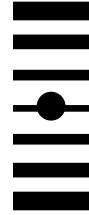


## CHAPTER TWENTY-TWO

# Trade Secrecy & Preemption



### Introduction

The oldest form of protection for valuable information or innovation is secrecy. If I have a new method of making steel or lacquering violins or I have developed obstetrical forceps that are dramatically safer than the alternative, or a list of all the people in Pennsylvania who buy barrels, I can simply keep the information to myself. By itself, secrecy is a factual, not a legal protection. Of course, the law is involved to the extent that some of my existing legally protected interests make it easier to keep the secret. My property rights over land make it illegal for you to trespass in my factory to spy on my steel-making. My legally protected interests in bodily security and the rules of criminal law mean you are not allowed to kidnap or torture me to try and find out my secrets. But those legally protected interests are independent, not intended to promote the goals of intellectual property.

In this chapter we ask whether the law does and should go further. (For the impatient, the answers are respectively “Yes and maybe.”) Should there be a free-standing protection for trade secrets? If so, what conduct should it protect against? A patent would allow me to exclude the person who independently invents the steel making method or the forceps. Should trade secrecy? What about if I carelessly leave the blueprints on the bus, and a stranger finds them? *Why* should the law help me protect the secret? We return to the very first chapter and our discussion of competing theories of intellectual property law. Is this to incentivize innovation and the collection of valuable information? Is it a reward for hard work? A way of policing bad behavior and the “commercial immorality” of snoops and cheats? Finally, how does trade secrecy interact with our other three intellectual property schemes: copyright, trademark and patent? Do those Federal schemes ever preempt state trade secrecy protections, just as we saw that copyright law sometimes preempts unfair competition protections? In this chapter we will try to answer all of those questions.

### The Restatement, Uniform Trade Secrets Act, and Defend Trade Secrets Act

Until 2016, the civil law of trade secrecy was a matter of state law. The main sources of that law were the Restatement (First) of Torts (1939) (the provisions of which were later included in the Restatement (Third) of Unfair Competition), and the Uniform Trade Secrets Act (“UTSA”), the most recently amended version of which dates from 1985.<sup>1</sup> In turn, states relied on those two basic frameworks in creating their own law of trade secrecy, both by statute and in the courts. Most states (New York and Massachusetts are exceptions) adopted some version of the UTSA, with their own amendments.<sup>2</sup> In May of 2016, Congress passed the Defend Trade Secrets Act (“DTSA”), adding a new Federal civil cause of action to the existing Federal criminal prohibitions against Economic

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<sup>1</sup> The Economic Espionage Act of 1996 added severe criminal penalties for the misappropriation of trade secrets with knowledge or intent that it would benefit a foreign power or harm the owner of the trade secret used in a product for interstate or international commerce.

<sup>2</sup> In the Statutory Supplement we include California’s adoption of the Uniform Trade Secrets Act, noting the places where the California legislation makes changes.

Espionage.<sup>3</sup> Just as the Lanham Act does not preempt state trademark law, the DTSA does not preempt state trade secrecy protections. The Restatement, the UTSA and the DTSA rest on broadly similar foundations but, as we will see, there are some differences. As you read through the definitions offered below, note the central features of trade secrecy.

- The basic form of the protection is that it provides legal backing to the existing “factual” secrecy we described earlier. If you take reasonable efforts to protect your secret, the law of trade secrecy aids you by forbidding certain methods of uncovering that secret—such as by spying, or bribing one of your employees to violate a duty of confidentiality.
- Trade secrecy is much more expansive and less demanding in its criteria than patentable subject matter. It can also extend to material that is outside of copyright’s subject matter—such as an unoriginal compilation of facts.
- The criteria for what counts as a trade secret are mixed—they go to the value of the information, the cost of developing it and the care taken in maintaining the secrecy. The Restatement attempted to distinguish “single shot” secrets (the amount of an individual bid, not eligible for protection) with those that have a continued importance to the operation of the business (a database of all bids made over time, correlated by the factors predicting their success, eligible for protection). The UTSA and DTSA lower the bar, protecting any type of secret information so long as it has “actual or potential” value based on its secrecy.
- The protection is not absolute. The trade secret can be uncovered through reverse engineering, or lost through publication, independent discovery or carelessness. In other words, only certain types of behavior—which we call, with some degree of circularity, “misappropriation”—can violate a trade secret.
- Information may be shared without losing its legal protection as a trade secret so long as it travels with a duty of confidentiality on those with whom it is shared. (What policy reasons would there be for us to want to allow secrets to be shared and yet to retain their protection?)
- The protection is not the kind of strict liability property system we saw in copyright and in patent. If I innocently acquire a trade secret without knowing or having reason to know that the person from whom I receive it disclosed it without authorization, I am not liable to the owner for my use of the information. (Though my informant may well be.)

*Restatement (First) of Torts*  
(1939)



## **SECTION 757. LIABILITY FOR DISCLOSURE OR USE OF ANOTHER’S TRADE SECRET**

GENERAL PRINCIPLE. One who discloses or uses another’s trade secret, without a privilege to do so, is liable to the other if

- (a) he discovered the secret by improper means, or
- (b) his disclosure or use constitutes a breach of confidence reposed in

<sup>3</sup> The DTSA was passed as a series of amendments to the Economic Espionage Act (“EEA”). The Statutory Supplement contains both the EEA, as amended, and the DTSA.

- him by the other in disclosing the secret to him, or
- (c) he learned the secret from a third person with notice of the facts that it was a secret and that the third person discovered it by improper means or that the third person's disclosure of it was otherwise a breach of his duty to the other, or
- (d) he learned the secret with notice of the facts that it was a secret and that its disclosure was made to him by mistake.

Comment b. Definition of Trade Secret.

A trade secret may consist of any formula, pattern, device or compilation of information which is used in one's business, and which gives him an opportunity to obtain an advantage over competitors who do not know or use it. It 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. It differs from other secret information in a business . . . in that it is not simply information as to single or ephemeral events in the conduct of the business, as, for example, the amount or other terms of a secret bid for a contract or the salary of certain employees, or the security investments made or contemplated, or the date fixed for the announcement of a new policy or for bringing out a new model or the like. A trade secret is a process or device for continuous use in the operation of the business. Generally it relates to the production of goods, as, for example, a machine or formula for the production of an article. It may, however, relate to the sale of goods or to other operations in the business, such as a code for determining discounts, rebates or other concessions in a price list or catalogue, or a list of specialized customers, or a method of bookkeeping or other office management.

The subject matter of a trade secret must be secret. Matters of public knowledge or of general knowledge in an industry cannot be appropriated by one as his secret. Matters which are completely disclosed by the goods which one markets cannot be his secret. Substantially, a trade secret is known only in the particular business in which it is used. It is not requisite that only the proprietor of the business know it. He may, without losing his protection, communicate it to employees involved in its use. He may likewise communicate it to others pledged to secrecy. Others may also know of it independently, as, for example, when they have discovered the process or formula by independent invention and are keeping it secret. Nevertheless, a substantial element of secrecy must exist, so that, except by the use of improper means, there would be difficulty in acquiring the information. An exact definition of a trade secret is not possible. Some factors to be considered in determining whether given information is one's trade secret are:

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

*Uniform Trade Secrets Act*  
*With 1985 Amendments*



SECTION 1. DEFINITIONS. As used in this [Act], unless the context requires otherwise:

(1) “Improper means” includes theft, bribery, misrepresentation, breach or inducement of a breach of a duty to maintain secrecy, or espionage through electronic or other means;

(2) “Misappropriation” means:

(i) acquisition of a trade secret of another by a person who knows or has reason to know that the trade secret was acquired by improper means; or

(ii) disclosure or use of a trade secret of another without express or implied consent by a person who

(A) used improper means to acquire knowledge of the trade secret; or

(B) at the time of disclosure or use, knew or had reason to know that his knowledge of the trade secret was

(I) derived from or through a person who had utilized improper means to acquire it;

(II) acquired under circumstances giving rise to a duty to maintain its secrecy or limit its use; or

(III) derived from or through a person who owed a duty to the person seeking relief to maintain its secrecy or limit its use; or

(C) before a material change of his [or her] position, knew or had reason to know that it was a trade secret and that knowledge of it had been acquired by accident or mistake. . . .

(4) “Trade secret” means information, including a formula, pattern, compilation, program, device, method, technique, or process, that:

(i) derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use, and

(ii) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.

### **COMMENT**

. . . “A complete catalogue of improper means is not possible,” but Section 1(1) includes a partial listing.

