886 (1992).

52. *Id.* at 2893.

53. *Id.* at 2895.

54. *Id.* at 2899.

55. See *id.* at 2895 n.8.

56. GEOFFREY R. STONE ET AL., *CONSTITUTIONAL LAW* 1581 (2d ed. 1991).

57. *Nollan v. California Coastal Comm'n*, 483 U.S. 825, 837 (1987).

58. *Dolan v. City of Tigard*, 114 S. Ct. 2309, 2319-20 (1994).

C. REGULATION THAT REQUIRES DISCLOSURE OF TRADE SECRETS

Many of the trade secret cases arise in the context of regulation.⁵⁹ Often, the issuance of a permit or license is dependent upon the disclosure of information, some of which may be classified as a trade secret.

An early case that discusses government taking of trade secrets in the context of regulation is *Corn Products Refining Co. v. Eddy*.⁶⁰ The Kansas legislature enacted a law requiring manufacturers to label the percentages of all ingredients in syrup. The manufacturers claimed that this requirement constituted a disclosure of trade secret information and therefore amounted to a taking. The Court refused to recognize a taking, stating that the manufacturer's right to maintain secrecy must be subject to the state's right to promote fair dealing.⁶¹

The issue of disclosure of proprietary information to conform with government regulation arose again in the more recent Supreme Court case of *Ruckelshaus v. Monsanto Co.*⁶² For the first time in 1984, the Court held that a trade secret may be protected by the Takings Clause of the Fifth Amendment.⁶³ The review of the modern approach to the taking of trade secrets begins with an analysis of the *Monsanto* case.

D. RUCKELSHAUS V. MONSANTO CO.

The *Monsanto* opinion sets forth the history of the enactment and amendments made to the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).⁶⁴ A brief synopsis is set forth below. In 1947, Congress passed FIFRA, which was primarily a licensing and labeling statute. Upon the creation of the Environmental Protection Agency (EPA) in 1970, many of the Department of Agriculture's responsibilities under FIFRA were transferred to the EPA.

In 1972, Congress amended the FIFRA requirement that any application for license must provide test data to ensure that chemicals are safe. Applicants could signify data as a trade secret. The EPA was in turn prohibited from publicly disclosing any information that contained these trade secrets. The amended act also allowed the EPA to consider data submitted by one applicant in the application of another, provided the subsequent applicant offered to compensate the original submitter.

59. See, e.g., *Ruckelshaus v. Monsanto Co.*, 467 U.S. 986 (1984); *New Jersey State Chamber of Commerce v. Hughey*, 774 F.2d 587 (3d Cir. 1985); *Chevron Chem. Co. v. Costle*, 641 F.2d 104 (3d Cir.), cert. denied, 452 U.S. 961 (1981).

60. 249 U.S. 427 (1919).

61. *Id.* at 431. The Court explained that "it is too plain for argument that a manufacturer or vendor has no constitutional right to sell goods without giving to the purchaser fair information of what it is that is being sold." *Id.* at 431. See also *National Fertilizer Ass'n v. Bradley*, 301 U.S. 178 (1937) (upholding a South Carolina statute requiring labelling of fertilizer bags).

62. 467 U.S. 986 (1984).

63. *Id.* at 1003-04.

64. *Id.* at 990-97.

In 1978, Congress once again amended FIFRA. This 1978 amendment created a ten year exclusive use period for the original submitter. The act also included a provision that provided for disclosure of all health, safety, and environmental data to qualified requestors, notwithstanding the prohibition against disclosure of trade secrets. The act, however, did not authorize disclosure of information that would reveal "manufacturing or quality control processes" or certain other details.⁶⁵

Monsanto applied for a license for a pesticide it had developed. The company had incurred costs in excess of \$23.6 million in developing the health, safety, and environmental data submitted under FIFRA requirements.⁶⁶ Much of this data submitted contained trade secrets. When the EPA began to disclose the secret information submitted by Monsanto, as allowed under the 1978 version of FIFRA, Monsanto sued, alleging a taking of property without just compensation.

The Supreme Court unanimously held that "to the extent that Monsanto has an interest in its health, safety, and environmental data cognizable as a trade-secret property right under Missouri law, that property right is protected by the Taking[s] Clause of the Fifth Amendment."⁶⁷

In its analysis, the Court looked at three separate time periods: before 1972, between 1972 and 1978, and after 1978. There was no taking for data submitted prior to 1972 (when there was no provision for keeping secret) or after 1978 (when the statute provided that data would be publicly disclosed).⁶⁸ On the other hand, there was a taking for data submitted between 1972 and 1978 when data submitted was designated as trade secret data and the statute prohibited public disclosure of trade secret information.⁶⁹

In reaching this conclusion, the Court set out the framework for determining if a compensable taking has occurred. First, it must be determined whether the allegedly aggrieved party had a recognized property interest.⁷⁰ The next inquiry is to determine whether there has been a taking.⁷¹ If there has been a taking, the next question is whether the taking was for a public use.⁷² Finally, the determination must be made whether the statute provides for just compensation.⁷³ In the following sections, this comment will review each of these issues.

65. *Id.* at 996.

66. Monsanto claimed that its development of trade secrets required a massive commitment of resources and energy costing the company \$70 million in 1981 alone. Brief for Appellee at 21, *Ruckelshaus v. Monsanto Co.*, 467 U.S. 986 (1984) (No. 83-196).

67. *Monsanto*, 467 U.S. at 1003-04.

68. *Id.* at 1013.

69. *Id.* at 1013.

70. *Id.* at 1000.

71. *Id.*

72. *Monsanto*, 467 U.S. at 1001.

73. *Id.*

III. PROPERTY INTERESTS PROTECTED BY THE TAKINGS CLAUSE

In a case that predates *Monsanto*, the Court of Appeals for the Third Circuit was faced with determining whether the provisions of FIFRA constituted a taking that required compensation.⁷⁴ Chevron Chemical developed two pesticides for which they obtained patents. However, before being able to sell these chemicals, the company was required to provide test data in order to obtain licensure from the EPA. Chevron expended over one million dollars in compiling this data, an amount greater than the actual development costs. Because of the great investment, Chevron took steps to treat the test data as trade secrets.

Prior to 1972 the EPA was using this test data, without disclosure, in the approval of applications, called "me-too" applications, of the same or similar chemicals by other companies. However, the 1972 version of FIFRA prohibited the EPA from using any data designated as a trade secret in the application of another. Chevron sued the administrator of the EPA claiming that the use of Chevron's test data before 1972 constituted a taking without just compensation.

The court of appeals rejected Chevron's claim because the company did not have a protectable property interest.⁷⁵ In determining whether federal due process requirements apply, there must be an entitlement created by law.⁷⁶ The court could find neither a federal nor a state law which created a property right and therefore ended the analysis at that point.⁷⁷ The court, in dicta, went on to hypothesize whether any state law could have protected the confidentiality of the data submitted voluntarily.⁷⁸ The court doubted this protection would have survived Supremacy Clause scrutiny.⁷⁹ They never reached this issue, however, because no such state law was found.

The Supreme Court in *Monsanto* made clear that the court of appeals analysis in dicta was not the deciding factor.⁸⁰ If state law creates a property interest, then this interest is protected by the Takings Clause of the Fifth Amendment.⁸¹ Therefore the first hurdle is to find a property right.

74. *Chevron Chem. Co. v. Costle*, 641 F.2d 104 (3d Cir.), *cert. denied*, 452 U.S. 961 (1981).

75. *Id.* at 117.

76. *Id.* at 114.

77. *Id.* at 115.

78. *Id.* at 116.

79. *Chevron*, 641 F.2d at 116 (referring to the Supremacy Clause which states "[t]his Constitution, and the Laws of the United States which shall be made in Pursuance thereof . . . shall be the supreme Law of the Land" U.S. CONST. art VI.).

80. *Monsanto*, 467 U.S. at 1003.

81. *Id.*

A. TRADE SECRETS

A property right must be found in an existing law, other than the Takings Clause of the Constitution.⁸² Trade secret protection may arise from two sources: state law or federal statute.⁸³ Many states recognize trade secrets as property because of their similarity to other forms of tangible property.⁸⁴ But just what is a trade secret and when does the property interest in it vest for the purpose of finding a Fifth Amendment taking?

Several different definitions of trade secrets are used by the states. The two most commonly used definitions are derived from the original *Restatement of Torts* and the Uniform Trade Secrets Act. The original *Restatement of Torts* defines a trade secret as "any formula, pattern, device or compilation of information which is used in one's business, and that gives one an opportunity to obtain an advantage over competitors who do not know or use it."⁸⁵ The *Restatement* notes that an exact definition of a trade secret is not possible but does list several factors to consider in determining whether given information is a trade secret.⁸⁶

A trade secret may be a formula for a chemical compound, a process of manufacturing, treating or preserving materials, a pattern for a machine or other device, or a list of customers.⁸⁷ In addition, confidential business information is property.⁸⁸ Specific business information that have been

82. *Board of Regents v. Roth*, 408 U.S. 564, 577 (1972) ("[P]roperty interests . . . are not created by the Constitution. Rather, they are created and their dimensions are defined by existing rules or understandings that stem from an independent source."). See also *Webb's Fabulous Pharmacies, Inc. v. Beckwith*, 449 U.S. 155, 161 (1980).

83. *United Steelworkers of Am., AFL-CIO-CLC v. Aucter*, 763 F.2d 728, 739 (3d Cir. 1985), *aff'd on other grounds*, *Dole v. United Steelworkers of Am.*, 494 U.S. 26 (1990). In unusual cases, property rights can also arise because certain items have traditionally been treated as property. See *Nixon v. United States*, 978 F.2d 1269, 1269-70 (1992) (holding that Former President Nixon has a property interest in his presidential papers, which he claims include trade secrets, because every president before and after Nixon treated presidential papers as private property).

