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ANTITRUST AND TRADE SECRETS: THE U.S. AND THE EU APPROACH

Katarzyna A. Czapracka†

Abstract

This paper examines the divergent approaches to application of antitrust principles to trade secrets in the EU and in the U.S. The U.S. antitrust enforcers recognize the need to protect trade secrets and treat them as a type of intellectual property. By contrast, the European Commission takes the view that trade secrets do not merit the same level of deference as that accorded to intellectual property rights. In Microsoft, the Commission decided that Microsoft's refusal to disclose secret interoperability information to its competitors constituted an abuse of a dominant position because the refusal created an unfair competitive advantage for Microsoft. Moreover, as the recent controversy over the implementation of the Microsoft decision shows, the Commission position is that Microsoft does not have the right to charge royalties or control the secret interoperability information it was forced to disclose, unless such information qualifies for patent protection. The source of these divergent approaches may be the lack of harmonized EU standards of trade secret protection. Whereas U.S. antitrust authorities naturally relied on the harmonized principles of trade secrets law, the EU antitrust enforcers, lacking such uniform standards, have been using competition law to shape substantive trade secret laws. In doing so, they have undermined national trade secret protection measures and thus created a legal environment which may discourage private R&D investment and impede diffusion of technologies.

† JSD, Columbia Law School; associate at White & Case LLP, New York. I am indebted to Professor Petros C. Mavroidis and Professor Harvey J. Golschmid for their comments on this paper. The paper also greatly benefited from the suggestions of Ian S. Forrester, Partner at White & Case LLP, Brussels.
I. INTRODUCTION

The tension at the intersection of intellectual property (IP) and competition law has provided a fertile soil for debate. Yet, little has been said about the application of competition rules to trade secrets. Specific features of trade secrets and their status as a form of IP merit closer consideration, as has become evident after the European Commission decision in the Microsoft case and the litigation that ensued. Should the same standards that apply to compulsory licensing of IP apply to compulsory licensing of trade secrets? If compulsory licensing is ordered, is the owner of the information entitled to royalties? Does the value of the trade secrets at stake or the degree of innovation involved matter when applying antitrust rules to trade secrets? The European Commission faced all these questions in the Microsoft case. The Microsoft decision also illustrates that trade secrets are treated significantly differently by the EU antitrust enforcers than by their U.S. counterparts. This paper is an attempt to systematically compare and assess the application of antitrust rules to trade secrets in the EU and in the U.S. It asserts that trade secrets should be treated as a form of IP for the purpose of applying antitrust laws, as is the case in the U.S., but not so in the EU.

The issue of how trade secrets should be treated for the purpose of applying antitrust laws cannot be considered without examining first the basic questions on the nature and economics of trade secrets, such as how trade secrets are defined, how they differ from IP rights, and why they deserve to be protected. These questions are discussed in the first part of this paper. These general considerations are followed by a brief comparison of the laws governing trade secret protection in Europe and in the U.S. Both in the EU and in the U.S., trade secret protection is a matter of state or national law. However, in the U.S. a number of measures have been taken to create standards of trade secret protection at the federal level. There has been no similar development in the EU.

Both in the U.S. and in the EU, "federal" antitrust rules trump inconsistent state trade secret laws. Yet, whereas the U.S. antitrust


authorities treat trade secrets with the same deference as I.P. rights, the position of EU competition policy makers is that trade secrets do not deserve the same level of protection as IP rights. Moreover, the decisions in which the European Commission applied competition law to trade secrets have shaped the standards of trade secret protection in the European Union. The Commission has adopted a definition of what constitutes protectable know-how, decided what the acceptable means of its exploitation are, asserted that trade secrets are not IP, and that trade secrets do not merit the same level of protection as IP. In doing so, the Commission was predominantly concerned with the need to ensure free competition and less with the need to secure the rights of the companies in their know-how. This process, which effectively led to the establishment of trade secrets standards for the purpose of application of EU competition law, was erratic and marked by decisions that ignored the standards of trade secret protection at the Member States level. As a result, the Commission considerably undermined national trade secret protection measures, which in turn may undermine the incentives to innovate and impede the diffusion of new technologies. Thus, the U.S. approach is preferable.