Proper means include:

1. Discovery by independent invention;

2. Discovery by “reverse engineering”, that is, by starting with the known product and working backward to find the method by which it was developed. The acquisition of the known product must, of course, also be by a fair and honest means, such as purchase of the item on the open market for reverse engineering to be lawful;

3. Discovery under a license from the owner of the trade secret;

4. Observation of the item in public use or on public display;

5. Obtaining the trade secret from published literature.

Because the trade secret can be destroyed through public knowledge, the unauthorized disclosure of a trade secret is also a misappropriation.

## *Defend Trade Secrets Act of 2016*



**§ 1836 (b)(1) In general.**—An owner of a trade secret that is misappropriated may bring a civil action under this subsection if the trade secret is related to a product or service used in, or intended for use in, interstate or foreign commerce.

[The DTSA largely takes its definition of trade secrecy from the (broad) existing definition in the Economic Espionage Act (§ 1839), which it amends.]

**§ 1839 (3) [T]he term “trade secret” means all forms and types of financial, business, scientific, technical, economic, or engineering information, including patterns, plans, compilations, program devices, formulas, designs, prototypes, methods, techniques, processes, procedures, programs, or codes, whether tangible or intangible, and whether or how stored, compiled, or memorialized physically, electronically, graphically, photographically, or in writing if**

**(A) the owner thereof has taken reasonable measures to keep such information secret; and**

**(B) the information derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable through proper means by, another person who can obtain economic value from the disclosure or use of the information.**

[The original § 1839 had read “not being generally known to, and not being readily ascertainable through proper means by, *the public*.” The amended version now tracks the UTSA: “by another person who can obtain economic value from the disclosure or use of the information.” The DTSA also mirrors the UTSA’s definition of “misappropriation” given on the previous page and reiterates its description of improper means, while specifically clarifying conduct that is *not* improper, in a manner similar to the California version of the UTSA.]

**§ 1839 (6) the term ‘improper means’**

**(A) includes theft, bribery, misrepresentation, breach or inducement of a breach of a duty to maintain secrecy, or espionage through electronic or other means; and (B) does not include reverse engineering, independent derivation, or any other lawful means of acquisition. . . .**

Despite the similarities between the DTSA and the state trade secrecy schemes built on the foundation of the UTSA, there are also differences.

- **Federal Cause of Action:** Most obviously, for the first time this provides a cause of action in the Federal courts. Plaintiffs can now use Federal courts to assert both Federal and state trade secrecy causes of action, though not *vice versa*. Alternatively, they may bring separate Federal and state actions.
- **Whistleblower Immunity:** The DTSA provides civil and criminal immunity to individuals who disclose trade secrets to Federal or state governments or to an

attorney in order to report a violation of the law. It also allows for disclosures, under seal, in certain court filings and disclosures in the case of anti-retaliation suits. No such immunity is explicitly given in most state trade secrecy regimes. Notably, employers *must* notify employees of the existence of this whistleblower immunity in order to keep their full range of rights under the DTSA (though that notification may be buried in a larger policy document).

- **Ex Parte Civil Seizure:** A large portion of the DTSA is taken up with a significant new remedy for plaintiffs. From § 1836 (b): “[T]he court may, upon *ex parte* application but only in extraordinary circumstances, issue an order providing for the seizure of property necessary to prevent the propagation or dissemination of the trade secret that is the subject of the action.” *Ex parte* applications, that is applications made by one party without the other party’s participation, are obviously subject to few of the restraints of a full hearing. The application must satisfy the judge that the plaintiff is likely to win at trial (that is, that it is a trade secret, it has been misappropriated and so on) and will suffer irreparable injury if the order is not granted, and that the benefit caused by the order will outweigh harms to the defendant and “substantially outweigh” harms to third parties. Even with these limitations and the possibility of a suit in the case of misuse, this gives plaintiffs a powerful right which can be triggered before the judge has heard the defendant’s side of the story. It is a right that many scholars,<sup>4</sup> including the authors of this casebook, fear may end up being abused for anti-competitive ends.
- **Compatibility with Labor Mobility:** Some states, most notably California, generally reject on public policy grounds injunctions that would prevent employees from changing employers. By contrast the DTSA forbids only injunctions that “prevent a person from accepting an offer of employment under conditions that avoid actual or threatened misappropriation.”

### Question:

1.) What differences in emphasis do you see between the Restatement, the UTSA and the DTSA? What policy choices do they represent?

### Preemption

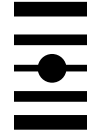
In Chapter 16 we considered the question of when Federal Copyright law preempts state causes of action, such as unfair competition protection of “hot news.” Similarly, Federal Copyright Law presumably imposes *some* limits on state trade secrecy laws. Not on the core concept. Trade secrecy allows for protection of at least certain kinds of “facts.” Copyright does not. Yet, *Theflyonthewall.com* notwithstanding, trade secrecy rights would surely survive a preemption challenge, largely because of the narrowness of the right and the commercial circumstances in which it arises. The DTSA signals Congress’s clear belief that basic state trade secrecy rights are not inconsistent with existing Federal intellectual property law, for it explicitly allows those state rights to continue to exist. Yet could California amend its trade secrecy law to say that publicly distributed movies were “trade secrets” and thus that it was illegal ever to reproduce or screen them, even after the

<sup>4</sup> Eric Goldman, *Ex Parte Seizures and the DTSA*, 72 WASH. & LEE LAW REV. ONLINE 284 (2015).

copyright term had expired? We think not. There's no magic in the phrase "trade secrecy." Merely *labeling* something a "trade secrecy right" does not thereby make it immune from preemption challenge.

What about patent law? The Patent Act lacks the Copyright Act's explicit statutory section outlining its preemptive reach. The courts, therefore, must turn to logic and purpose to guide them. In so doing, they produce some of the most extensive discussions of the nature and function of the patent system and of the state rights which might conflict with that system—including, but by no means limited to, trade secrecy. In doing so, they cast further light on our earlier discussion of preemption and copyright.

***Sears, Roebuck & Co. v. Stiffel Co.***  
376 U.S. 225 (1964)



Mr. Justice BLACK delivered the opinion of the Court.

The question in this case is whether a State's unfair competition law can, consistently with the federal patent laws, impose liability for or prohibit the copying of an article which is protected by neither a federal patent nor a copyright. . . .

Sears has been held liable here for unfair competition because of a finding of likelihood of confusion based only on the fact that Sears' lamp was copied from Stiffel's unpatented lamp and that consequently the two looked exactly alike. Of course there could be "confusion" as to who had manufactured these nearly identical articles. But mere inability of the public to tell two identical articles apart is not enough to support an injunction against copying or an award of damages for copying that which the federal patent laws permit to be copied. Doubtless a State may, in appropriate circumstances, require that goods, whether patented or unpatented, be labeled or that other precautionary steps be taken to prevent customers from being misled as to the source, just as it may protect businesses in the use of their trademarks, labels, or distinctive dress in the packaging of goods so as to prevent others, by imitating such markings, from misleading purchasers as to the source of the goods. But because of the federal patent laws a State may not, when the article is unpatented and uncopyrighted, prohibit the copying of the article itself or award damages for such copying. The judgment below did both and in so doing gave Stiffel the equivalent of a patent monopoly on its unpatented lamp. That was error, and Sears is entitled to a judgment in its favor.

Reversed.

***Kewanee Oil Co. v. Bicron Corp.***  
416 U.S. 470 (1974)



Mr. Chief Justice BURGER delivered the opinion of the Court.

We granted certiorari to resolve a question on which there is a conflict in the courts of appeals: whether state trade secret protection is pre-empted by operation of the federal patent law. . . .

## II

The protection accorded the trade secret holder is against the disclosure or

unauthorized use of the trade secret by those to whom the secret has been confided under the express or implied restriction of nondisclosure or nonuse. The law also protects the holder of a trade secret against disclosure or use when the knowledge is gained, not by the owner's volition, but by some "improper means," Restatement of Torts § 757 (a), which may include theft, wiretapping, or even aerial reconnaissance. A trade secret law, however, does not offer protection against discovery by fair and honest means, such as by independent invention, accidental disclosure, or by so-called reverse engineering, that is by starting with the known product and working backward to divine the process which aided in its development or manufacture.

#### IV

The question of whether the trade secret law of Ohio is void under the Supremacy Clause involves a consideration of whether that law "stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress." The laws which the Court of Appeals in this case held to be in conflict with the Ohio law of trade secrets were the patent laws passed by the Congress in the unchallenged exercise of its clear power under Art. I, § 8, cl. 8, of the Constitution. The patent law does not explicitly endorse or forbid the operation of trade secret law. However, as we have noted, if the scheme of protection developed by Ohio respecting trade secrets "clashes with the objectives of the federal patent laws," *Sears, Roebuck & Co. v. Stiffel Co.*, then the state law must fall. To determine whether the Ohio law "clashes" with the federal law it is helpful to examine the objectives of both the patent and trade secret laws.