84. 1 MILGRIM, *TRADE SECRETS* § 1.01(2) (1994).

85. *RESTATEMENT OF TORTS* § 757, cmt. b (1939).

86. *Id.* The factors are:

- (1) the extent to which the information is known outside of his business;
- (2) the extent to which it is known by employees and others involved in his business;
- (3) the extent of measures taken by him to guard the secrecy of the information;
- (4) the value of the information to him and to his competitors;
- (5) the amount of effort or money expended by him in developing the information;
- (6) the ease or difficulty with which the information could be properly acquired or duplicated by others.

Id.

87. *Id.* More recently, the Department of Justice told Congress that "formulae, designs, drawings, research data, etc., which although set forth on pieces of paper, are significant not as records but as items of valuable property." United States Department of Justice, Attorney General's Memorandum on the Public Information Section of the Administrative Procedure Act 34 (1967), quoted in Brief for Appellee at 20, *Ruckelshaus v. Monsanto Co.*, 467 U.S. 986 (1984) (No. 83-196).

88. *Carpenter v. United States*, 484 U.S. 19, 26 (1987); *Formax, Inc. v. Hostert*, 841 F.2d 388, 390 (Fed. Cir. 1988). But some states leave business information out of their criminal statutes. For example, a Michigan statute defines a trade secret as "the whole or any portion or phase of scientific or technical information, design, process, procedure, formula or improvement which is secret and of value." *MICH. COMP. LAWS* § 752.771.1(3)

considered trade secrets include: procedures, lists of suppliers, lists of customers, and business codes.⁸⁹ A trade secret may or may not be patentable.⁹⁰

Under the *Restatement* definition, in order to be considered a trade secret, the information cannot be general knowledge; that is, it must be secret.⁹¹ The element of secrecy is required before the information can be considered a trade secret and must be maintained in secrecy in order for the information to remain a trade secret.⁹² If the owner discloses his or her trade secret publicly or to a person who has no obligation to maintain confidentiality, then the property right is extinguished.⁹³

The *Restatement* definition of trade secrets is followed in a number of states.⁹⁴ Yet other states follow the Uniform Trade Secrets Act.⁹⁵ The Uniform Trade Secrets Act was developed to codify the basic principles of common law trade secret protection while preserving its essential distinction from patent law.⁹⁶

As is clear from the second requirement, the Uniform Trade Secrets Act, like the *Restatement*, requires the owner to maintain secrecy. The Act also requires that the secret "not [be] readily ascertainable by proper means."⁹⁷ Proper means of discovery include, but are not limited to, in-

(1992). See also N.H. REV. STAT. ANN. § 637.2 (1993) (defining trade secret as "scientific or technical information . . . which the owner thereof intends to be available only to persons selected by him"); TEX. PENAL CODE § 31.05(4) (West 1989) (limiting trade secrets to "scientific or technical information, design, process, procedure, formula or improvement" in the criminal context).

89. FLA. STAT. § 812.081(1)(c) (1992).

90. RESTATEMENT OF TORTS § 757, cmt. b (1939); See *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 474 (1974) (establishing that neither the Patent Clause of the U.S. Constitution nor federal patent statutes preempt state trade secret protection for patentable information).

91. *Id.* at 474-75.

92. *American Precision Vibrator Co. v. National Air Vibrator Co.*, 764 S.W.2d 274, 276 (Tex. App.—Houston [1st Dist.] 1988), *aff'd*, 771 S.W.2d 562 (Tex. 1989).

93. *Monsanto*, 467 U.S. at 1002.

94. See, e.g., *American Precision Vibrator Co. v. National Air Vibrator Co.*, 764 S.W.2d 274, 276 (Tex. App.—Houston [1st Dist.] 1988) (applying the RESTATEMENT's definition of trade secret in Texas), *aff'd*, 771 S.W.2d 562 (Tex. 1989); FLA. STAT. § 812.081(1)(c) (1992) (codifying a modified version of the RESTATEMENT definition of trade secret).

95. UNIF. TRADE SECRETS ACT § 1, 14 U.L.A. 438 (1985). The Uniform Trade Secrets Act defines a trade secret as:

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.

Id. See also ARK. STAT. ANN. § 4-75-601 (1994); MINN. STAT. § 609.52 (1993); MONT. CODE ANN. § 30-14-402 (1994); S.C. ADVANCE LEG. SERVICE, Act 437, § 39-8-1(4) (1993); WIS. STAT. § 134.90 (1991-1992).

96. UNIF. TRADE SECRETS ACT, Prefatory Note of National Conference of Commissioners on Uniform State Laws, 14 U.L.A. 434 (1985).

97. *Id.*

dependent discovery, discovery through reverse engineering, discovery under a license from the trade secret owner, discovery through observation in public, or discovery from published literature.⁹⁸ Proper means are contrasted with improper means which include "theft, bribery, misrepresentation, breach or inducement of a breach of a duty to maintain secrecy, or espionage through electronic or other means."⁹⁹

In the official comments to the Uniform Trade Secrets Act, the Commissioner noted another difference between the Act and the *Restatement*.¹⁰⁰ The *Restatement* required that a trade secret be "continuously used in one's business."¹⁰¹ The Uniform Trade Secrets Act broadens the definition by omitting this requirement.¹⁰² In fact, the comments specifically include information which obtains value from a negative viewpoint.¹⁰³ For example, the results of lengthy and expensive research which prove that a certain process will not work could be of great value to a competitor.¹⁰⁴

As can be seen, states have varying views on the issue of what constitutes a trade secret. As a result, deciding whether intellectual property is a trade secret depends upon which state law is being used. In the context of takings, the important question is not only whether the information is a trade secret but also whether the trade secret is property which rises to a high enough level to be protected from government seizure by the Fifth Amendment.

B. FINDING A PROTECTABLE PROPERTY RIGHT IN TRADE SECRET

In *Monsanto* the Supreme Court announced that the owner of a trade secret could have a property right which is protected by the Takings Clause of the Fifth Amendment.¹⁰⁵ A review of the next three cases will reveal some insight as to how this rule has been applied.

In *United Steelworkers of America, AFL-CIO-CLC v. Aucther*,¹⁰⁶ a labor union sued the Environmental Protection Agency (EPA) challenging the government's decision not to require disclosure of the chemical com-

98. UNIF. TRADE SECRETS ACT § 1 cmt., 14 U.L.A. 438 (1985).

99. UNIF. TRADE SECRETS ACT § 1 cmt., 14 U.L.A. 439 (1985). In fact, by 1974 over 20 states had enacted criminal statutes prohibiting the misappropriation of trade secrets. See *Stamicarbon, N.V. v. American Cyanamid Co.*, 506 F.2d 532, 540 n.11 (2d Cir. 1974) (listing statutes).

100. UNIF. TRADE SECRETS ACT § 1 cmt., 14 U.L.A. 439 (1985).

101. RESTATEMENT OF TORTS § 757, cmt. b (1939).

102. UNIF. TRADE SECRETS ACT § VI cmt., 14 U.L.A. 439 (1985). S.C. ADVANCE LEG. SERVICE, Act 437, § 39-8-1, Comm'r Comment (1992).

103. *Id.*

104. *Id.*

105. *Monsanto*, 467 U.S. at 1003-04.

106. 763 F.2d 728 (3d Cir. 1985), *aff'd on other grounds*, *Dole v. United Steelworkers of Am.*, 494 U.S. 26 (1990). See also *United Steelworkers of Am., AFL-CIO-CLC v. Pendergrass*, 819 F.2d 1263 (3d Cir. 1987); *United Steelworkers of Am., AFL-CIO-CLC v. Pendergrass*, 855 F.2d 108 (3d Cir. 1988) (intervening cases).

pounds to which workers were exposed.¹⁰⁷ The government determined it could not require disclosure of certain information without compensating the business.¹⁰⁸

The Occupational Safety and Health Act (OSHA)¹⁰⁹ requires disclosure of hazardous chemicals to employees.¹¹⁰ The rule includes an exception for chemicals claimed as trade secrets.¹¹¹ For these chemicals, the company must disclose hazardous properties and suggest appropriate precautions. In addition, in case of emergency, the company must identify the chemicals to medical personnel but can require a confidentiality agreement in return. The manufacturer is not required to disclose the precise formula but must only identify the chemicals in the compound.

The issue turned on the definition of a trade secret.¹¹² The EPA's definition of trade secret was much broader than the *Restatement* definition because the EPA's definition also included information which was determinable by reverse engineering.¹¹³ The EPA justified this broader definition by pointing out that many products can only be reverse engineered with the use of sophisticated analytical techniques.¹¹⁴ Because competitors often do not, in fact, use the information, it remains a trade secret.¹¹⁵

The court disagreed with the EPA's analysis claiming there was no legal justification for affording broader trade secret protection than state law affords.¹¹⁶ The *Restatement's* definition was broader than the definition used within many other regulatory schemes, and the EPA's definition here was broader still.¹¹⁷ In fact, the court noted that the Fifth Amendment did not require any protection since the companies were receiving a license in exchange for disclosure.¹¹⁸ As a result, the court instructed the

107. Interestingly, this cases arises in a somewhat different context than many of the other cases in this area. While both the trade secret owner and the government agree that disclosure of the secret would effect a taking, a third party has brought suit to require disclosure. A similar situation also arose in *Tri-Bio Lab., Inc. v. United States*, 836 F.2d 135 (3d Cir. 1987), *cert. denied*, 488 U.S. 818 (1988).

108. See *Tri-Bio*, 763 F.2d at 739.

109. 29 U.S.C. §§ 651-678 (1988).