II. TRADE SECRETS BASICS

A. Trade Secrets Defined

Trade secrets can be broadly defined as confidential information which has commercial value because it is secret. The World Intellectual Property Organization (WIPO) defines trade secrets on its website as “any confidential business information which provides an enterprise a competitive edge” and explains that trade secrets “encompass manufacturing or industrial secrets and commercial secrets.” The World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (“TRIPS Agreement”), which comprehensively addresses the issue of trade secret protection, requires the WTO Member States to protect


“undisclosed information” which (1) is secret in the sense that it is not generally known or readily accessible, (2) has commercial value because it is secret, and (3) has been subject to reasonable steps under the circumstances to keep it secret by the person lawfully in control of the information.5 It is not required that the information is of a technical nature; non-technical information, such as customer lists, sales data, or business strategies, can also be protected as a trade secret. For example, U.S. Courts have held that a recipe for chocolate chip cookies,6 a pesticide formula,7 a scheme for an electronic board game,8 computer hardware design,9 some elements of computer software,10 and information relating to nontechnical aspects of business such as customer lists11 qualify for protection under the trade secret laws.12

The TRIPS Agreement provides that trade secrets are protected against unauthorized disclosure, acquisition, or use that is contrary to honest commercial practices.13 The notion of unauthorized use typically includes such practices as industrial or commercial espionage, breach of contract, and breach of confidence.14 It does not extend to the use of protected information by third parties who obtained it in accordance with honest commercial practices. Still, an

12. See I ROGER M. MILGRIM, MILGRIM ON TRADE SECRETS § 1.09 (2007); JAGER, supra note 9, § 3:9.
13. “A manner contrary to honest commercial practices” is a standard borrowed from Article 10bis of the Paris Convention and defined in note 10 to the TRIPS Agreement as “at least practices such as breach of contract, breach of confidence and inducement to breach, and includes the acquisition of undisclosed information by third parties who knew, or were grossly negligent in failing to know, that such practices were involved in the acquisition.” TRIPS Agreement on Trade-Related Aspects of Intellectual Property Rights, § 7, art. 39, Apr. 15, 1994, available at http://www.wto.org/english/docs_e/legal_e/27-trips_04d_e.htm#3.
14. Id.
element of contractual breach is not a prerequisite for liability. A third party who knowingly acquires the information from someone who had earlier misappropriated it is also liable.\textsuperscript{15} Under the TRIPS Agreement, the obligation to protect trade secrets applies not only to private parties, but also to public authorities dealing with trade secrets, particularly in the context of the proceedings before courts and administrative authorities.\textsuperscript{16} This principle has also been long recognized both in the EU and in the U.S. The European Court of Justice (ECJ) stressed the importance of trade secrets in the context of antitrust procedure and commented that they must be "afforded very special protection."\textsuperscript{17} The U.S. Supreme Court has held that trade secret rights are protected under the Fifth Amendment Taking Clause.\textsuperscript{18}

B. Why Do We Protect Trade Secrets and What Role Do They Play?

The basic economic rationale for protecting trade secrets is akin to that of protecting other forms of IP. Trade secrets provide an economic incentive for private investment in knowledge production by giving the means to exclude others from using that knowledge and thus increasing the expected returns of innovation.\textsuperscript{19} Trade secret