The stated objective of the Constitution in granting the power to Congress to legislate in the area of intellectual property is to "promote the Progress of Science and useful Arts." The patent laws promote this progress by offering a right of exclusion for a limited period as an incentive to inventors to risk the often enormous costs in terms of time, research, and development. The productive effort thereby fostered will have a positive effect on society through the introduction of new products and processes of manufacture into the economy, and the emanations by way of increased employment and better lives for our citizens. In return for the right of exclusion—this "reward for inventions"—the patent laws impose upon the inventor a requirement of disclosure. To insure [sic] adequate and full disclosure so that upon the expiration of the 17-year period "the knowledge of the invention enures to the people, who are thus enabled without restriction to practice it and profit by its use," the patent laws require that the patent application shall include a full and clear description of the invention and "of the manner and process of making and using it" so that any person skilled in the art may make and use the invention. 35 U.S.C. § 112. When a patent is granted and the information contained in it is circulated to the general public and those especially skilled in the trade, such additions to the general store of knowledge are of such importance to the public weal that the Federal Government is willing to pay the high price of 17 years of exclusive use for its disclosure, which disclosure, it is assumed, will stimulate ideas and the eventual development of further significant advances in the art. The Court has also articulated another policy of the patent law: that which is in the public domain cannot be removed there from by action of the States. "[F]ederal law requires that all ideas in general circulation be dedicated to the common good unless they are protected by a valid patent." *Lear, Inc. v. Adkins*.

The maintenance of standards of commercial ethics and the encouragement of invention are the broadly stated policies behind trade secret law. "The necessity of good faith and honest, fair dealing, is the very life and spirit of the commercial world." In *A. O.*



*Smith Corp. v. Petroleum Iron Works Co.*, the Court emphasized that even though a discovery may not be patentable, that does not “destroy the value of the discovery to one who makes it, or advantage the competitor who by unfair means, or as the beneficiary of a broken faith, obtains the desired knowledge without himself paying the price in labor, money, or machines expended by the discoverer.”

In *Wexler v. Greenberg* (1960), the Pennsylvania Supreme Court noted the importance of trade secret protection to the subsidization of research and development and to increased economic efficiency within large companies through the dispersion of responsibilities for creative developments.

Having now in mind the objectives of both the patent and trade secret law, we turn to an examination of the interaction of these systems of protection of intellectual property—one established by the Congress and the other by a State—to determine whether and under what circumstances the latter might constitute “too great an encroachment on the federal patent system to be tolerated.”

As we noted earlier, trade secret law protects items which would not be proper subjects for consideration for patent protection under 35 U.S.C. § 101.

Since no patent is available for a discovery, however useful, novel, and nonobvious, unless it falls within one of the express categories of patentable subject matter of 35 U.S.C. § 101, the holder of such a discovery would have no reason to apply for a patent whether trade secret protection existed or not. Abolition of trade secret protection would, therefore, not result in increased disclosure to the public of discoveries in the area of nonpatentable subject matter. . . . The question remains whether those items which are proper subjects for consideration for a patent may also have available the alternative protection accorded by trade secret law.

Certainly the patent policy of encouraging invention is not disturbed by the existence of another form of incentive to invention. In this respect the two systems are not and never would be in conflict. Similarly, the policy that matter once in the public domain must remain in the public domain is not incompatible with the existence of trade secret protection. By definition a trade secret has not been placed in the public domain.

The more difficult objective of the patent law to reconcile with trade secret law is that of disclosure, the *quid pro quo* of the right to exclude. We are helped in this stage of the analysis by Judge Henry Friendly’s opinion in *Painton & Co. v. Bourns, Inc.* (2d Cir. 1971). There the Court of Appeals thought it useful, in determining whether inventors will refrain because of the existence of trade secret law from applying for patents, thereby depriving the public from learning of the invention, to distinguish between three categories of trade secrets: “(1) the trade secret believed by its owner to constitute a validly patentable invention; (2) the trade secret known to its owner not to be so patentable; and (3) the trade secret whose valid patentability is considered dubious.”

As to the trade secret known not to meet the standards of patentability, very little in the way of disclosure would be accomplished by abolishing trade secret protection. With trade secrets of nonpatentable subject matter, the patent alternative would not reasonably be available to the inventor.

Even as the extension of trade secret protection to patentable subject matter that the owner knows will not meet the standards of patentability will not conflict with the patent policy of disclosure, it will have a decidedly beneficial effect on society. Trade secret law will encourage invention in areas where patent law does not reach, and will prompt the independent innovator to proceed with the discovery and exploitation of his invention. Competition is fostered and the public is not deprived of the use of valuable, if not quite patentable, invention.

Even if trade secret protection against the faithless employee were abolished, inventive and exploitive effort in the area of patentable subject matter that did not meet the standards of patentability would continue, although at a reduced level. Alternatively with the effort that remained, however, would come an increase in the amount of self-help that innovative companies would employ. Knowledge would be widely dispersed among the employees of those still active in research. As a result, organized scientific and technological research could become fragmented, and society, as a whole, would suffer.

Another problem that would arise if state trade secret protection were precluded is in the area of licensing others to exploit secret processes. The holder of a trade secret would not likely share his secret with a manufacturer who cannot be placed under binding legal obligation to pay a license fee or to protect the secret. The result would be to hoard rather than disseminate knowledge. Instead, then, of licensing others to use his invention and making the most efficient use of existing manufacturing and marketing structures within the industry, the trade secret holder would tend either to limit his utilization of the invention, thereby depriving the public of the maximum benefit of its use, or engage in the time-consuming and economically wasteful enterprise of constructing duplicative manufacturing and marketing mechanisms for the exploitation of the invention. The detrimental misallocation of resources and economic waste that would thus take place if trade secret protection were abolished with respect to employees or licensees cannot be justified by reference to any policy that the federal patent law seeks to advance.

Nothing in the patent law requires that States refrain from action to prevent industrial espionage. In addition to the increased costs for protection from burglary, wiretapping, bribery, and the other means used to misappropriate trade secrets, there is the inevitable cost to the basic decency of society when one firm steals from another. A most fundamental human right, that of privacy, is threatened when industrial espionage is condoned or is made profitable; the state interest in denying profit to such illegal ventures is unchallengeable.

The next category of patentable subject matter to deal with is the invention whose holder has a legitimate doubt as to its patentability. The risk of eventual patent invalidity by the courts and the costs associated with that risk may well impel some with a good-faith doubt as to patentability not to take the trouble to seek to obtain and defend patent protection for their discoveries, regardless of the existence of trade secret protection. Trade secret protection would assist those inventors in the more efficient exploitation of their discoveries and not conflict with the patent law. In most cases of genuine doubt as to patent validity the potential rewards of patent protection are so far superior to those accruing to holders of trade secrets, that the holders of such inventions will seek patent protection, ignoring the trade secret route. For those inventors "on the line" as to whether to seek patent protection, the abolition of trade secret protection might encourage some to apply for a patent who otherwise would not have done so.

The point is that those who might be encouraged to file for patents by the absence of trade secret law will include inventors possessing the chaff as well as the wheat. Some of the chaff—the nonpatentable discoveries—will be thrown out by the Patent Office, but in the meantime society will have been deprived of use of those discoveries through trade secret-protected licensing. Some of the chaff may not be thrown out. This Court has noted the difference between the standards used by the Patent Office and the courts to determine patentability. *Graham v. John Deere Co.* (1966). In *Lear, Inc. v. Adkins* (1969), the Court thought that an invalid patent was so serious a threat to the free use of ideas already in the public domain that the Court permitted licensees of the patent holder to challenge the validity of the patent. Better had the invalid patent never been issued. More of those patents

would likely issue if trade secret law were abolished. Eliminating trade secret law for the doubtfully patentable invention is thus likely to have deleterious effects on society and patent policy which we cannot say are balanced out by the speculative gain which might result from the encouragement of some inventors with doubtfully patentable inventions which deserve patent protection to come forward and apply for patents. There is no conflict, then, between trade secret law and the patent law policy of disclosure, at least insofar as the first two categories of patentable subject matter are concerned.