110. "Any standard . . . shall prescribe the use of labels or other appropriate forms of warning as are necessary to insure that employees are apprised of all hazards to which they are exposed, relevant symptoms and appropriate emergency treatment, and proper conditions and precautions of safe use or exposure." 29 U.S.C. § 655(b)(7) (1982).

111. See 29 C.F.R. § 1910.1200(i) (1984).

112. The EPA defined a trade secret as:

[A]ny confidential formula, pattern, process, devise, information or compilation of information (including chemical name or other unique chemical identifier) that is used in an employer's business, and that gives the employer an opportunity to obtain an advantage over competitors who do not know or use it.

United Steelworkers, 763 F.2d at 740 (quoting 29 C.F.R. § 1910.1200(c) (1984)). Compare § 1910.1200(c) with the *RESTATEMENT* definition *infra* note 64.

113. *United Steelworkers*, 763 F.2d at 740.

114. *Id.* at 741.

115. *Id.*

116. *Id.*

117. *Id.*

118. *Tri-Bio*, 763 F.2d at 741; see *infra* part III.C for a discussion of when a taking has occurred in these situations.

EPA to reconsider a definition of trade secret that does not include chemicals that can be determined by reverse engineering.¹¹⁹

Another case which demonstrates the approach taken in determining whether a property right exists is *Lariscey v. United States*.¹²⁰ *Lariscey* presents an interesting set of facts. A prisoner was employed by the government as a laborer in a Texas prison manufacturing facility. On his own time and in his cell, he developed a device for cutting helmet material which worked better than the many other devices that had been tried. After developing the superior device, Lariscey requested a patent attorney but was refused. Not only could he not patent his invention, but he was forced to demonstrate his device. After the government decided to use the cutting device, Lariscey sued complaining of a Fourteenth Amendment taking.

The Claims Court found that no trade secret property right existed because Lariscey did not maintain a confidential relationship with the prison.¹²¹ The lower court stressed that the prisoner was not negotiating to license his invention.¹²² In fact, the prison superintendent had told Lariscey that he no longer owned the invention.¹²³

The Court of Appeals for the Federal Circuit reversed the Claims Court holding.¹²⁴ The court first noted that trade secrets are derived from the common law¹²⁵ and Texas uses the *Restatement* rule for trade secrets.¹²⁶ Using the *Restatement* test, Lariscey did have a property right.¹²⁷ The device was maintained in secrecy as best he could.¹²⁸ In fact, a prison would appear to be ideally adapted for the maintenance of secrecy against competitors.¹²⁹ The court further held that the forced demonstration was not a release of a property right.¹³⁰ First, the prisoner had limited choice.¹³¹ Second, Lariscey did not automatically lose his

119. *Id.* at 741-42. As an interesting aside, the court noted that the EPA originally proposed a regulation where chemical identity information must be disclosed, but "[w]hen representatives of the chemical industry commented on the importance of trade secrets to the economic health of that industry, the Secretary adopted an entirely new approach." *Id.* at 740 (citation omitted). One must wonder if, in reaching its final determination, the court did not feel an obligation to protect the public from outside political influences.

120. 949 F.2d 1137 (Fed. Cir. 1991), *reh'g granted*, 962 F.2d 1047, *aff'd by equally divided court*, 981 F.2d 1244 (Fed. Cir. 1992), *cert. denied*, 113 S. Ct. 2297 (1993).

121. *Lariscey v. United States*, 20 Cl. Ct. 385, 390 (1990), *rev'd*, 949 U.S. 1137 (Fed. Cir. 1991), *aff'd by equally divided court*, 981 F.2d 1047 (Fed. Cir. 1992), *cert. denied*, 113 S. Ct. 2297 (1993).

122. *Id.* at 389.

123. *Id.* at 390.

124. *Lariscey*, 949 F.2d at 1143.

125. *Id.* at 1141.

126. *Id.* See *American Precision Vibrator Co. v. National Air Vibrator Co.*, 764 S.W.2d 274, 276 (Tex. App.—Houston [1st Dist.] 1988, n.w.h.) (applying the RESTATEMENT's definition of trade secret in Texas).

127. *Lariscey*, 949 F.2d at 1143.

128. *Id.* at 1142.

129. *Id.*

130. *Id.*

131. *Id.*

property right since he made his intention to maintain secrecy known.¹³² The government knew the prisoner had built this device and deemed it to be his own.¹³³ In weighing all these factors, the appeals court determined that Lariscey had a protectable property right and the government must compensate him if they wished to acquire this property.¹³⁴

The Colorado case of *City of Northglenn v. Grynberg*¹³⁵ provides another interesting application of the Taking Doctrine. In 1978, the City of Northglenn began choosing sights for a new water reservoir project. The surface estate of the land chosen was owned by a third party while, unbeknownst to the city, Grynberg owned the mineral rights.¹³⁶ Before learning of Grynberg's interest and with the permission of the surface owner, the city drilled into the land to learn, among other things, whether there were any valuable coal reserves below. A publicly accessible report was later prepared indicating that no economically feasible coal was available. When Grynberg learned of the city's activity on the land, he sued on a number of counts. Among them, Grynberg claimed that the city effected a taking of his property by publicly disclosing the results of the drilling tests.

The court indicated that "[a]n owner of mineral rights has a property interest in the proprietary information which can be gathered by way of geophysical exploration of his or her land."¹³⁷ Much of the value of an unexplored coal lease is that information regarding the coal is unknown.¹³⁸ However, the owner must have exclusive access to the information for it to have value; in other words, the information must be secret.¹³⁹

Although the court agreed that the subsurface information could be a trade secret that would effect a taking, they reached the conclusion that in this case the information disclosed in the report was not sufficiently exclusive to be a valid property interest.¹⁴⁰ The court went on to conclude that the mere publication of a report that a leaseholder's leased property does not have commercially exploitable coal reserves is not, by itself, a

132. *Lariscey*, 949 F.2d at 1142

133. *Id.*

134. *Id.* at 1143.

135. 846 P.2d 175 (Colo.), *cert. denied*, 114 S. Ct. 63 (1993) [hereinafter *Grynberg II*]. The facts of this case are given in the prior case of *Grynberg v. City of Northglenn*, 739 P.2d 230 (Colo. 1987) [hereinafter *Grynberg I*].

136. The city had searched the title but did not learn of Grynberg because he had failed to record his leasehold.

137. *Grynberg II*, 846 P.2d at 182.

138. *Id.* "An owner, who may not have the wherewithal to mine or explore for minerals, may be able to make a substantial profit by selling an option to mine the minerals to someone who does possess the resources to explore or mine the minerals." *Id.*

139. *Id.*

140. *Id.* at 184. The court noted that "[w]hile we do not decide here whether geophysical information in general may or may not be a 'trade secret,' the amount of information publicly available regarding the coal reserves . . . clearly shows that Grynberg's access to the information was not sufficiently exclusive to qualify as a trade secret . . ." *Grynberg II*, 846 P.2d at 184 n.17.

taking of property.¹⁴¹ The only claim the leaseholder may have is in tort, and then only if the report is not accurate.¹⁴²

IV. GOVERNMENT TAKING OF TRADE SECRET PROPERTY

A trade secret retains its value only so long as it remains a secret. As such, the economic value of the property right in a trade secret lies in the competitive advantage that the secret provides.¹⁴³ Once the secret is disclosed, all competitive advantage is gone and with it goes all economic value. In other words, once the trade secret is disclosed to others, the holder of the trade secret has lost her property interest.¹⁴⁴

The right to exclude others is one of the valuable characteristics of property.¹⁴⁵ This right is inherent in the definition of trade secrets since an owner will lose all property rights if he does not exclude his competitors, i.e., does not keep his information secret. In this same vein, if the government uses one person's trade secret information for the benefit of another, then that person will have suffered an economic loss, even if the specific contents of the trade secret have not been disclosed.¹⁴⁶

Accordingly, a taking may occur when the government discloses a trade secret or uses it for the benefit of another. But the Fifth Amendment's taking doctrine is based in equity and, as a result, there is no set formula to determine when a taking has occurred.¹⁴⁷ In real property cases, a two part test has been used to determine when a taking has occurred.¹⁴⁸ The Court will look to whether the government action fails to advance a legitimate government interest or whether the government action effectively deprives the aggrieved of all economic value.¹⁴⁹ The Court also often looks to whether the action interferes with investment backed expectations.¹⁵⁰

A. CHARACTER OF GOVERNMENT ACTION

The Wisconsin Supreme Court faced the issue of whether a statute requiring the disclosure of mineral exploration data effected a taking of

141. *Id.* at 184. The court cited *Lipson v. State Dep't of Highways*, 588 P.2d 390, 391-92 (Colo. Ct. App. 1978), for the proposition that "the mere announcement of impending condemnations, coupled as it may well be with substantial delay and damage, does not, in the absence of the acts which may be translated into an exercise of dominion and control by the condemning authority, constitute a taking so as to warrant awarding compensation." *Grynberg II*, 846 P.2d at 184.

142. *Id.*

143. *Ruckelshaus v. Monsanto*, 467 U.S. 986, 1012 (1984).

144. *Id.* at 1011.

145. *Kaiser Aetna v. United States*, 444 U.S. 164, 176 (1979) (stating that the right to exclude is "one of the most essential sticks in the bundle of rights that are commonly characterized as property").

146. *Monsanto*, 467 U.S. at 1012.

147. *Pennsylvania Cent. Transp. Co. v. New York City*, 438 U.S. 104, 123 (1978).

148. *Agins v. City of Tiburon*, 447 U.S. 255, 260 (1980).