\begin{itemize}
\item \textsuperscript{15} Id.
\item \textsuperscript{16} Id.
\item \textsuperscript{18} See Ruckelshaus v. Monsanto Co., 467 U.S. 986, 1003-04 (1984).
\item \textsuperscript{19} A number of authors have justified the existence of trade secrets in terms of incentives to innovate. See, e.g., Richard A. Epstein, The Constitutional Protection of Trade Secrets Under the Takings Clause, 71 U. CHI. L. REV. 57 (2004); RÉGIS FABRE, LE KNOW-HOW: SA RÉSERVATION EN DROIT COMMUN [KNOW HOW: ITS PROTECTION UNDER COMMON LAW] 9-12 (1976); Gordon L. Doerfer, The Limits on Trade Street Law Imposed by Federal Patent and Antitrust Supremacy, 80 HARV. L. REV. 1432, 1454 (1967) ("As presently developed, however, trade secret law has no such effect: rather, it encourages invention by providing the incentive of gaining and preserving a competitive advantage"); James Pooley & Walter Bratic, The Value of Trade Secrets, MANAGING INTELL. PROP. 66, 69 (Feb. 1999). See also David D. Friedman et al., Some Economics of Trade Secrets Law, 5 J. ECON. PERSP. 61, 64 (1991) (arguing that trade secret is a useful supplement to patent law because it allows inventors to choose between the two regimes an option that gives them the larger return). The same rationale for trade secret protection was given in Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 485-86 (1964) and in DVD Copy Control Ass’n v. Bunner, 75 P.3d 1, 13 (Cal. 2003) ("By creating a limited property right in information, trade secret law ‘acts as an incentive for investment in innovation.’") (citation omitted). An argument that undermines this theory is that trade secret laws do not add to the incentives to innovate because trade secrets are only available for information that could be kept secret. If information can be kept secret through self-help, then owners will spend more money to keep the information secret even in the absence of trade secret law. Thus, trade secret protection does not necessarily confer an opportunity for the owner to charge more than would
protection comes at a cost of restricting the use of information by those who might have benefited from it had it been freely available. Consequently, trade secret protection involves the same fundamental policy choices between favoring innovation and favoring competition as laws protecting other forms of IP. The tradeoff between exclusivity and limiting competition is a function of what information is protected, for how long it is protected, and from what sort of third party conduct it is protected. In this context, it must be noted that to prevail on a trade secret claim, the plaintiff must show that the taking of the secret was improper. Trade secrets are not protected against honest commercial practices such as reverse engineering or independent research and development activities. Reverse engineering is crucial in the context of trade secrets economics, as it considerably limits the scope of exclusivity enjoyed by an owner of a trade secret. It promotes competition in developing new products and constrains market power.\textsuperscript{20} The possibility of reverse engineering may result in duplicative research, but also means that protection of trade secrets, unlike the patent system, does not encourage wasteful R&D races.\textsuperscript{21}

Aside from encouraging innovation, trade secrets also play a role in diffusion of knowledge and commercialization of innovations. Arguably, the ability to enforce rights in confidential information encourages licensing and limits inefficient hoarding of valuable know-how.\textsuperscript{22} In addition, effective remedies against trade secret misappropriation limit wasteful expenditure on measures to secure secrecy and allow organizing production processes in an efficient manner.\textsuperscript{23}

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\textsuperscript{21} See Friedman et al., supra note 19, at 65-66.

\textsuperscript{22} See JAGER, supra note 9, § 1:4.

\textsuperscript{23} See, e.g., E. I. duPont deNemours & Co., Inc. v. Christopher, 431 F.2d 1012, 1016 (5th Cir. 1970) (affording protection to trade secrets prevents wasteful expenditure in trade secret protection); Richard Posner, Trade Secret Misappropriation: A Cost-Benefit Response to the Fourth Amendment Analogy, 106 HARV. L. REV. 461, 472 (1992) ("Although expensive domes or other protections may be the only means of securing Fourth Amendment privacy rights, 'courts do not require extreme and unduly expensive procedures to be taken to protect trade secrets."); Vincent Chiappetta, Myth, Chameleon or Intellectual Property Olympian? A Normative Framework Supporting Trade Secrets Law, 8 GEO. MASON L. REV. 69, 87 (1999) ("Information holders also might reallocate resources from other activities, including research and development to protect existing information").
Another rationale for trade secret protection is the promotion of commercial ethics.\textsuperscript{24} The Unfair Competition Act, the primary legislation which provides for trade secret protection in Germany, is based on a general prohibition of acts that are contrary to good morals in the context of commercial transactions.\textsuperscript{25} Similarly, Irish and English courts used equitable principles to protect confidences.\textsuperscript{26} In the U.S., an often mentioned reason for trade secret protection is the protection of the fundamental right to privacy.\textsuperscript{27} The U.S. Supreme Court in \textit{Bonito Boats, Inc. v. Thunder Craft Boats, Inc.} noted that “a most fundamental human right, that of privacy, is threatened when industrial espionage is condoned or is made profitable.”\textsuperscript{28}

\textbf{C. Trade Secrets and IP Rights}

In some legal systems, such as China, Germany, and Japan, protection of trade secrets forms part of the general concept of protection against unfair competition.\textsuperscript{29} In other legal systems, such as the United Kingdom or Australia, trade secrets are treated as a form of confidential information and protected under the laws of confidentiality.\textsuperscript{30} Trade secret protection has been based on a number of different legal theories: contract, property, fiduciary relationship, and unjust enrichment.\textsuperscript{31} It is unclear whether trade secrets can be characterized as property rights in a manner similar to copyrights or

\begin{footnotesize}

25. Gesetz gegen den unlauteren Wettbewerb [Act Against Unfair Competition], June 7, 1909, RGBl. at 499, last amended July 3, 2004, BGBl. 1 at 1414, § 1. See also Ustawa z dnia 16 kwietnia 1993 r. o zwalczaniu nieuczciwej konkurencji [Polish Act Against Unfair Competition], Official Journal 1993 No 47 item, 211, Art. 3, (defining an act of unfair competition along the same lines).