The final category of patentable subject matter to deal with is the clearly patentable invention, i.e., that invention which the owner believes to meet the standards of patentability. It is here that the federal interest in disclosure is at its peak; these inventions, novel, useful and nonobvious, are “the things which are worth to the public the embarrassment of an exclusive patent.” *Graham v. John Deere Co.* (quoting Thomas Jefferson). The interest of the public is that the bargain of 17 years of exclusive use in return for disclosure be accepted. If a State, through a system of protection, were to cause a substantial risk that holders of patentable inventions would not seek patents, but rather would rely on the state protection, we would be compelled to hold that such a system could not constitutionally continue to exist. In the case of trade secret law no reasonable risk of deterrence from patent application by those who can reasonably expect to be granted patents exists.

Trade secret law provides far weaker protection in many respects than the patent law. While trade secret law does not forbid the discovery of the trade secret by fair and honest means, e. g., independent creation or reverse engineering, patent law operates “against the world,” forbidding any use of the invention for whatever purpose for a significant length of time. The holder of a trade secret also takes a substantial risk that the secret will be passed on to his competitors, by theft or by breach of a confidential relationship, in a manner not easily susceptible of discovery or proof. Where patent law acts as a barrier, trade secret law functions relatively as a sieve. The possibility that an inventor who believes his invention meets the standards of patentability will sit back, rely on trade secret law, and after one year of use forfeit any right to patent protection, 35 U.S.C. § 102 (b), is remote indeed.

Nor does society face much risk that scientific or technological progress will be impeded by the rare inventor with a patentable invention who chooses trade secret protection over patent protection. The ripeness-of-time concept of invention, developed from the study of the many independent multiple discoveries in history, predicts that if a particular individual had not made a particular discovery others would have, and in probably a relatively short period of time. If something is to be discovered at all very likely it will be discovered by more than one person.

We conclude that the extension of trade secret protection to clearly patentable inventions does not conflict with the patent policy of disclosure. Perhaps because trade secret law does not produce any positive effects in the area of clearly patentable inventions, as opposed to the beneficial effects resulting from trade secret protection in the areas of the doubtfully patentable and the clearly unpatentable inventions, it has been suggested that partial pre-emption may be appropriate, and that courts should refuse to apply trade secret protection to inventions which the holder should have patented, and which would have been, thereby, disclosed. However, since there is no real possibility that trade secret law will conflict with the federal policy favoring disclosure of clearly patentable inventions partial pre-emption is inappropriate.

Partial pre-emption, furthermore, could well create serious problems for state courts in the administration of trade secret law. As a preliminary matter in trade secret

actions, state courts would be obliged to distinguish between what a reasonable inventor would and would not correctly consider to be clearly patentable, with the holder of the trade secret arguing that the invention was not patentable and the misappropriator of the trade secret arguing its undoubted novelty, utility, and nonobviousness. Federal courts have a difficult enough time trying to determine whether an invention . . . is patentable. . . . [I]t would be undesirable to impose the almost impossible burden on state courts to determine the patentability—in fact and in the mind of a reasonable inventor—of a discovery which has not been patented and remains entirely uncircumscribed by expert analysis in the administrative process. Neither complete nor partial pre-emption of state trade secret law is justified.

Trade secret law and patent law have co-existed in this country for over one hundred years. Each has its particular role to play, and the operation of one does not take away from the need for the other. Trade secret law encourages the development and exploitation of those items of lesser or different invention than might be accorded protection under the patent laws, but which items still have an important part to play in the technological and scientific advancement of the Nation. Trade secret law promotes the sharing of knowledge, and the efficient operation of industry; it permits the individual inventor to reap the rewards of his labor by contracting with a company large enough to develop and exploit it. Congress, by its silence over these many years, has seen the wisdom of allowing the States to enforce trade secret protection. Until Congress takes affirmative action to the contrary, States should be free to grant protection to trade secrets.

Since we hold that Ohio trade secret law is not preempted by the federal patent law, the judgment of the Court of Appeals for the Sixth Circuit is reversed, and the case is remanded to the Court of Appeals with directions to reinstate the judgment of the District Court.

***Bonito Boats, Inc. v. Thunder Craft Boats, Inc.***

489 U.S. 141 (1989)



JUSTICE O'CONNOR delivered the opinion of the Court.

We must decide today what limits the operation of the federal patent system places on the States' ability to offer substantial protection to utilitarian and design ideas which the patent laws leave otherwise unprotected. In *Interpart Corp. v. Italia* (Fed. Cir. 1985), the Court of Appeals for the Federal Circuit concluded that a California law prohibiting the use of the "direct molding process" to duplicate unpatented articles posed no threat to the policies behind the federal patent laws. In this case, the Florida Supreme Court came to a contrary conclusion. It struck down a Florida statute which prohibits the use of the direct molding process to duplicate unpatented boat hulls, finding that the protection offered by the Florida law conflicted with the balance struck by Congress in the federal patent statute between the encouragement of invention and free competition in unpatented ideas. We granted certiorari to resolve the conflict and we now affirm the judgment of the Florida Supreme Court. . . .

. . . [I]n *Kewanee Oil Co. v. Bicron Corp.* (1974), we held that state protection of trade secrets did not operate to frustrate the achievement of the congressional objectives served by the patent laws. Despite the fact that state law protection was available for ideas which clearly fell within the subject matter of patent, the Court concluded that the nature and degree of state protection did not conflict with the federal policies of

encouragement of patentable invention and the prompt disclosure of such innovations.

Several factors were critical to this conclusion. First, because the public awareness of a trade secret is by definition limited, the Court noted that “the policy that matter once in the public domain must remain in the public domain is not incompatible with the existence of trade secret protection.” Second, the *Kewanee* Court emphasized that “[t]rade secret law provides far weaker protection in many respects than the patent law.” This point was central to the Court’s conclusion that trade secret protection did not conflict with either the encouragement or disclosure policies of the federal patent law. The public at large remained free to discover and exploit the trade secret through reverse engineering of products in the public domain or by independent creation. Thus, the possibility that trade secret protection would divert inventors from the creative effort necessary to satisfy the rigorous demands of patent protection was remote indeed. Finally, certain aspects of trade secret law operated to protect noneconomic interests outside the sphere of congressional concern in the patent laws. As the Court noted, “[A] most fundamental human right, that of privacy, is threatened when industrial espionage is condoned or is made profitable.” There was no indication that Congress had considered this interest in the balance struck by the patent laws, or that state protection for it would interfere with the policies behind the patent system. . . .

At the heart of *Sears* and *Compco* [a similar case about design protection and unfair competition] is the conclusion that the efficient operation of the federal patent system depends upon substantially free trade in publicly known, unpatented design and utilitarian conceptions. In *Sears*, the state law offered “the equivalent of a patent monopoly,” in the functional aspects of a product which had been placed in public commerce absent the protection of a valid patent. While, as noted above, our decisions since *Sears* have taken a decidedly less rigid view of the scope of federal pre-emption under the patent laws, we believe that the *Sears* Court correctly concluded that the States may not offer patent-like protection to intellectual creations which would otherwise remain unprotected as a matter of federal law. Both the novelty and the nonobviousness requirements of federal patent law are grounded in the notion that concepts within the public grasp, or those so obvious that they readily could be, are the tools of creation available to all. They provide the baseline of free competition upon which the patent system’s incentive to creative effort depends. A state law that substantially interferes with the enjoyment of an unpatented utilitarian or design conception which has been freely disclosed by its author to the public at large impermissibly contravenes the ultimate goal of public disclosure and use which is the centerpiece of federal patent policy. Moreover, through the creation of patent-like rights, the States could essentially redirect inventive efforts away from the careful criteria of patentability developed by Congress over the last 200 years. We understand this to be the reasoning at the core of our decisions in *Sears* and *Compco*, and we reaffirm that reasoning today.

### Questions:

1.) In *Kewanee* the Court says: “Certainly the patent policy of encouraging invention is not disturbed by the existence of another form of incentive to invention. In this respect the two systems are not and never would be in conflict.” Do you agree? Is this consistent with the holding of the *Sears* case? The *Bonito Boats* case? With the holdings of the courts in the copyright preemption cases *NBA v. Motorola* or *Barclays v. Theflyonthewall.com*? How might adding new forms of protection for innovation change the balance set up by the Federal patent scheme? Does the passage of the DTSA strengthen the Court’s argument?

2.) The *Kewanee* Court discusses the effect of trade secret protection on three classes of innovations; those that are clearly unpatentable, those that are clearly patentable, and those of dubious patentability. In each case, it finds that trade secret law does not effectively deprive the public of the type of disclosure promised by the patent system. Do you agree? Does the fact that the patent system focuses so much on promoting disclosure indicate that it was a Congressional response to the possibility of factual or legal secrecy by offering a different set of incentives that would encourage inventors to relinquish that secrecy?