149. *Id.*

150. *Pennsylvania Cent. Transp. Co.*, 438 U.S. at 123; *Monsanto*, 467 U.S. at 1005.

trade secrets.¹⁵¹ In 1977, the Wisconsin legislature enacted a statute which required explorers to disclose certain geographic data acquired while exploring for minerals. This data would be publicly disclosed three years after submission. Noranda, a mineral exploration business, invested almost four million dollars over a seven year period to acquire data relating to subsurface conditions. The company then sued to enjoin the state from requiring the data and to declare the statute unconstitutional.

The court analyzed the situation under the Fifth Amendment of the U.S. Constitution and also under the Wisconsin Constitution.¹⁵² After determining that Noranda had a protectable property interest in the exploration data,¹⁵³ the court looked to whether the statute was a legitimate exercise of police power.¹⁵⁴ The test was to find the purpose of the statute and then determine whether this purpose was advanced.¹⁵⁵ The court determined that the disclosure of confidential information bore no reasonable relationship to the goals of the statute and therefore the disclosure comprised an unconstitutional taking.¹⁵⁶

The line of reasoning utilized by the Wisconsin Supreme Court is consistent with U.S. Supreme Court decisions. In land taking cases, the government must show a substantial nexus between the taking and a legitimate state interest.¹⁵⁷ The government requirement must be roughly proportional to a legitimate purpose.¹⁵⁸ The regulating body "must make some sort of individualized determination that the required dedication is related both in nature and extent to the proposed development's impact."¹⁵⁹ If the land taking is total, the owner will almost certainly be entitled to compensation.¹⁶⁰ By analogy, one can predict a similar analysis would be taken with respect to intellectual property.

151. *Noranda Exploration, Inc. v. Ostrom*, 335 N.W.2d 596 (Wis. 1983).

152. *Id.* at 601. The Wisconsin Constitution states that "[t]he property of no person shall be taken for public use without just compensation therefor." *Id.* (quoting Wis. CONST. art. I, § 13).

153. *Noranda*, 335 N.W.2d at 603. The state-recognized property right was found in the statute which provided for the disclosure. One of the goals of the statute was in "protecting proprietary rights in such information." *Id.* (quoting Wis. STAT. § 107.15 (1977)).

154. *Id.* at 604.

155. *Id.* The purpose of the legislation was "to further the public interest in informed decision-making by appropriate state agencies . . . and at the same time protecting proprietary rights in such information." *Id.* (quoting Wis. STAT. § 107.15(1) (1977)).

156. *Id.* at 604-05. The court put weight in the fact that "the instant case involves the state's acquisition of a private citizen's property, and the distribution of that property (after the period of confidentiality ends) to other private citizens for their benefit." *Id.* at 605. It should be noted that *Noranda* was decided a year before the Supreme Court ruling in *Ruckelshaus v. Monsanto*. Although the ruling in *Noranda* is not inconsistent with *Monsanto*, it is possible that a court reviewing the same issue today would find that *Noranda* did not have a reasonable, investment-backed expectation of protection of, at least, the data collected after the statute was enacted in 1977. See *infra* part B. Of course, if the court relied on the Wisconsin Constitution, the *Monsanto* decision would be non-binding.

157. *Nollan v. California Coastal Comm'n*, 483 U.S. 825, 837 (1987).

158. *Dolan v. City of Tigard*, 114 S. Ct. 2309, 2319 (1994).

159. *Id.* at 2319-20.

160. *Lucas v. South Carolina Coastal Comm'n*, 112 S. Ct. 2886, 2894 (1992).

On the other hand, if the government acts to protect trade secrets, then a taking has not occurred.¹⁶¹ Although *International Funding Institute* was reviewed primarily as a First Amendment case, it does provide an interesting insight into how the government can act to protect the intellectual property of those affected by regulation.

The Federal Election Campaign Act¹⁶² required political committees to publicly disclose all contributors who donate more than \$200 in a calendar year.¹⁶³ These lists, however, could not be sold or used by others.¹⁶⁴ This prohibition was protected by allowing submitters to include ten pseudonyms that could be used to track violations.¹⁶⁵ By prohibiting others from using the submitted lists and employing a mechanism to find violations, the government protected the submitter's interest even though the list could no longer be considered a trade secret because it was no longer secret.¹⁶⁶ This government action was sufficient to avoid a taking under the Fifth Amendment.¹⁶⁷

B. INTERFERENCE WITH REASONABLE INVESTMENT-BACKED EXPECTATIONS

For there to be a taking, there must be a "reasonable investment backed expectation."¹⁶⁸ In other words, there must be more than a "unilateral expectation or an abstract need."¹⁶⁹ A trade secret is not protected by the Fifth Amendment if the owner voluntarily disclosed it in exchange for a registration and he had notice at the time of disclosure that the government was authorized to use all the data submitted.¹⁷⁰

Unfortunately for trade secret owners who cannot market their products without government licensing, this requirement, for all practical purposes, eliminates any trade secret protection for information which the government feels a need to disclose. As long as the owner is aware that the information may be disclosed and the disclosure is rationally related to a legitimate government interest, a submission under these conditions

161. See *Federal Election Comm'n v. International Funding Inst.*, 969 F.2d 1110 (D.C. Cir.) (en banc), cert. denied, 113 S. Ct. 605 (1992).

162. 2 U.S.C. § 438(a)(4) (1988).

163. *Id.*

164. *Id.*

165. *Id.*

166. See 2 U.S.C. § 438(a)(4) (1988).

167. *Federal Election Comm'n*, 969 F.2d at 1121 (Randolph, J., concurring) (noting that "[i]f the government forced political committees to disclose their lists to the public without imposing any restrictions on how the lists might be used, this might constitute a taking under the Fifth Amendment").

168. *Ruckelshaus v. Monsanto Co.*, 467 U.S. 986, 1005 (1984). For a criticism of the Court's expectation based analysis, see Richard A. Epstein, *Lucas v. South Carolina Coastal Council: A Tangled Web of Expectations*, 45 STAN. L. REV. 1369 (1993).

169. *Monsanto*, 467 U.S. at 1005-06 (quoting *Webb's Fabulous Pharmacies, Inc. v. Beckwith*, 449 U.S. 155, 161 (1980)).

170. *United Steelworkers of Am. v. Auchter*, 763 F.2d 728, 741 (1985), *aff'd on other grounds*, *Dole v. United Steelworkers of Am.*, 494 U.S. 26 (1990).

does not constitute a taking.¹⁷¹ As the Court in *Monsanto* stated, a voluntary submission of a trade secret to the government in exchange for economic advantages "can hardly be called a taking."¹⁷²

Therefore, the determination of whether a trade secret owner has a reasonable investment-backed expectation of maintaining his secret turns on whether the owner is on notice his trade secret may be disclosed. This question can usually be answered by reviewing the legislation under which the information was obtained by the government to see if the submitter was forewarned of possible disclosure. In general, there are three possibilities: (1) the legislation prohibits disclosure, (2) the legislation provides for disclosure, or (3) the legislation is silent on whether there will be disclosure. The next three sub-sections will review each of these possibilities.

1. *Legislation Prohibits Disclosure of Trade Secret Information*

The easiest case for a trade secret owner to prove he had an expectation that his trade secret would not be disclosed is when the legislation specifically states that the trade secret will not be disclosed.

In *Monsanto*, a unanimous Supreme Court found that Monsanto had an investment-backed expectation that the trade secret information submitted between 1972 and 1978 would not be disclosed.¹⁷³ During this time, the statute gave Monsanto explicit assurance that the EPA was prohibited from publicly disclosing any data submission determined to be a trade secret.¹⁷⁴ This explicit governmental guarantee formed the basis of a reasonable investment-backed expectation.¹⁷⁵ Therefore, any disclosure or use for the benefit of another of data submitted by Monsanto between 1972 and 1978 would affect a governmental taking.

2. *Legislation Allows Disclosure of Trade Secret Information*

The second situation arises when the legislation specifically allows for government disclosure of information submitted by a trade secret owner. Once again, the analysis of this situation, although seemingly unfair, is fairly straightforward. As long as the submitter is aware of the conditions under which the information is submitted and the conditions are ration-

171. *New Jersey State Chamber of Commerce v. Hughey*, 600 F. Supp. 606, 628 (D.N.J.), *aff'd in part and rev'd in part*, 774 F.2d 587 (3d Cir. 1985). The Third Circuit in an earlier case noted in dicta that "[t]he only instance in which a taking of proprietary information might occur is the involuntary use of proprietary information in a rulemaking proceeding (or perhaps as a witness in a licensing or adjudicatory proceeding) pursuant to compulsory process." *Westinghouse Elec. Corp. v. United States Nuclear Regulatory Comm'n*, 555 F.2d 82, 95 (3d Cir. 1977).

172. *Monsanto*, 467 U.S. at 1007. See also *Westinghouse Elec. Corp.*, 555 F.2d at 95 (3d Cir. 1977) (denying power company's claim of uncompensated taking of information voluntarily submitted in application for license to operate nuclear power plant).

173. *Monsanto*, 467 U.S. at 1013. See *supra* part I.A for a summary of the 1972 and 1978 FIFRA amendments.

174. *Id.* at 1011.