27. See, e.g., Samuel D. Warren & Louis D. Brandeis, \textit{Right to Privacy}, 4 Harv. L. Rev. 193, 212 (1890); JAGER, supra note 9, § 1:5. See also RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 39, cmt. a (1995).


30. Id.

\end{footnotesize}
Though the TRIPS Agreement lists trade secrets among other forms of IP, it does not choose between different theoretical approaches to trade secret protection. Some commentators view rights in trade secrets as a series of undertakings that bind individuals who have received a trade secret in the course of a confidential relationship. They submit that the duty not to disclose confidential information results from a contractual relationship, such as an employment contract, a license agreement, a joint-venture or a partnership, or it is implied because parties are in a fiduciary relationship. The source of liability is a breach of an explicit or implicit obligation of confidence. Other commentators assert that the protection of trade secrets is best understood in terms of proprietary interests, by reference to the owner’s right to prevent unauthorized use and disclosure of the information. They see trade secrets as a bundle of rights assigned to the owner, who is entitled to using, assigning, or licensing the information that is the subject of her rights. This seems to be a better way to analyze trade secrets, taken that the contractual theory does not explain why trade secrets holders can exercise their rights even in the absence of any contractual

32. In *E. I. Du Pont De Nemours Powder Co. v. Masland*, 244 U.S. 100, 102 (1917), Justice Holmes, writing for the majority of the U.S. Supreme Court, famously remarked:

> The word property as applied to trademarks 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.

In *Ruckelshaus v. Monsanto Co.*, 467 U.S. 986, 1004 n.9 (1984), Justice Blackmun interpreted this statement not as a denial that property interests exist in trade secrets, but as “determination of the existence of that interest irrelevant to resolution of the case” and reminded that in other cases the Court spoke of trade secrets in terms of property interests.

33. Arguably the reference to the information that is “legitimately under the control” of plaintiffs and the fact that trade secrets are listed with other intellectual property rights (IPRs) imply that the TRIPS Agreement adopts the property rights theory. See DESSEMONTET, *supra* note 31, at 246.


relationship between them and the parties using the information. Nor does it explain the criminal liability for trade secret "theft," or the fact that indirect recipients can be held responsible for trade secret misappropriation.

The case for the proprietary theory is stronger in common law jurisdictions. In *Kewanee*, the U.S. Supreme Court compared characteristics and purposes of the law of trade secrets and patent law, reasoning that they are both designed to encourage innovation. In *Ruckelshaus*, the Court held that trade secrets, as intangible property rights, qualified for protection under the Fifth Amendment Taking Clause. Although courts in the United Kingdom and Australia ruled that certain confidential information can constitute property, there is also some authority rejecting proprietary analysis. By contrast, courts in civil law jurisdictions have been reluctant to recognize proprietary interests in trade secrets. For example, French courts have held there are no exclusive rights in confidential information. Similarly, the Italian legal system does not recognize *erga omnes*

36. In the U.S., trade secret theft is a federal crime under the Economic Espionage Act. French, German, and Polish laws criminalize trade secret theft, see infra Part III(B)(2); so do Italian (Art. 513, 623 Codice Penali) and Spanish laws (Section 3 of Chapter XI of the Spanish Criminal Code).