3.) The *Bonito Boats* case struck down as preempted a state law protecting boat hull designs from direct mold copying, and only that form of copying. In that case the Court had to reconcile its *Sears* and *Kewanee* decisions. It stressed three arguments made by the *Kewanee* Court: i.) By definition, trade secrets are not in the public domain—unlike the unpatentable design of a good already on sale—thus the public is deprived of nothing; ii.) Trade secret law is far weaker than patent protection; iii.) Trade secret law protects additional non-economic values beyond the promotion of innovation—in this case the “fundamental human right of privacy.” Is a ban that goes only to boat designs copied by direct molding far weaker than patent protection? Do unfair competition actions—such as that involved in the *Sears* case—involve non-economic values beyond the promotion of innovation? That leads us to consider the very reasonable idea that trade secrets, by definition, are not in the public domain. The next case provides us with an intriguing fact situation to test what we mean by “facts available to the public.”

## Improper Means

### *E.I. du Pont de Nemours & Co. v. Christopher* 431 F.2d 1012 (5th Cir. 1970)



GOLDBERG, Circuit Judge:

This is a case of industrial espionage in which an airplane is the cloak and a camera the dagger. The defendants-appellants, Rolfe and Gary Christopher, are photographers in Beaumont, Texas. The Christophers were hired by an unknown third party to take aerial photographs of new construction at the Beaumont plant of E. I. DuPont de Nemours & Company, Inc. Sixteen photographs of the DuPont facility were taken from the air on March 19, 1969, and these photographs were later developed and delivered to the third party.

DuPont subsequently filed suit against the Christophers, alleging that the Christophers had wrongfully obtained photographs revealing DuPont’s trade secrets which they then sold to the undisclosed third party. DuPont contended that it had developed a highly secret but unpatented process for producing methanol, a process which gave DuPont a competitive advantage over other producers. This process, DuPont alleged, was a trade secret developed after much expensive and time-consuming research, and a secret which the company had taken special precautions to safeguard. The area photographed by the Christophers was the plant designed to produce methanol by this secret process, and because the plant was still under construction parts of the process were exposed to view from directly above the construction area. Photographs of that area, DuPont alleged, would enable a skilled person to deduce the secret process for making methanol. DuPont thus contended that the Christophers had wrongfully appropriated DuPont trade secrets by

taking the photographs and delivering them to the undisclosed third party. In its suit DuPont asked for damages to cover the loss it had already sustained as a result of the wrongful disclosure of the trade secret and sought temporary and permanent injunctions prohibiting any further circulation of the photographs already taken and prohibiting any additional photographing of the methanol plant.

The Christophers argued both at trial and before this court that they committed no “actionable wrong” in photographing the DuPont facility and passing these photographs on to their client because they conducted all of their activities in public airspace, violated no government aviation standard, did not breach any confidential relation, and did not engage in any fraudulent or illegal conduct. In short, the Christophers argue that for an appropriation of trade secrets to be wrongful there must be a trespass, other illegal conduct, or breach of a confidential relationship. We disagree.

It is true, as the Christophers assert, that the previous trade secret cases have contained one or more of these elements. However, we do not think that the Texas courts would limit the trade secret protection exclusively to these elements. On the contrary, in *Hyde Corporation v. Huffines* (1958), the Texas Supreme Court specifically adopted the rule found in the Restatement of Torts which provides:

“One who discloses or uses another’s trade secret, without a privilege to do so, is liable to the other if

(a) he discovered the secret by improper means, or

(b) his disclosure or use constitutes a breach of confidence reposed in him by the other in disclosing the secret to him \* \* \*.”

Restatement of Torts § 757 (1939).

Thus, although the previous cases have dealt with a breach of a confidential relationship, a trespass, or other illegal conduct, the rule is much broader than the cases heretofore encountered. Not limiting itself to specific wrongs, Texas adopted subsection (a) of the Restatement which recognizes a cause of action for the discovery of a trade secret by any “improper” means.

The question remaining, therefore, is whether aerial photography of plant construction is an improper means of obtaining another’s trade secret. We conclude that it is and that the Texas courts would so hold. The Supreme Court of that state has declared that “the undoubted tendency of the law has been to recognize and enforce higher standards of commercial morality in the business world.” *Hyde Corporation v. Huffines*. That court has quoted with approval articles indicating that the proper means of gaining possession of a competitor’s secret process is “through inspection and analysis” of the product in order to create a duplicate. *K & G Tool & Service Co. v. G & G Fishing Tool Service*. Later another Texas court explained:

“The means by which the discovery is made may be obvious, and the experimentation leading from known factors to presently unknown results may be simple and lying in the public domain. But these facts do not destroy the value of the discovery and will not advantage a competitor who by unfair means obtains the knowledge *without paying the price expended by the discoverer.*” *Brown v. Fowler* (emphasis added).

We think, therefore, that the Texas rule is clear. One may use his competitor’s secret process if he discovers the process by reverse engineering applied to the finished product; one may use a competitor’s process if he discovers it by his own independent research; but one may not avoid these labors by taking the process from the discoverer without his permission at a time when he is taking reasonable precautions to maintain its secrecy. To

obtain knowledge of a process without spending the time and money to discover it independently is improper unless the holder voluntarily discloses it or fails to take reasonable precautions to ensure its secrecy.

In the instant case the Christophers deliberately flew over the DuPont plant to get pictures of a process which DuPont had attempted to keep secret. The Christophers delivered their pictures to a third party who was certainly aware of the means by which they had been acquired and who may be planning to use the information contained therein to manufacture methanol by the DuPont process. The third party has a right to use this process only if he obtains this knowledge through his own research efforts, but thus far all information indicates that the third party has gained this knowledge solely by taking it from DuPont at a time when DuPont was making reasonable efforts to preserve its secrecy. In such a situation DuPont has a valid cause of action to prohibit the Christophers from improperly discovering its trade secret and to prohibit the undisclosed third party from using the improperly obtained information.

In taking this position we realize that industrial espionage of the sort here perpetrated has become a popular sport in some segments of our industrial community. However, our devotion to free wheeling industrial competition must not force us into accepting the law of the jungle as the standard of morality expected in our commercial relations. Our tolerance of the espionage game must cease when the protections required to prevent another's spying cost so much that the spirit of inventiveness is dampened. Commercial privacy must be protected from espionage which could not have been reasonably anticipated or prevented. We do not mean to imply, however, that everything not in plain view is within the protected vale, nor that all information obtained through every extra optical extension is forbidden. Indeed, for our industrial competition to remain healthy there must be breathing room for observing a competing industrialist. A competitor can and must shop his competition for pricing and examine his products for quality, components, and methods of manufacture. Perhaps ordinary fences and roofs must be built to shut out incursive eyes, but we need not require the discoverer of a trade secret to guard against the unanticipated, the undetectable, or the unpreventable methods of espionage now available.

In the instant case DuPont was in the midst of constructing a plant. Although after construction the finished plant would have protected much of the process from view, during the period of construction the trade secret was exposed to view from the air. To require DuPont to put a roof over the unfinished plant to guard its secret would impose an enormous expense to prevent nothing more than a school boy's trick. We introduce here no new or radical ethic since our ethos has never given moral sanction to piracy. The marketplace must not deviate far from our *mores*. We should not require a person or corporation to take unreasonable precautions to prevent another from doing that which he ought not do in the first place. Reasonable precautions against predatory eyes we may require, but an impenetrable fortress is an unreasonable requirement, and we are not disposed to burden industrial inventors with such a duty in order to protect the fruits of their efforts. "Improper" will always be a word of many nuances, determined by time, place, and circumstances. We therefore need not proclaim a catalogue of commercial improprieties. Clearly, however, one of its commandments does say "thou shall not appropriate a trade secret through deviousness under circumstances in which countervailing defenses are not reasonably available."

Having concluded that aerial photography, from whatever altitude, is an improper method of discovering the trade secrets exposed during construction of the DuPont plant, we need not worry about whether the flight pattern chosen by the Christophers violated



any federal aviation regulations. Regardless of whether the flight was legal or illegal in that sense, the espionage was an improper means of discovering DuPont's trade secret.

The decision of the trial court is affirmed and the case remanded to that court for proceedings on the merits.