175. *Id.*

ally related to a legitimate government interest, a voluntary submission of data in return for an economic advantage will not be considered a taking.¹⁷⁶

For example, in *Monsanto* a unanimous Court found Monsanto did not have a reasonable investment-backed expectation that trade secrets disclosed after 1978 would not be disclosed.¹⁷⁷ The 1978 amendment to FIFRA created a ten year exclusive use period after which all data submitted could be used without the submitter's permission. Since Monsanto was on notice of this provision at the time it submitted the data, the company could not have reasonably expected that the data would be kept secret.¹⁷⁸ The Court rationalized Monsanto's loss by reminding the company that "such restrictions are the burdens we all must bear in exchange for 'the advantage of living and doing business in a civilized community.'" ¹⁷⁹

Another case in which these issues arose was *New Jersey State Chamber of Commerce v. Hughey*.¹⁸⁰ In 1984, New Jersey enacted the Worker and Community Right to Know Act.¹⁸¹ The Act required, among other things, employers to publicly disclose the use of certain hazardous substances.¹⁸² In addition, the Act contained a procedure by which employers could claim the presence of certain substances as trade secrets—not to be revealed to the public.¹⁸³ However, the Right to Know Act also addressed a category of particularly dangerous chemicals designated as special health hazard substances.¹⁸⁴ For these chemicals, no trade secret protection was available.¹⁸⁵ Companies which used this class of particularly dangerous chemicals brought suit claiming the forced disclosure of these specially designated chemicals constituted a Fifth Amendment taking.

In analyzing this situation, the court followed the Supreme Court's analysis in *Monsanto*.¹⁸⁶ In general, trade secrets are property rights under New Jersey law and therefore are protected from a taking without just compensation.¹⁸⁷ However, since the companies knew at the time of submission the information would be disclosed, they could not have had a

176. *Monsanto*, 467 U.S. at 1007. See also *United States v. Geophysical Corp.*, 732 F.2d 693 (9th Cir. 1983) (holding that disclosure requirements for applicants for permits to explore the continental shelf do not effect an unconstitutional taking).

177. *Monsanto*, 467 U.S. at 1013.

178. *Id.* at 1006.

179. *Id.* at 1007 (quoting *Andrus v. Allard*, 444 U.S. 51, 67 (1979) (quoting *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393, 422 (1922) (Brandeis, J., dissenting))).

180. 774 F.2d 587 (3d Cir. 1985). See also *Manufacturers Ass'n v. Knepper*, 801 F.2d 130 (3d Cir. 1986), cert. denied, 484 U.S. 815 (1987) (reviewing the Pennsylvania Right to Know Act).

181. N.J. STAT. ANN. § 34:5A-1 (West 1993).

182. *Id.* § 34:5A-2.

183. *Id.* § 34:5A-3, 34:5A-15.

184. *Id.* § 34:5A-5(b).

185. *Id.*

186. *New Jersey State Chamber of Commerce v. Hughey*, 600 F. Supp. 606, 623 (D.N.J.), aff'd in part rev'd in part, 774 F.2d 587 (3d Cir. 1985).

187. *Hughey*, 600 F. Supp. at 627.

reasonable expectation of protection.¹⁸⁸ Consequently, disclosure of the data was not a taking for which the state must pay compensation under the Fifth Amendment or the Fourteenth Amendment.¹⁸⁹

In *Department of Natural Resources v. Arctic Slope Regional Corp.*,¹⁹⁰ the Alaska Supreme Court faced deciding whether a state law¹⁹¹ requiring disclosure of oil well drilling information was a compensable taking. The land owner, Arctic Slope, and the lessee, Chevron, spent over \$40 million drilling the well and, in the process, gathered substantial information about the subsurface geography of the land.¹⁹² When data was due to be released under the statute, the oil companies sued to enjoin the state from disclosing the information.

The court followed the analysis from *Monsanto*.¹⁹³ First, oil well data constitute trade secrets under both the Alaska and United States Constitutions.¹⁹⁴ The court then concluded that the companies did not have a reasonable investment-backed expectation that the information would not be disclosed.¹⁹⁵ The companies were on notice that the government in fact used confidential data in its decision making.¹⁹⁶

The Alaska Supreme Court went on to hold that even if the companies did have an expectation that the information would not be disclosed, this expectation was not investment backed.¹⁹⁷ The assumption that the information would not be disclosed did not affect the company's decision on whether to invest in the oil wells.¹⁹⁸ Therefore, even if a trade secret owner expects that her secret will be held in confidence, the government is not forbidden from disclosing the secret unless the owner relied on this expectation.

188. *Id.* at 628.

189. *Id.*

190. 834 P.2d 134 (Alaska 1991).

191. ALASKA STAT. § 31.05.035 (1978).

192. This information was particularly valuable because the region had not yet been drilled and much of the land had not yet been leased. *Department of Natural Resources*, 834 P.2d at 136.

193. *Arctic Slope Regional Corp.*, 834 P.2d at 138.

194. *Id.* The Alaska Constitution provides that "private property shall not be taken or damaged for public use without just compensation." ALASKA CONST. art. I, § 18.

195. *Arctic Slope Regional Corp.*, 834 P.2d at 140.

196. *Id.* The court relied on a 1978 letter by the state attorney general as well as testimony by the Director on the Department of Natural Resources before the Senate Resources Committee to show that the companies were on notice. The court also dismissed a letter by the attorney general in 1984 that the companies argued assured them the confidential data would not be disclosed. The court found that the companies did not rely on this letter. *Id.* at 141.

197. *Id.* at 141.

198. *Id.* The court stated:

The values motivating such investment — the hope of discovering commercial deposits of oil and gas, the utility of well data to the companies for numerous purposes, and the competitive advantage the data provide vis-a-vis other bidders in future lease sales — outweigh any interest in keeping the data from [the Department of Natural Resources].

Id.

Each of these cases was decided before the Supreme Court's recent ruling in *Dolan v. Tigard*.¹⁹⁹ In *Dolan*, the Court held that a regulation which forces a property owner to relinquish a property right must be roughly proportional to a legitimate state interest.²⁰⁰ In that case, the owner of a commercial plumbing business applied for a permit to double the size of her store. The permit was denied, however, when she refused to dedicate a portion of her land for a future bicycle and pedestrian track. The Court determined that there was not a sufficient relationship between the storeowner's ability to expand her business and the possibility of the track being built in the future.²⁰¹

Following the reasoning of *Dolan*, the Alaska Supreme Court should have looked to whether the requirements of the state disclosure law were roughly proportional to the impact upon the oil companies. If this requirement was not met, the state action would constitute a compensable taking regardless of the property owner's expectations.

3. *Legislation is Silent on Disclosure of Trade Secrets*

The least predictable situation arises when a statute is silent on its face as to whether information will be held as a secret. In this situation the trade secret owner has neither been forewarned that the information submitted would be disclosed nor assured that it would not. Therefore, other circumstances surrounding the disclosure of the trade secret must be considered in determining whether a taking has been effected. The question of whether expectations of secrecy are reasonable is a heavily factual question.²⁰²

The Court in *Monsanto* took this approach when deciding whether Monsanto could reasonably expect the EPA to maintain confidentiality of data submitted prior to 1972, when the statute was silent on this issue. The Court ultimately found Monsanto did not have a reasonable expectation the information would be kept secret.²⁰³ The Court relied on a Senate subcommittee report that included a statement by a chemical association claiming that the EPA had, in fact, been using data submitted by one company in applications by another.²⁰⁴ Apparently, since the industry was aware of the EPA's use of one company's data in reviewing

199. 114 S. Ct. 2309 (1994).

200. *Id.* at 2319.

201. *Id.* at 2321.

202. *Monsanto*, 467 U.S. at 1024 (O'Connor, J., dissenting in part).

203. *Id.* at 1010.

204. *Id.* at 1009 n.14. The Court quoted a 1972 statement by the National Agricultural Chemicals Association:

Under the present law registration information submitted to the Administrator has not routinely been made available for public inspection. Such information has, however, as a matter of practice but without statutory authority, been considered by the Administrator to support the registration of the same or a similar product by another registrant.

Id. (quoting *Fed. Envtl. Pesticide Control Act: Hearings before the Subcomm. on Agric. Research and Gen. Legislation of the Senate Comm. on Agric. and Forestry*, 92d Cong., 2d Sess., pt. 2, at 245 (1972)).

another company's application, members of the industry could not claim they reasonably believed this practice would not occur.²⁰⁵

In her dissent, Justice O'Connor questioned the Court's analysis on this issue. Justice O'Connor favored remanding the issue to the district court for further factual findings concerning Monsanto's expectation regarding interagency uses of trade secret information submitted prior to 1972.²⁰⁶ Justice O'Connor cited the district court's finding that disclosure of trade secrets was neither permitted by law nor customary practice.²⁰⁷

Despite the difference in result, both the majority and dissent used the same approach to determine if a compensable taking had occurred. The circumstances surrounding the submission of the trade secret must be examined to determine if the trade secret owner reasonably expected his secret to be protected.²⁰⁸ The only relevant time to consider is the time when the trade secret is submitted.²⁰⁹ It does not matter if, at a later date, the government gave assurances that previously submitted information would not be disclosed.²¹⁰

The Court's recent ruling in *Lucas v. South Carolina Coastal Council* would not likely impact on this decision in *Monsanto*. In *Lucas*, the Court determined that total takings must be compensated.²¹¹ Monsanto's loss, on the other hand, was not a total taking—Monsanto could continue to use the test data for its own purposes.

In *Dolan v. City of Tigard*, however, the Court required that the impact of the regulation be roughly proportional to a legitimate state interest.²¹²

205. An interesting question is whether it is enough for companies to believe the EPA was using data in subsequent applications regardless of whether this belief was factually correct. It seems that a company could not reasonably expect the trade secret to be maintained in confidence if they believed, even though the belief was incorrect, it would not. The Court never addressed this hypothetical issue.

206. *Monsanto*, 467 U.S. at 1021 (O'Connor, J., dissenting in part).

207. *Id.* The district court found that: "During the period that the USDA administered FIFRA, it was also its policy that the data developed and submitted by companies such as [Monsanto] could not be used to support the registration of another's product without permission of the data submitter." *Id.* at 1009 n.14 (quoting *Monsanto Co. v. Acting Adm'r, United States Env'tl. Protection Agency*, 564 F. Supp. 552, 564 (E.D. Mo. 1983) (emphasis in original)).