40. See, e.g., *Herbert Morris Ltd. v. Saxelby*, [1916] 1 A.C. 688 (H.L.); *Markwell Bros. Pty. Ltd. v. C.P.N. Diesels Queensland Pty. Ltd.*, (1983) 2 Q.R. 508; *Technography Printed Circuits Ltd. v. Chalwyn Ltd* [1967] F.S.R. 307, 311 (Plowman, J., referring to "the plaintiffs' proprietary interests by way of confidential information for which they are entitled to protection"); *Boardman v. Phipps* [1966] 3 All E.R. 721, 745-46 ("what is called 'know-how' in the commercial sense is property which may be a very valuable asset . . . confidential information acquired in this case, which was capable of being and was turned to account, can properly be regarded as the property of the trust"). See also Paul Kohler & Norman Palmer, *Qualifications upon the Proprietary Analysis, in INTERESTS IN GOODS 6-9* (Norman Palmer & Ewan McKendrick eds., 2d ed. 1998); *John Hull & Sarah Abbott, Property Rights in Secrets -- Douglas v Hello! in the Court of Appeal, 27 EUR. INTELL. PROP. L. REV. 379, 382-83 (2005).


rights in confidential information.⁴³ The civil law concept of a property right is strictly defined: the right exists, in accordance with the principle of numerus clausus, only when it has been created by law.⁴⁴ Thus, trade secrets have been described as "de facto assets" or "incomplete IPRs" or "subjective rights" (subjective Rechte, droit subjectif).⁴⁵ Though the legal theories on which the protection of trade secrets is based may differ, all industrialized countries provide strong protection for trade secrets.

Trade secrets have features which make them different from IP rights. There is no scheme for trade secrets registration or publication. They exist irrespective of their acknowledgment by the State or even broader public. Consequently, information protected as a trade secret is not scrutinized for its originality or innovativeness. Indeed, it is not required that trade secrets meet high standards when it comes to originality or innovativeness. Furthermore, whereas copyrights and patents encourage sharing of the results of creative efforts, trade secret owners need to keep the information secret to benefit from protection. Trade secret protection is somewhat limited in comparison to that afforded by other types of IPRs: they do not afford exclusive rights and are vulnerable to accidental discovery and reverse engineering. Still, all these aspects of trade secrets law are not unique. Copyrights, for example, give no protection against independent creation and they exist without the need to fulfill any formal requirements. The copyright requirement of originality has not been very strict. Trade secrets law is not unique in that it allows reverse engineering. The Semiconductor Chip Protection Act of 1984 sanctions reverse engineering and some degree of copying of protected chip designs.⁴⁶ There is a similar provision in the 1987 EU Directive on the legal protection of topographies of semiconductor

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⁴³ See Giorgio Mondini et al., Italy, in INTERNATIONAL INTELLECTUAL PROPERTY LAW: EUROPEAN JURISDICTIONS, 342 (Dennis Campbell & Susan Cotter eds., 1995).
If earnest creative efforts are involved, the law is not violated. In all these cases, competitors can obtain the benefit of the information through licensing, or, if they choose, through reverse engineering or independent innovation.

Though there are major analogies in the ways trade secrets and patents encourage private innovation and facilitate commercialization of technology, the specific features of trade secrets merit closer consideration. Patents encourage public disclosure, which in turn prevents wasteful duplication of inventive efforts and allows building on prior work. The publication is rewarded by exclusive rights in the protected invention, which enables recouping the cost of its creation. Patents are limited in time; so ultimately, the invention becomes a part of the public domain. Trade secrets have to be kept secret to be protected and can provide potentially infinite protection for confidential information. A patent is granted only after ascertaining that information meets the requisite criteria of novelty and inventiveness; trade secrets exist without the assessment of the innovative value of the information at stake. Thus, a legitimate question is whether encouraging the use of trade secrets undermines the patent system. Yet, rather than contradict the purpose of the patent system, trade secrets supplement it. First, all patentable inventions are trade secrets until the publication of the patent application. Further, secret know-how concerning the implementation of a patented invention is often licensed with patents, which indicates that there is some level of symbiosis between patents and know-how. Second, companies typically employ a combination of trade secret and patent strategies to protect their innovations and maintain a competitive edge. Trade secrets can be used to protect inventions that are not patentable or those in which the length or other conditions of patent protection are inadequate. The costs of preparing a patent application are not insignificant and the process is lengthy. If the expected commercial life of a patentable invention is short, it may not...