### Questions:

- 1.) **Improper Means:** The Comments to the UTSA endorse *Christopher*. Why is this conduct “improper under the circumstances”?
- 2.) **Holding:** Does *Christopher* hold that trade secrets may only be legally discovered through reverse engineering? Through methods that cost the discoverer as much as the initial secret cost its owner to develop? Through conventional methods that the trade secret owner had already thought about and countered? Some other possibility?
- 3.) **Baselines & Positive Externalities:** One of the rationales the court offers for its decision is a moral one. “We introduce here no new or radical ethic since our ethos has never given moral sanction to piracy. The market place must not deviate far from our *mores*. *We should not require a person or corporation to take unreasonable precautions to prevent another from doing that which he ought not do in the first place.*” (Emphasis added.) How would Pitney respond? Brandeis? Is there a tension between this reasoning and the preemption analysis in the *NBA v. Motorola* or *Barclays v. Theflyonthewall.com* cases?
- 4.) **Incentives:** The court's other main rationale could be expressed in terms of efficient incentives for secrecy. “To require DuPont to put a roof over the unfinished plant to guard its secret would impose an enormous expense to prevent nothing more than a school boy's trick. . . .” Does this mean that as new technologies make old techniques of secrecy less effective and countermeasures more expensive, the use of those new technologies is thus *prima facie* illegal?
- 5.) **Framing:** The court here frames the defendant's conduct in the first line of the decision. “This is a case of industrial espionage in which an airplane is the cloak and a camera the dagger.” How would you frame the issue if you were the Christophers' lawyer?

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## Reasonable Efforts to Preserve Secrecy

To establish that something is a trade secret, you first have to show that it is a secret at all. Trade secrecy law thus exists on a knife-edge. On the one hand, its very existence suggests that sometimes even vigorous attempts to preserve secrecy will fail—otherwise the legal protection would not be needed. On the other hand, how does one distinguish a lack of security that negates the claim to legal protection from the act of infringing the trade secret itself? As always, the common law answers that question by turning to the concept of “reasonableness”—in this case reasonable efforts to preserve secrecy. And who better to explore the concept of the reasonably secret man, or at least his economically-minded brother, than Judge Posner?

***Rockwell Graphic Systems, Inc. v. DEV Industries, Inc.****925 F.2d 174 (7th Cir. 1991)*

POSNER, Circuit Judge.

This is a suit for misappropriation of trade secrets. Rockwell Graphic Systems, a manufacturer of printing presses used by newspapers, and of parts for those presses, brought the suit against DEV Industries, a competing manufacturer, and against the president of DEV, who used to be employed by Rockwell. The case is in federal court by virtue of the RICO (“Racketeer Influenced and Corrupt Organizations”) statute. The predicate acts required for liability under RICO are acts of misappropriation (and related misconduct, such as alleged breaches of fiduciary duty) committed by the individual defendant, Fleck, and by another former employee of Rockwell and present employee of DEV, Peloso. These acts are alleged to violate Illinois law, and in pendent counts Rockwell seeks to impose liability for them directly under that law as well as indirectly under RICO. The district judge granted summary judgment for the defendants upon the recommendation of a magistrate who concluded that Rockwell had no trade secrets because it had failed to take reasonable precautions to maintain secrecy. Therefore there had been no misappropriation, which in turn was the foundation for the predicate acts; so the RICO count had to be dismissed. With the federal claim out of the case, the district judge relinquished jurisdiction over the pendent counts, resulting in a dismissal of the entire case.

When we said that Rockwell manufactures both printing presses and replacement parts for its presses—“wear parts” or “piece parts,” they are called—we were speaking approximately. Rockwell does not always manufacture the parts itself. Sometimes when an owner of one of Rockwell’s presses needs a particular part, or when Rockwell anticipates demand for the part, it will subcontract the manufacture of it to an independent machine shop, called a “vendor” by the parties. When it does this it must give the vendor a “piece part drawing” indicating materials, dimensions, tolerances, and methods of manufacture. Without that information the vendor could not manufacture the part. Rockwell has not tried to patent the piece parts. It believes that the purchaser cannot, either by inspection or by “reverse engineering” discover how to manufacture the part; to do that you need the piece part drawing, which contains much information concerning methods of manufacture, alloys, tolerances, etc. that cannot be gleaned from the part itself. So Rockwell tries—whether hard enough is the central issue in the case—to keep the piece part drawings secret, though not of course from the vendors; they could not manufacture the parts for Rockwell without the drawings.

Rockwell employed Fleck and Peloso in responsible positions that gave them access to piece part drawings. Fleck left Rockwell in 1975 and three years later joined DEV as its president. Peloso joined DEV the following year after being fired by Rockwell when a security guard caught him removing piece part drawings from Rockwell’s plant. This suit was brought in 1984, and pretrial discovery by Rockwell turned up 600 piece part drawings in DEV’s possession, of which 100 were Rockwell’s. DEV claimed to have obtained them lawfully, either from customers of Rockwell or from Rockwell vendors, contrary to Rockwell’s claim that either Fleck and Peloso stole them when they were employed by it or DEV obtained them in some other unlawful manner, perhaps from a vendor who violated his confidentiality agreement with Rockwell. Thus far in the litigation DEV has not been able to show which customers or vendors lawfully supplied it with Rockwell’s piece part drawings.

The mere fact that Rockwell gave piece part drawings to vendors—that is,

disclosed its trade secrets to “a limited number of outsiders for a particular purpose”—did not forfeit trade secret protection. On the contrary, such disclosure, which is often necessary to the efficient exploitation of a trade secret, imposes a duty of confidentiality on the part of the person to whom the disclosure is made. But with 200 engineers checking out piece part drawings and making copies of them to work from, and numerous vendors receiving copies of piece part drawings and copying them, tens of thousands of copies of these drawings are floating around outside Rockwell’s vault, and many of these outside the company altogether. Not only did Rockwell not limit copying of those drawings or insist that copies be returned; it did not segregate the piece part drawings from the assembly drawings and institute more secure procedures for the former. So Rockwell could have done more to maintain the confidentiality of its piece part drawings than it did, and we must decide whether its failure to do more was so plain a breach of the obligation of a trade secret owner to make reasonable efforts to maintain secrecy as to justify the entry of summary judgment for the defendants.

The requirement of reasonable efforts has both evidentiary and remedial significance, and this regardless of which of the two different conceptions of trade secret protection prevails. The first and more common merely gives a remedy to a firm deprived of a competitively valuable secret as the result of an independent legal wrong, which might be conversion or other trespass or the breach of an employment contract or of a confidentiality agreement. Under this approach, because the secret must be taken by improper means for the taking to give rise to liability, the only significance of trade secrecy is that it allows the victim of wrongful appropriation to obtain damages based on the competitive value of the information taken. The second conception of trade secrecy, illustrated by *E.I. du Pont de Nemours & Co. v. Christopher* is that “trade secret” picks out a class of socially valuable information that the law should protect even against nontrespassory or other lawful conduct—in *Christopher*, photographing a competitor’s roofless plant from the air while not flying directly overhead and hence not trespassing or committing any other wrong independent of the appropriation of the trade secret itself.

Since, however, the opinion in *Christopher* describes the means used by the defendant as “improper,” which is also the key to liability under the first, more conventional conception of trade secret protection, it is unclear how distinct the two conceptions really are. It is not as if *Christopher* proscribes all efforts to unmask a trade secret. It specifically mentions reverse engineering as a proper means of doing so. This difference in treatment is not explained, but it may rest on the twofold idea that reverse engineering involves the use of technical skills that we want to encourage, and that anyone should have the right to take apart and to study a product that he has bought.

It should be apparent that the two different conceptions of trade secret protection are better described as different emphases. The first emphasizes the desirability of deterring efforts that have as their sole purpose and effect the redistribution of wealth from one firm to another. The second emphasizes the desirability of encouraging inventive activity by protecting its fruits from efforts at appropriation that are, indeed, sterile wealth-redistributive—not productive—activities. The approaches differ, if at all, only in that the second does not limit the class of improper means to those that fit a preexisting pigeonhole in the law of tort or contract or fiduciary duty—and it is by no means clear that the first approach assumes a closed class of wrongful acts, either.

Under the first approach, at least if narrowly interpreted so that it does not merge with the second, the plaintiff must prove that the defendant obtained the plaintiff’s trade secret by a wrongful act, illustrated here by the alleged acts of Fleck and Peloso in removing piece part drawings from Rockwell’s premises without authorization, in

violation of their employment contracts and confidentiality agreements. Rockwell is unable to prove directly that the 100 piece part drawings it got from DEV in discovery were stolen by Fleck and Peloso or obtained by other improper means. But if it can show that the probability that DEV could have obtained them otherwise—that is, without engaging in wrongdoing—is slight, then it will have taken a giant step toward proving what it must prove in order to recover under the first theory of trade secret protection. The greater the precautions that Rockwell took to maintain the secrecy of the piece part drawings, the lower the probability that DEV obtained them properly and the higher the probability that it obtained them through a wrongful act.