208. But an "unsolicited proposal" to the government that includes a restriction forbidding the use or disclosure of trade secret information for any purpose other than evaluating the proposal is not sufficient to create a reasonable expectation of protection. *Airborne Data, Inc. v. United States*, 702 F.2d 1350, 1359 (Fed. Cir. 1983). In *Airborne Data*, the government received an unsolicited bid from a company but, after failing to negotiate a contract, disclosed the information to a third party who was later awarded a contract. In adopting the Claims Court opinion, the Federal Circuit said, "the essential inquiry is whether the injury to that property 'rises to the magnitude of an appropriation of some interest in [the] property permanently to the use of the Government.'" *Id.* (quoting *National By-Products, Inc. v. United States*, 405 F.2d 1256 (Ct. Cl. 1969)). The court did, however, find that an implied-in-fact contract had been formed prohibiting government disclosure of Airborne's trade secret information and required further proceedings to determine damages. *Airborne Data*, 702 F.2d at 1361.

209. *Monsanto*, 467 U.S. at 1013 n.17.

210. *Id.*

211. 112 S. Ct. at 2895.

212. 114 S. Ct. at 2319.

In *Monsanto*, on the other hand, the Court did not focus on this factor, although it is unquestionable that the government could have shown a legitimate state interest. It is less clear, however, whether the Court would still have found the necessary nexus between state interest and property owner's loss.

In a 1987 case, the Third Circuit had to determine whether the Food and Drug Administration (FDA) was correct in finding that they did not have the authority to use the test information from one drug company in the application of a generic drug by another company.²¹³ In *Tri-Bio Laboratories*, a third party drug manufacturer, Schering Corp., developed a drug under the brand name of "Garasol." Schering obtained a patent on its development in 1963. The drug was approved by the FDA in 1978, and two years later, in 1980, the patent expired. Tri-Bio Laboratories then applied for FDA approval of a generic version of Schering's drug. To meet the testing requirement, Tri-Bio referred to Schering's previous test data. The FDA, however, refused to consider the test data because it considered Schering's data to be proprietary information and determined that the use of the pioneer company's data in an application of another company would constitute a taking.

The court agreed with the FDA and found that the statute did not permit the FDA's use of the pioneer drug manufacturer's data in the processing of a generic manufacturer's new drug application.²¹⁴ To reach this conclusion, the court analyzed the statute to determine if the pioneer manufacturer had an investment-backed expectation that the test data would not be disseminated.²¹⁵ First, the court did not find anything in the Act evidencing any intent to have the government compensate the pioneer registrant for the use of its data to review a generic application.²¹⁶ Because the statute did not provide for the subsequent use of the test data, the court looked at other circumstances surrounding the application. The deciding factor was a regulation that memorialized FDA policy and prohibited the use of information without the consent of the submitter.²¹⁷ As a result, any use of the data would constitute a taking by the government and compensation would be required.

Other legislation may also affect a trade secret owner's expectation of protection. The Trade Secrets Act²¹⁸ is one statute which may be useful

213. *Tri-Bio Labs., Inc. v. United States*, 836 F.2d 135 (3d Cir. 1987), *cert. denied*, 488 U.S. 818 (1988).

214. *Id.* at 141.

215. *Id.*

216. *Id.*

217. *Id.* at 141. The regulation stated that "[a]ny reference to information furnished by a person other than the applicant may not be considered unless its use is authorized in a written statement signed by the person who submitted it." 21 C.F.R. § 514.1(a) (1987) (originally codified at 21 C.F.R. § 135.4a(a)), redesignated to 21 C.F.R. § 514.1(a) by 40 Fed. Reg. 13802, 13825 (1975).

218. 18 U.S.C. § 1905 (1988). The Trade Secrets Act states:

Whoever, being an officer or employee of the United States or of any department or agency thereof, . . . publishes, divulges, discloses, or makes known in any manner or to any extent not authorized by law any information coming

in determining whether a trade secret owner had a reasonable expectation that her secret would be protected.²¹⁹ The prohibition of disclosure extends not only to individuals, but also to formal and official agency action.²²⁰ Of course, if the statute permits disclosure, then the Trade Secrets Act is inapplicable because the disclosure is, in the words of the Act, "authorized by law."

In *Monsanto*, Justice O'Connor stated that the Trade Secrets Act created at least as strong an expectation as the 1972 version of the statute that called for data submission.²²¹ The Trade Secrets Act prohibited government disclosure of trade secret information revealed during the course of official duties, while the 1972 version of FIFRA prohibited the EPA from disclosing "trade secrets or commercial or financial information."²²² Justice O'Connor failed to see the difference between the two.²²³

On the other hand, legislation exists that promotes the disclosure of information thereby diminishing a trade secret owner's expectation of protection. As a result, courts must sometimes weigh the conflicting policies. For example, the Freedom of Information Act²²⁴ is a statute allowing government disclosure of certain information. The Act also includes an exemption for trade secret information.²²⁵ At least one district court, however, has more narrowly interpreted trade secrets in determining the scope of government disclosure under the Freedom of Information Act.²²⁶ As a result, the trade secret owner may have a diffi-

to him in the course of his employment or official duties . . . [that] concerns or relates to the trade secrets, processes, operations, style of work, or apparatus . . . shall be fined not more than \$1000, or imprisoned not more than one year, or both; and shall be removed from office or employment.

Id.

219. *Monsanto*, 467 U.S. at 1008. Although the Trade Secrets Act prohibits the disclosure of trade secret information, it is a criminal statute and accordingly affords no private right of action to prevent disclosure in violation with its provisions. *Chrysler Corp. v. Brown*, 441 U.S. 281, 316 (1979).

220. *Monsanto*, 467 U.S. at 1008. See also *Chrysler Corp.*, 441 U.S. at 298-301.

221. *Monsanto*, 467 U.S. at 1022 (O'Connor, J., dissenting in part).

222. *Id.*

223. *Id.*

224. 5 U.S.C. § 552 (1988).

225. 5 U.S.C. § 552(b)(4) (1988) (exempting from disclosure "trade secrets and commercial or financial information obtained from a person and privileged or confidential"). See *Public Citizen Health Research Group v. Food and Drug Admin.*, 704 F.2d 1280, 1288 (D.C. Cir. 1983) (defining "[T]rade secret, solely for the purpose of FOIA [Freedom of Information Act] Exemption 4, as a secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort."). See generally Andrea G. Nadel, Annotation, *What Constitutes "Trade Secrets" Exempt from Disclosure under State Freedom of Information Act*, 27 A.L.R. 4th 773 (1984).

226. *Burnside-Ott Aviation Training Ctr. v. United States*, 617 F. Supp. 279, 285 (S.D. Fla. 1985). In *Burnside-Ott* the court held that if the Trade Secrets Act was broadly read to include all information relating to corporate activities, the Freedom of Information Act (FOIA) would be vitiated. *Id.* The court feared that "[n]o government agency could disclose any data whatever despite the provisions of the FOIA, for fear of violating § 1905 [the Trade Secret Act]." *Id.* See John C. Janka, Comment, *Federal Disclosure Statutes and the Fifth Amendment: The New Status of Trade Secrets*, 54 U. CHI. L. REV. 334 (1987) (concluding that *Monsanto* should be interpreted to change the way that FOIA is inter-

cult time predicting beforehand whether his information will be protected.

C. ECONOMIC IMPACT OF GOVERNMENT ACTION

In determining whether government action rises past mere regulation to become a compensable taking, courts will also consider the economic impact of the government action. According to Justice Holmes, "if regulation goes too far it will be recognized as a taking."²²⁷ In *Pennsylvania Coal Co.*, the Court found that the statute that limited coal mining in certain circumstances affected a taking because the coal company had lost all practical economic value in the mineral rights.²²⁸

Modern courts, however, seem to be much more deferential to the legislation and are not often inclined to find the economic impact so harsh as to transform the regulation into a taking. This inclination is especially true in the licensure context. In *Monsanto*, for example, the Court did not even consider the economic harm because the presence and absence of a reasonable investment-backed expectation of protection was such an overwhelming factor.²²⁹

In *New Jersey State Chamber of Commerce v. Hughey*,²³⁰ the Third Circuit found that the extreme economic impact was outweighed by the lack of any expectation that the trade secret would be protected.²³¹ The district court admitted that "[e]mployers may face the unpleasant choice of disclosing trade secrets or limiting or shutting down operations in New Jersey."²³² Even though this may be a more onerous dilemma than *Monsanto* faced, the lack of reasonable investment-backed expectation still prevailed.

V. TAKING FOR PUBLIC USE

Modern courts have been very deferential to legislative determinations of whether the taking of property has been for a public use.²³³ Although the public use rule originally provided a serious constraint on government action, so many exceptions have developed that the rule itself has been

preted by declaring that legislatively-mandated disclosure of trade secrets is a taking regardless of notice to the owner).

227. *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393, 415 (1922).

228. *Id.* at 414; see *supra* note 41 and accompanying text.

229. *Monsanto*, 467 U.S. at 1005.

230. 774 F.2d 587 (3d Cir. 1985). See *supra* note 180 and accompanying text (discussing the facts in *Hughey*).

231. *Id.* at 598.

232. 600 F. Supp. 606, 628 (1985).