48. For a more comprehensive comparison between trade secrets and other intellectual property rights, see Risch, supra note 19, at 11-13.
be worthwhile to obtain a patent.\textsuperscript{51} Third, whereas it takes a while for a patent system to adjust to the pace of innovation, the flexibility of trade secrets makes it possible to use them as "gap fillers" in settings where the formal rights system in IP is underdeveloped.\textsuperscript{52} For example, in the 1960s and 1970s, before it was established that computer programs qualify for protection as "literary works", IT firms viewed trade secrecy as the best means of protecting their software against unauthorized copying.\textsuperscript{53} Trade secrets continue to play an important role in protecting innovations in high-tech industries.\textsuperscript{54} In addition, the fact that trade secret protection arises automatically, as a matter of law, with no costly or lengthy application process, makes it particularly suitable to protect inventions of smaller companies.

III. TRADE SECRET LAWS IN THE U.S. AND IN THE EU

Trade secret cases consistently involve complex policy issues. They require careful balancing between conflicting interests of companies wanting to protect the fruits of their research and

\footnotesize{51. See, e.g., Friedman et al., supra note 19, at 63-64; WILLIAM M. LANDES & RICHARD A. POSNER, THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW 356-59 (2003); Andrew Beckerman-Rodau, The Choice Between Patent Protection and Trade Secret Protection: A Legal and Business Decision, 84 J. PAT. & TRADEMARK OFF. SOC'Y 371, 388-91 (2002). There are other business and legal factors which may support the choice of trade secret protection. If an invention is unlikely to be reversely engineered or independently developed within the lifespan of patent protection, companies may choose to rely on trade secret law. The cost and difficulty of keeping the invention secret, as opposed to the costs of obtaining and policing a patent, must also be taken into the account.

52. JAGER, supra note 9, § 1:1.

53. See JAGER, supra note 9, § 1:2; Bradford L. Smith & Susan O. Mann, Innovation and Intellectual Property Protection in the Software Industry: An Emerging Role for Patents?, 71 U. CHI. L. REV. 241, 243 (2004); Marina Lao, Federalizing Trade Secrets Law in an Information Economy, 59 OHIO ST. L.J. 1633, 1638-49 (1998). The growing importance of trade secrets for information technologies was also endorsed by the IPR Helpdesk sponsored by the European Commission:

Today's business environment has increased the importance of trade secret protection and the development and implementation of information protection practices . . . . [T]rade secrets are rapidly becoming, in some cases, a choice form of intellectual property protection in the information economy. Machinery and mechanisms were the brainchildren of the Industrial Age and patent law was designed to protect these. In the Information Age, trade secret protection is, in some cases, the most attractive, effective and readily available intellectual property right.


innovation, employees wanting to preserve their freedom to take new jobs and use their skills, and society in general, which profits from innovative products and vigorous competition in the marketplace. Unlike other areas of IP law which are based on statutory law, trade secrets remain largely the creature of jurisprudence. What qualifies as a trade secret is only decided in litigation through a comprehensive evaluation of all the relevant factors. Trade secret cases on both sides of the Atlantic are often fact-specific and general principles of trade secret laws are not easy to ascertain. The following section is an attempt to trace these basic principles and provide an overview of the trade secrets laws in the EU and in the United States.

A. Harmonizing Trade Secret Laws in America

Common law of trade secrets developed throughout the nineteenth and the beginning of the twentieth century. In 1837, the Supreme Judicial Court of Massachusetts decided that a contract for sale of a chocolate mill with an “exclusive right and art or secret manner of making chocolate” was enforceable and did not create any illegal restraint of trade. In Peabody v. Norfolk, the same court held that:

One who invents or discovers, and keeps secret, a process of manufacture, whether proper for a patent or not, has a property therein which a court of chancery will protect against one who in violation of contract and breach of confidence undertakes to apply it to his own use or disclose it to third persons.

The basic principles of trade secret law were first codified in the 1939 Restatement of Torts. The Restatement proved to be very influential and its definition of a trade secret has been almost universally cited by courts, including the U.S. Supreme Court. It has remained popular with courts and commentators even after the publication of the second edition of the Restatement of Torts, which

55. See POOLEY & GRAVES, supra note 28, § 1.02.
57. For a historical outlook, see JAGER, supra note 9, §§ 2:1-2:4.
60. See, e.g., 1 JAGER, supra note 9, §§ 3:1-3:2.
61. See, e.g., 1 JAGER, supra note 9, § 3:4; 1 MILGRIM, supra note 12, § 1.01.
no longer contains a section dealing with trade secrets. The Restatement's definition also appears to be influential in Europe. Comment b of section 757 of the Restatement defines trade secrets as:

Any formula, pattern, device or compilation of information which is used in one's business, and which gives him an opportunity to obtain an advantage over competitors who do not know or use it. 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.