Under the second theory of trade secret protection, the owner's precautions still have evidentiary significance, but now primarily as evidence that the secret has real value. For the precise means by which the defendant acquired it is less important under the second theory, though not completely unimportant; remember that even the second theory allows the unmasking of a trade secret by some means, such as reverse engineering. If Rockwell expended only paltry resources on preventing its piece part drawings from falling into the hands of competitors such as DEV, why should the law, whose machinery is far from costless, bother to provide Rockwell with a remedy? The information contained in the drawings cannot have been worth much if Rockwell did not think it worthwhile to make serious efforts to keep the information secret.

The remedial significance of such efforts lies in the fact that if the plaintiff has allowed his trade secret to fall into the public domain, he would enjoy a windfall if permitted to recover damages merely because the defendant took the secret from him, rather than from the public domain as it could have done with impunity. It would be like punishing a person for stealing property that he believes is owned by another but that actually is abandoned property. If it were true, as apparently it is not, that Rockwell had given the piece part drawings at issue to customers, and it had done so without requiring the customers to hold them in confidence, DEV could have obtained the drawings from the customers without committing any wrong. The harm to Rockwell would have been the same as if DEV had stolen the drawings from it, but it would have had no remedy, having parted with its rights to the trade secret. This is true whether the trade secret is regarded as property protected only against wrongdoers or (the logical extreme of the second conception, although no case—not even *Christopher*—has yet embraced it and the patent statute might preempt it) as property protected against the world. In the first case, a defendant is perfectly entitled to obtain the property by lawful conduct if he can, and he can if the property is in the hands of persons who themselves committed no wrong to get it. In the second case the defendant is perfectly entitled to obtain the property if the plaintiff has abandoned it by giving it away without restrictions.

It is easy to understand therefore why the law of trade secrets requires a plaintiff to show that he took reasonable precautions to keep the secret a secret. If analogies are needed, one that springs to mind is the duty of the holder of a trademark to take reasonable efforts to police infringements of his mark, failing which the mark is likely to be deemed abandoned, or to become generic or descriptive (and in either event be unprotectable).

But only in an extreme case can what is a "reasonable" precaution be determined on a motion for summary judgment, because the answer depends on a balancing of costs and benefits that will vary from case to case and so require estimation and measurement by persons knowledgeable in the particular field of endeavor involved. On the one hand, the more the owner of the trade secret spends on preventing the secret from leaking out, the more he demonstrates that the secret has real value deserving of legal protection, that he really was hurt as a result of the misappropriation of it, and that there really was

misappropriation. On the other hand, the more he spends, the higher his costs. The costs can be indirect as well as direct. The more Rockwell restricts access to its drawings, either by its engineers or by the vendors, the harder it will be for either group to do the work expected of it. Suppose Rockwell forbids any copying of its drawings. Then a team of engineers would have to share a single drawing, perhaps by passing it around or by working in the same room, huddled over the drawing. And how would a vendor be able to make a piece part—would Rockwell have to bring all that work in house? Such reconfigurations of patterns of work and production are far from costless; and therefore perfect security is not optimum security.

There are contested factual issues here. Obviously Rockwell took some precautions, both physical (the vault security, the security guards—one of whom apprehended Peloso *in flagrante delicto*) and contractual, to maintain the confidentiality of its piece part drawings. Obviously it could have taken more precautions. But at a cost, and the question is whether the additional benefit in security would have exceeded that cost. We do not suggest that the question can be answered with the same precision with which it can be posed, but neither can we say that no reasonable jury could find that Rockwell had done enough and could then go on to infer misappropriation from a combination of the precautions Rockwell took and DEV's inability to establish the existence of a lawful source of the Rockwell piece part drawings in its possession.

This is an important case because trade secret protection is an important part of intellectual property, a form of property that is of growing importance to the competitiveness of American industry. Patent protection is at once costly and temporary, and therefore cannot be regarded as a perfect substitute. If trade secrets are protected only if their owners take extravagant, productivity-impairing measures to maintain their secrecy, the incentive to invest resources in discovering more efficient methods of production will be reduced, and with it the amount of invention. And given the importance of the case we must record our concern at the brevity of the district court's opinion granting summary judgment (one and a half printed pages). Brevity is the soul of wit, and all that, and the district judge did have the benefit of a magistrate's opinion; but it is vital that commercial litigation not appear to be treated as a stepchild in the federal courts. The future of the nation depends in no small part on the efficiency of industry, and the efficiency of industry depends in no small part on the protection of intellectual property.

The judgment is reversed and the case remanded to the district court for further proceedings consistent with this opinion (including reinstatement of the pendent counts).  
REVERSED AND REMANDED.

### Questions:

- 1.) What are the two views of trade secrecy that Posner outlines? What role does evidence of the adequacy of secrecy play in each one? With which does he agree?
- 2.) "This is true whether the trade secret is regarded as property protected only against wrongdoers or (the logical extreme of the second conception, although no case—not even *Christopher*—has yet embraced it and the patent statute might preempt it) as property protected against the world." Why does Posner think that Federal law would preempt trade secrecy rights if they were treated as property protected against the world? Does the *Bonito Boats* Court agree?

## “Are Trade Secrets ‘Property’?” Why Do You Ask, Pray Tell?

Definitions are part and parcel of the lawyer’s craft, but searching for answers by defining the supposed essence of an activity *in the abstract* leads to sterile, purposeless conceptualism. This general point is illustrated with great clarity in a confused and confusing debate over the question of whether trade secrets are *really* property. The most useful answer comes by first asking “what do you mean by property, and why do you want to know?” When lawyers ask “is this property?” they may mean many things.

- Is this a physical, tangible thing?
- Is this a right protected by a property rule (for example, your right to refuse to sell your modest house to Elon Musk at any price) or a liability rule (for example, the right of the cement company in *Boomer v. Atlantic Cement* to go on causing a nuisance to a neighbor’s property so long as it pays “actual damages”)? If the homeowner in *Boomer* can get an injunction against nuisance, it is a property rule. If he must accept the damages, it is a liability rule.
- Is this a right that is “good against the world” and protected by strict liability—such as the right of the owner of the copyright to sue anyone who copies their work, even in good faith, for damages? This is a characteristic we associate with “property rights.” Or is it a right that goes only against the person who has committed the wrongful act—the initial tortfeasor, or the person who violates the contract or the license?
- Is this a right, which if substantially extinguished by the state, will trigger the protections of the US Constitution against “takings” of property?
- Is it pragmatically *useful* (in terms of analogies, policies, precedents that can be used) to place this legally protected interest in the conceptual box we call “property” or should we instead think about it as part of a set of relationship-based obligations, such as fiduciary duties?

And so on. When posed this way, we can see that the answers to these questions with regard to trade secrecy present a fascinating pattern. Trade secrecy is protected by injunctions as well as damages. Yet it is not a right good against the world, protected by strict liability penalties even against the innocent acquirer. (Indeed, Judge Posner suggested in *Rockwell* that such a right—because of its breadth—would probably be preempted.) Trade secrecy is relational and conduct-based. If I find out your trade secret by reverse engineering and as a result, cause great harm to your profits, I commit no legal wrong. If I “misappropriate” the exact same information, causing the same harm, I violate your trade secret. In other words, the answer to the question “are trade secrets property?” is “It depends. What do you mean and why are you asking?” In fact, you might usefully think of the definitional inquiry as a slightly confused way to pose a different question. Why do we have trade secrecy? For reasons of morality? Efficiency? Innovation? And against what behavior, by individuals, companies and states, *should* we defend it?

***E.I. du Pont de Nemours Powder  
Co. et al. v. Masland et al.***  
244 U.S. 100 (1917)



Mr. Justice HOLMES delivered the opinion of the court.

The case has been considered as presenting a conflict between a right of property

and a right to make a full defence, and it is said that if the disclosure is forbidden to one who denies that there is a trade secret, the merits of his defence are adjudged against him before he has a chance to be heard or to prove his case. We approach the question somewhat differently. The word property as applied to trade-marks and trade secrets is an unanalyzed expression of certain secondary consequences of the primary fact that the law makes some rudimentary requirements of good faith. Whether the plaintiffs have any valuable secret or not the defendant knows the facts, whatever they are, through a special confidence that he accepted. The property may be denied but the confidence cannot be. Therefore the starting point for the present matter is not property or due process of law, but that the defendant stood in confidential relations with the plaintiffs, or one of them. These have given place to hostility, and the first thing to be made sure of is that the defendant shall not fraudulently abuse the trust reposed in him. It is the usual incident of confidential relations. If there is any disadvantage in the fact that he knew the plaintiffs' secrets he must take the burden with the good.