233. See *Berman v. Parker*, 348 U.S. 26 (1954) (holding that the condemnation of slum properties for the purpose of reselling the land to private parties was within the police power of the government); *Hawaii Hous. Auth. v. Midkiff*, 467 U.S. 229 (1984) (holding that state law which authorized the forced sale of land to lessees was constitutional because it was rationally related to the public purpose of correcting deficiencies in the real estate market).

abandoned.²³⁴ In general, the public use limitation is met as long as the object of the taking is within the government's authority.²³⁵

In cases involving trade secrets, the Supreme Court has followed the trend of being extremely deferential. For example, in *Monsanto* the Court held that Congress is empowered with determining whether information should be publicly disclosed.²³⁶ The Court requires only the most minimal standard, that the action be rationally related to a legitimate government interest.²³⁷ This standard applies even when the direct beneficiaries of the taking are private citizens rather than the public in general.²³⁸ As a result, the public use requirement provides practically no restriction on government actions that take trade secrets.²³⁹

VI. JUST COMPENSATION FOR TRADE SECRETS THAT HAVE BEEN TAKEN

Once it has been determined that a taking of property has occurred, the only remaining question is whether the owner has been justly compensated.²⁴⁰ The Fifth Amendment does not provide trade secret owners with a mechanism to stop the government from taking the property.²⁴¹ An injunction is not available.²⁴²

234. *STONE*, *supra* note 56, at 1567; *see also* Dunham, *Griggs v. Alleghany County in Perspective: Thirty Years of Supreme Court Expropriation Law*, 1962 SUP. CT. REV. 63, 65-71; Note, *The Public Use Limitation on Eminent Domain: An Advance Requiem*, 58 YALE L.J. 599 (1949).

235. *NOWAK*, *supra* note 1, § 11.13. State governments effect a taking whenever the purpose of the action is for the benefit of the health, safety, and welfare of its citizens while the federal government may effect a taking whenever the object of the exercise bears any reasonable relationship to one of its implied or enumerated powers. *Id.*

236. *Monsanto*, 467 U.S. at 1015-16 ("[T]he optimum amount of disclosure to the public is for Congress, not the courts, to decide, and that the statute embodies Congress' judgment on that question.").

237. *Id.* at 1014 ("So long as the taking has a conceivable public character, 'the means by which it will be attained is . . . for Congress to determine.' ") (quoting *Berman*, 348 U.S. at 33).

238. *Thomas v. Union Carbide Agric. Prod. Co.*, 473 U.S. 568, 577 (1985) ("In *Monsanto*, we ruled that FIFRA's data-consideration provisions may be deemed a 'public use' even though the most direct beneficiaries of the regulatory scheme will be the later applicants.").

239. Interestingly, in *Larisey v. United States* (where a state prison manufacturing company appropriated a prison laborer's manufacturing trade secret), the Federal Circuit did not even address the public use issue. Upon finding a taking, the court remanded the case for determination of just compensation. *Larisey v. United States*, 949 F.2d 1137, 1145 (Fed. Cir. 1991). It is hard to imagine how the taking of Mr. Larisey's trade secret could benefit the public health, safety, or welfare. By allowing the state to continue using the process, however, the court apparently found that there was a public use. *See supra* notes 121-34 and accompanying text (discussing the facts in *Larisey*).

240. *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121, 128 (1985) (reciting the principle that "so long as compensation is available for those whose property is in fact taken, the governmental action is not unconstitutional").

241. *Larisey v. United States*, 949 F.2d 1137, 1143 (Fed. Cir. 1991) ("The Fifth Amendment is designed not to limit the governmental interference with property rights per se, but rather to secure compensation in the event of otherwise proper interference amounting to a taking.").

242. *Ruckelshaus v. Monsanto Co.*, 467 U.S. 986, 1016 (1984) (stating that "[e]quitable relief is not available to enjoin an alleged taking of private property for a public use, duly

The issue then is a matter of what the trade secret owner can expect in terms of compensation. Relatively little case law has arisen on exactly what constitutes just compensation for the taking of trade secrets.²⁴³ Some insight may be gained, however, by looking to closely related topics. First, the next section will review typical remedies for misappropriation of trade secrets cases between private parties. The following section will relate these methods to government takings by reviewing the better established law related to the taking of patents.

A. REMEDIES FOR TRADE SECRET MISAPPROPRIATION

In general, when trade secrets are misappropriated, the owner can recover either the damages sustained by him or the profits gained by the wrongdoer.²⁴⁴ Since private cases of trade secret misappropriation often involve theft or other wrongdoing, principles of unjust enrichment must be considered.²⁴⁵ In eminent domain cases, on the other hand, courts look to the loss of the owner rather than to the gain by the government.²⁴⁶ Since the government has the right to obtain property by eminent domain, nobody has been unjustly enriched.²⁴⁷

Therefore, the measure of just compensation is typically measured only by the loss suffered by the trade secret owner. In the paragraphs that follow, several methods for measuring this loss will be reviewed in the context of private misappropriations. These methods include lost profit, development cost, and reasonable royalty.

The profit lost by the owner of a misappropriated trade secret is a primary component in measuring damages.²⁴⁸ For example, when the owner of a trade secret loses business because of the disclosure of her secret to competitors, she can recover the profit she would have earned had her secret not been disclosed.²⁴⁹ For example, in *Sperry Rand* the plaintiff was underbid on government contracts for radar sets after the defendants improperly used the plaintiff's secret technical information in their own

authorized by law, when a suit for compensation can be brought against the sovereign subsequent to the taking").

243. One reason there is so little insight may be because if the legislation includes a remedy for the disclosure of information, then it is likely a taking will not be found in the first place and, therefore, the analysis never reaches the point of determining whether the compensation is just.

244. *Sperry Rand Corp. v. A-T-O, Inc.*, 447 F.2d 1387 (4th Cir. 1971), *cert. denied*, 405 U.S. 1017, *reh'g denied*, 459 F.2d 19 (4th Cir. 1972), *cert. denied*, 409 U.S. 892 (1973). See 12A R. MILGRIM, MILGRIM ON TRADE SECRETS § 7.08[3] (1985); UNIF. TRADE SECRET ACT § 1 cmt., 14 U.L.A. 439 (1985); WIS. STAT. § 134.90(4)(a) (1991).

245. See William F. Johnson, Jr., *Remedies in Trade Secret Litigation*, 72 N.W.U. L. REV. 1004, 1014 (1978).

246. *United States v. General Motors Corp.*, 323 U.S. 373, 378 (1945).

247. See Oberdick, *supra* note 6, at 247, n.80.

248. See *Robert B. Vance & Assoc., Inc. v. Baronet Corp.*, 487 F. Supp. 790 (N.D. Ga. 1979) (indicating that lost profits were preferred measure of damages upon finding of misappropriation of customer lists); Johnson, *supra* note 245, at 1020-23 (reasoning that a monopoly has been created by the existence of a trade secret and the disclosure of that secret ends the monopoly resulting in lost business).

249. See *Sperry-Rand*, 447 F.2d at 1393-94.

bid. The court awarded Sperry Rand the amount of profit it would have earned on both this contract and another expected add-on contract.²⁵⁰

Another method to determine the just compensation for a trade secret is to pay the trade secret owner all or some of the cost it took to develop the secret. In *Kubik, Inc. v. Hull*,²⁵¹ a former employee brought a number of trade secrets to his new employer. Since a large number of products which included the secret had been marketed by the trade secret owner, other competitors could legally copy it and therefore the disclosure itself did not cause any significant harm. The court did hold, however, that things such as the amount of time, labor, and money invested in developing a trade secret could be considered when determining the appropriate damages.²⁵²

Yet another measure of the appropriate remedy for misappropriation of a trade secret is the reasonable royalty method.²⁵³ In a number of cases, the amount of the reasonable royalty is determined from previous business dealings of the parties.²⁵⁴ In other cases, however, the courts must determine the royalty by other means. For example, the court may look to the royalty rate charged to other manufacturers who have taken patent licenses.²⁵⁵

In some cases, the value of the trade secret has simply been the market value at the time of misappropriation. For example, in *Precision Plating & Metal Finishing, Inc. v. Martin-Marietta Corp.*,²⁵⁶ the Fifth Circuit affirmed a measurement of damages as the value at the time the secret was misappropriated.²⁵⁷ The court looked to the investment value of the trade secret.²⁵⁸ The investment value was defined as the amount a rea-

250. *Id.* at 1392. *Cf.* *University Computing Co. v. Lykes-Youngstown Corp.*, 504 F.2d 518 (5th Cir. 1974) (denying lost profits when the trade secret had not been disclosed and the misappropriation had no obvious effect on the owner).

251. 224 N.W.2d 80 (Mich. Ct. App. 1974).

252. *Id.* at 95. *See also* *University Computing Co. v. Lykes-Youngstown Corp.*, 504 F.2d 518 (5th Cir. 1974) (allowing jury to consider cost of developing a computer program when determining damages for misappropriation of trade secret); *Elcor Chem. Corp. v. Agri-Sul, Inc.*, 494 S.W.2d 204 (Tex. Civ. App.—Dallas, 1973 writ ref'd n.r.e.) (indicating the costs of researching and developing a secret manufacturing process were relevant to the determination of damages).

253. *See* *Oberdick, supra* note 6, at 247 (arguing that reasonable royalty is the most appropriate measure of just compensation in situations in which trade secrets have been taken by the government).

254. *See* *Vitro Corp. of America v. Hall Chem. Co.*, 292 F.2d 678 (6th Cir. 1961) (using royalty established during course of negotiation of license agreement, even though no agreement was ever entered into); *Saco-Lowell Shops v. Reynolds*, 141 F.2d 587 (4th Cir. 1944) (finding a reasonable royalty in licensing agreement parties had entered into); *Sloan v. Mud Prod., Inc.*, 114 F. Supp. 916 (D. Okla. 1953) (using royalty rate from expired licensing agreement); *E. L. Bruce Co. v. Bradley Lumber Co.*, 79 F. Supp. 176 (D. Ark. 1948) (holding that the reasonable royalty was based on amount of royalty set forth in patent license agreement canceled by defendant).

255. *Carter Prod., Inc. v. Colgate-Palmolive Co.*, 214 F. Supp. 383 (D. Md. 1963).