***Ruckelshaus v. Monsanto Co.***

467 U.S. 986 (1984)



Justice BLACKMUN delivered the opinion of the Court.

In this case, we are asked to review a United States District Court's determination that several provisions of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), are unconstitutional. The provisions at issue authorize the Environmental Protection Agency (EPA) to use data submitted by an applicant for registration of a pesticide in evaluating the application of a subsequent applicant, and to disclose publicly some of the submitted data.

This Court never has squarely addressed the applicability of the protections of the Taking Clause of the Fifth Amendment to commercial data of the kind involved in this case. In answering the question now, we are mindful of the basic axiom that “[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 such as state law.”

Monsanto asserts that the health, safety, and environmental data it has submitted to EPA are property under Missouri law, which recognizes trade secrets, as defined in § 757, Comment b, of the Restatement of Torts, as property. . . . And the parties have stipulated that much of the information, research, and test data that Monsanto has submitted under FIFRA to EPA “contains or relates to trade secrets as defined by the Restatement of Torts.”

Because of the intangible nature of a trade secret, the extent of the property right therein is defined by the extent to which the owner of the secret protects his interest from disclosure to others. Information that is public knowledge or that is generally known in an industry cannot be a trade secret. If an individual discloses his trade secret to others who are under no obligation to protect the confidentiality of the information, or otherwise publicly discloses the secret, his property right is extinguished.

Trade secrets have many of the characteristics of more tangible forms of property. A trade secret is assignable. A trade secret can form the res of a trust, and it passes to a trustee in bankruptcy.

Even the manner in which Congress referred to trade secrets in the legislative

history of FIFRA supports the general perception of their property-like nature. In discussing the 1978 amendments to FIFRA, Congress recognized that data developers like Monsanto have a “proprietary interest” in their data. Further, Congress reasoned that submitters of data are “entitled” to “compensation” because they “have legal ownership of the data.” This general perception of trade secrets as property is consonant with a notion of “property” that extends beyond land and tangible goods and includes the products of an individual’s “labour and invention.” 2 W. Blackstone, Commentaries 405; see generally J. Locke, *The Second Treatise of Civil Government*.

Although this Court never has squarely addressed the question whether a person can have a property interest in a trade secret, which is admittedly intangible, the Court has found other kinds of intangible interests to be property for purposes of the Fifth Amendment’s Taking Clause. See, e. g., *Armstrong v. United States* (1960) (materialman’s lien provided for under Maine law protected by Taking Clause); *Louisville Joint Stock Land Bank v. Radford* (1935) (real estate lien protected); *Lynch v. United States* (1934) (valid contracts are property within meaning of the Taking Clause). That intangible property rights protected by state law are deserving of the protection of the Taking Clause has long been implicit in the thinking of this Court.

We therefore hold 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 Clause of the Fifth Amendment.

### Questions:

1.) “The word property as applied to trade-marks and trade secrets is an unanalyzed expression of certain secondary consequences of the primary fact that the law makes some rudimentary requirements of good faith.” What does Holmes mean? How does this relate to his comment in *INS v. AP*? “Property, a creation of law, does not arise from value, although exchangeable—a matter of fact. . . . Property depends upon exclusion by law from interference, and a person is not excluded from using any combination of words merely because someone has used it before, even if it took labor and genius to make it. If a given person is to be prohibited from making the use of words that his neighbors are free to make some other ground must be found.” What ground is Holmes suggesting trade secrecy rests upon?

2.) Do you agree with the Supreme Court’s decision in *Ruckelshaus*? Why? Why not? Note, by the way, that among the other rights the court says are protected from takings of *property*, are valid *contracts*, further proof of the importance of the “what do you mean” question posed at the beginning of this section. (*Ruckelshaus* did not leave the government powerless. The court also held “a voluntary submission of data by an applicant in exchange for the economic advantages of a registration can hardly be called a taking.” In this case, Monsanto had received guarantees of confidentiality.)



**PROBLEM 22-1****TRADE SECRETS, MISAPPROPRIATION & PREEMPTION**

CJ Jones Jr., the legendary and innovative CEO behind the Agora supermarket chain, has pioneered a data-driven approach towards the placement of his stores. Early in his career, he realized that his best performing branches had certain things in common—not the obvious ones like population density or amount of competition but more subtle features. For example, successful stores were no more than  $\frac{3}{4}$  mile from a freeway exit, were no more than 4 minutes from the nearest public school and 6 minutes to the nearest gas station and so on. At first, his insight was more art than science, but over the years—investing millions in data gathering—he refined it into a massive database. All of these statistics were, in time, compiled into the “CJ Index” which Agora internal documents describe as “the crown jewel” of the Agora Empire. The CJ Index is used by Agora to choose where to place branches in new locations. Superior branch placement decisions—together with fine ingredients, excellent customer service and competitive pricing—have enabled Agora to earn profits well above the industry average. The actual algorithm behind the Index is disclosed only to the board and top executive team of Agora, all of whom sign confidentiality agreements. The Index itself, as well as the database on which it relies, is encrypted, marked as “Highly Confidential” and kept on a password-protected computer in a room guarded by security personnel.

Larry Lessig, a hot-shot freelance programmer, was being recruited by Agora for a top executive position. Lessig was interested but bridled when he was told a non-disclosure agreement would be part of the deal. “Is this something that will restrict my ability to work with other supermarket companies in the future?” Lessig asked. “No,” said the Vice President in charge of his recruitment, “It simply covers things proprietary to Agora, like how we use data to place our stores, for example.” Lessig, a deep believer in “open data,” declined the position and did not sign the agreement. Going home, he fired up his laptop, pulled up Google Maps’ “Satellite View” and in half an hour wrote a simple multiple regression program that would scan Google Maps looking for commonalities in the placement of Agora stores. Google Maps makes the location of businesses publicly available—a service Agora is delighted to have, since it sends more customers their way. Lessig’s program looked for statistically significant “clusters” on those maps. When a common feature on the map was found for three or four stores—proximity to a swimming pool, a fire station or a school, for example—the program automatically checked to see if those features explained the placement of a wider number of stores. Lessig set it to run, and headed out to dinner. By the time he got home, the program had identified the common features of the Agora supermarkets. The insight behind the CJ Index was his. Lessig emailed the CEO of Whole Paycheck Stores—a pricy competitor to Agora—and offered to sell “the results of a program I’ve run, analyzing the common features of the legendarily successful Agora stores.” John Mack, the CEO of Whole Paycheck, had long been jealous of Agora’s success and was eager to peddle his kale chips, yoga magazines and quinoa salads to a wider audience. Anything that would increase customer satisfaction sounded good to him. “Is this data completely kosher?” he asked Lessig. “Yes” Lessig replied, “I compiled it from public data drawn from Google Maps.” “Done,” said Mack, sending him a check for \$20,000.

Lessig lives in the State of Confusion, which borders Florida and Georgia.

Confusion has not formally adopted either the Restatement or the UTSA, but its courts have relied on both in prior trade secret cases. In addition, Confusion has a wide-reaching tort of “misappropriation and commercially unfair competition by copying” which aims “to raise the standard of commercial morality in our businesses.” Confusion’s judges have embraced this task with fervor, often using in their decisions the Biblical injunction against “reaping where you have not sown” and the courts have used that tort to supplement trade secrecy.

**Getting wind of Lessig’s activities, Agora has sued Lessig and Whole Paycheck for i.) violation of the DTSA ii.) violations of Confusion state trade secrecy protection and iii.) for “commercially unfair competition by copying.” Agora’s suit asks for damages and for an injunction that would prevent both Lessig and Whole Paycheck from ever using or revealing the patterns in Agora’s store placement. Agora has also invoked the DTSA’s civil seizure provisions, making an *ex parte* application to the court for seizure of Lessig’s computers and his data, before any hearing is held. Discuss the likelihood of success of these causes of action against each plaintiff, including the arguments that might persuade a court either way. Be specific about the language from the DTSA, the Restatement, the UTSA and court decisions on which you are resting your analysis. (We recommend in particular that you look at the requirements for trade secrecy and the varying definitions of a trade secret and of misappropriation. You should also look at the DTSA’s requirements for invoking *ex parte* seizure in § 1836.) In your answer, be sure to discuss whether either of Agora’s state law claims would be preempted by Federal intellectual property law. You would be wise to look back at the *Motorola* and *Theflyonthewall.com* cases as well as the cases in this chapter.**