256. 435 F.2d 1262 (5th Cir. 1970).

257. *Id.* at 1263-64.

258. *Id.*

sonable investor would pay based upon the potential return in light of the facts and circumstances.²⁵⁹

B. COMPENSATION WHEN PATENTS ARE APPROPRIATED BY GOVERNMENT

When the Federal Government acquires someone's patent, the Fifth Amendment issues are not reached because the area is controlled by statute.²⁶⁰ Section 1498 is, in effect, an eminent domain statute entitling the government to use a patented article by paying compensation to the patent owner.²⁶¹ Therefore it will be informative to review how compensation is determined for patents "taken" by the government in order to gain insight into how trade secrets will be compensated.

First, however, it is important to note that there are several differences between patents and trade secrets.²⁶² Not all trade secrets are patentable.²⁶³ The scope of subject matter of a patent is much more narrowly limited the scope of a trade secret.²⁶⁴ In addition, patentable subject matter must be new,²⁶⁵ useful,²⁶⁶ and non-obvious.²⁶⁷ The patent owner must disclose his invention to the public rather than keep it secret.²⁶⁸ Trade secret owners, of course, must not. As a result, disclosure does not harm the patent owner. Also, patents have a limited term after which the subject matter is in the public domain and anyone can use the information.²⁶⁹ On the other hand, a trade secret can be kept indefinitely.

259. *Id.* See also *Digital Dev. Corp. v. International Memory Sys.*, 185 U.S.P.Q. 136 (S.D. Cal. 1973) (allowing recovery of "the reasonable value of the unauthorized appropriation of its ideas and design").

260. 28 U.S.C. § 1498 (1988). Section 1498(a) states:

Whenever an invention described in and covered by a patent of the United States is used or manufactured by or for the United States without license of the owner thereof or lawful right to use or manufacture the same, the owner's remedy shall be by action against the United States in the United States Court of Federal Claims for the recovery of his reasonable and entire compensation for such use and manufacture.

This statute does not apply to state governments that are immune from patent suits on grounds of the 11th Amendment. *Chew v. California*, 893 F.2d 331 (Fed. Cir.), *cert. denied*, 498 U.S. 810 (1990). The Federal Circuit has noted that patent owners could assert a takings claim against a state under the Fifth and Fourteenth Amendments. *Jacobs Wind Elec. Co. v. Florida Dept. of Trans.*, 919 F.2d 726 (Fed. Cir. 1990).

261. *Irving Air Chute Co. v. United States*, 93 F. Supp. 633, 635 (Ct. Cl. 1950) (citing U.S. Supreme Court decisions in *Crozier v. Fried Krupp*, 224 U.S. 290 (1911) and *Waite v. United States*, 282 U.S. 508 (1931)).

262. The owner of a patent is entitled to legally exclude others from making, using, or selling the patented invention for the term of the patent. 35 U.S.C. § 271(a) (1988). The owner of a trade secret, on the other hand, excludes others by not disclosing the secret.

263. See RESTATEMENT OF TORTS § 757 cmt. b (1939).

264. Compare 35 U.S.C. § 101 (1988) (limiting the subject of patents to a "process, machine, manufacture, or composition of matter" or improvements thereof) with RESTATEMENT OF TORTS § 757 cmt. b (1939) (discussed *supra* note 263 and accompanying text).

265. 35 U.S.C. § 102 (1988).

266. 35 U.S.C. § 101 (1988).

267. 35 U.S.C. § 103 (1988).

268. 35 U.S.C. § 112 (1988).

269. 35 U.S.C. § 154 (1988). A patent is enforceable for 17 years. *Id.*

But these differences aside, both patents and trade secrets are intangible property. When a person other than the property owner is entitled to use the protected information, the property owner has suffered a loss. The question here is how to put a value on that loss.

Several bases for recovery can be used to value a patent license. The court may determine a reasonable royalty.²⁷⁰ In other cases, the amount of profit lost by the patent owner may be used as the basis for recovery.²⁷¹ In a small number of cases, the savings by the government served as the basis of the compensation of the patent owner.²⁷² Lost profit, reasonable royalty, and gain received by the misappropriator are also the common ways in which private trade secret misappropriation cases are resolved.²⁷³

The reasonable royalty is the preferred measure of compensation for the government's procurement of an individual's patent rights.²⁷⁴ In the early patent case of *Egry Register Co. v. Standard Register Co.*,²⁷⁵ the Sixth Circuit developed a standard by describing the legal fiction of "what the parties would have agreed upon, if both were reasonably trying to reach agreement."²⁷⁶ To determine the reasonable royalty, the court will try to look at the actual value of what has been taken.²⁷⁷ A reasonable estimate will be used when no exact quantification is possible.²⁷⁸

VII. CONCLUSION

In the last ten years it has been repeatedly affirmed that the Constitution provides the owner of a trade secret protection from the government. In *Monsanto*, the Court affirmed that a trade secret is a property interest and therefore protected by the Fifth Amendment.²⁷⁹ This decision is a positive step in encouraging investment and scientific development.

270. *Calhoun v. United States*, 453 F.2d 1385 (Ct. Cl. 1972). See also *Amerace Esna Corp. v. United States*, 462 F.2d 1377 (Ct. Cl. 1972); *Pitcairn v. United States*, 547 F.2d 1106 (Ct. Cl. 1977).

271. *Imperial Mach. & Foundry Corp. v. United States*, 69 Ct. Cl. 667 (1930).

272. *Shearer v. United States*, 101 Ct. Cl. 196 (1942), *cert. denied*, 323 U.S. 676 (1944); *Olsson v. United States*, 25 F. Supp. 495 (1938), *cert. denied*, 307 U.S. 621 (1939).

273. See *supra* notes 244-59 and accompanying text.

274. *Decca Ltd. v. United States*, 640 F.2d 1156, 1167 (Ct. Cl. 1980); *Leesona Corp. v. United States*, 599 F.2d 958, 971 (Ct. Cl. 1979) (noting that lost profits and savings by government are factors in determining reasonable royalty).

275. 23 F.2d 438 (6th Cir. 1928).

276. *Id.* at 443. The court reasoned:

To adopt a reasonable royalty as the measure of damages is to adopt and interpret, as well as may be, the fiction that a license was to be granted at the time of beginning the infringement, and then to determine what the license price should have been. In effect, the court assumes the existence, ab initio of, and declares the equitable terms of, a suppositious license, and does this nunc protunc; it creates and applies retrospectively a compulsory license.

Id.

277. *Vitro Corp. of Am. v. Hall Chem. Co.*, 292 F.2d 678, 683 (6th Cir. 1961).

278. *University Computing Co. v. Lykes-Youngstown Corp.*, 504 F.2d 518, 537 (5th Cir. 1974).

279. *Ruckelshaus v. Monsanto Co.*, 467 U.S. 986, 1004 (1984).

Supreme Court decisions in land use regulation cases also provide encouragement for the trade secret owner. The Court has been less deferential in accepting any government justification for the taking of private property. The government now carries the burden of showing that the regulation is roughly proportional to the property owner's loss. In fact, if the loss is total, the property owner will most certainly be compensated.

But the trade secret owner must be cautioned. If the area in which the trade secret pertains is one that is regulated, the government has a great deal of authority. Justice Holmes once said "if a regulation goes too far it will be recognized as a taking."²⁸⁰ Today, at least in the area of trade secrets, Justice Holmes would have to say "if a regulation goes too far it will be recognized as a taking unless the owner was on notice of the regulation." Once the government has given notice of disclosure, the loss of trade secret information must be considered a cost of doing business.²⁸¹

It is debatable whether companies should reasonably bear this cost. Untangling the web of public policy goals is not a simple task. Regulation of potential dangers and adequate protection of American industry are each important goals. On one hand, the government attempts to promote the progress of science and the useful arts.²⁸² On the other hand, the government must protect the health, safety, and welfare of its citizens. While some argue health and safety regulations which publicly disclose testing information are needed to avoid the potentially dangerous effects of chemicals and other materials,²⁸³ companies that own trade secrets argue that regulations which disclose trade secrets provide a disincentive to the great expense required to promote technology.²⁸⁴

Regardless of who is right and who is wrong about the public policy issues, the trade secret owner must carefully consider the effect government actions will have on the property at issue. Protecting that interest may be an uphill task. First, the owner will need to prove that the property right exists in the first place by looking to state law or federal statute. The next step will be demonstrating that the government action has risen to the level of being treated as a taking. The key elements are whether the required disclosure is in response to a request from the owner and whether the owner knew of the disclosure. If the owner was on notice, the government is not required to compensate any loss. The opportunity to conduct business serves as the compensation. Even if the action was a

280. *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393, 415 (1922).

281. "Employers may face the unpleasant choice of disclosing trade secrets or limiting or shutting down operations in New Jersey." *New Jersey State Chamber of Commerce v. Hughey*, 600 F. Supp. 606, 628 (D.N.J.), *aff'd*, 774 F.2d 587 (3d Cir. 1985) (referring to a state Freedom of Information Act requiring disclosure of hazardous chemicals).

282. U.S. CONST. art. I, § 8, cl. 8 (referring to Congress's power to grant patents and copyrights).

283. AFL-CIO Brief Amici Curiae in Support of Appellant at 2, *Ruckelshaus v. Monsanto Co.*, 467 U.S. 986 (1984) (No. 83-196).

284. Monsanto claimed that its development of trade secrets required a massive commitment of resources and energy costing the company \$70 million in 1981 alone. Brief for Appellee at 21, *Ruckelshaus v. Monsanto Co.*, 467 U.S. 986 (1984) (No. 83-196).

taking, the owner cannot prevent the disclosure but is limited to the collection of just compensation.