A trade secret must be capable of being continuously used in the operation of the business. 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." The invention need not be novel or have any intrinsic value to qualify for protection under trade secret law; it does not need to be patentable. When discussing novelty and prior art, the Restatement concludes:

A trade secret may be a device or process which is patentable; but it need not be that. It may be a device or process which is clearly anticipated in the prior art or one which is merely a mechanical improvement that a good mechanic can make. Novelty and invention are not requisite for a trade secret as they are for patentability.

The Restatement concedes that an exact definition of trade secrets is difficult to discern from common law principles. It then lists factors that are relevant for determining whether given information is a trade secret as follows:

(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

63. See 1 MILGRIM, supra note 12, at § 1.01; 1 JAGER, supra note 9, § 3:2; POOLEY & GRAVES, supra note 28, §2.02. Several states, including New York and Texas, continue to rely on the principles of trade secrets law expressed in the Restatement (First) of Torts and did not adopt the Uniform Trade Secrets Act (UTSA). See 2 JAGER, supra note 9, §§ 50:1 and 61:1.

64. Notably, the EU IPR Helpdesk refers to the Restatement's six factors to identify the type of information that qualifies for protection under trade secret law. See IPR Helpdesk, supra note 53, Section B.

65. RESTATEMENT (FIRST) OF TORTS § 757 cmt. b (1939).

66. Id. Section 759 of the Restatement dealt with business information such as financial data, bids, supplier information, and business plans; this type of information, unlike "real" trade secrets, was protected only from improper procurement by a competitor who thereafter uses or discloses it.

67. RESTATEMENT (FIRST) OF TORTS § 757 cmt. b (1939).

68. Id.
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.  

Courts have not interpreted these conditions very strictly. For example, trade secret protection was afforded to information which could be easily duplicated by others competent in the given field. In one case, the Court of Civil Appeals of Alabama found that a recipe for a mixed drink consisting of Jack Daniel’s whiskey, Triple Sec, sweet and sour mix, and 7-Up constituted a trade secret, even though the plaintiff spent little time, effort, or money in concocting the drink recipe and the testimony of experts in the field of bartending characterized the drink as a member of the Collins family of drinks, of which there are many with essentially the same ingredients. The court concluded that the plaintiff’s ability to combine common elements into a successful drink could be a trade secret entitled to protection. In addition, the plaintiff put much effort into advertising and marketing the beverage, which became the top seller in the plaintiff’s restaurant, comprising about a third of his total sales of alcoholic drinks. The plaintiff took precautions to protect the secrecy of recipe: he revealed it to only a few of his employees, the bartenders, and specifically instructed them not to tell anyone about the recipe. To prevent customers from learning the recipe, the beverage was mixed in the ‘back’ of the restaurant and lounge. The Court reasoned that the fact that the exclusive sale of the drink was of great value to the plaintiff was sufficient to infer that the beverage could also have been valuable to his competitors. The Restatement definition and the factors cited above leave plenty of discretion to courts. As the Fifth Circuit noted, ‘[t]he term ‘trade secret’ is one of

69. Id.
70. See, e.g., Learning Curve Toys, Inc. v. Playwood Toys, Inc., 342 F.3d 714, 723 (7th Cir. 2003).
72. Mason, 518 So. 2d at 130.
73. The plaintiff created the beverage one evening to ease a sore throat. Id. at 133.
74. Id.
75. Id.
76. Id.
77. Id.
78. Id.
the most elusive and difficult concepts in the law to define." In many cases, the existence of a trade secret is decided based on an ad hoc evaluation of all the surrounding circumstances.

In 1979, the Uniform Trade Secrets Act (UTSA) was adopted with the view of clarifying and harmonizing the standards of trade secret protection. So far, the UTSA has been adopted in forty-six states. It defines a trade secret as:

[I]nformation, 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.

The definition is broader than the Restatement of Torts' definition, e.g., it does not mention the condition that the information must be capable of continuous use by the owner in business. The Restatement (Third) of Unfair Competition adopted by the American Law Institute in 1995 was another step to further high and consistent standards for trade secret protection in the U.S. It defines trade secrets as "any information that can be used in the operation of a business or other enterprise and that is sufficiently valuable and secret to afford an actual or potential economic advantage over others." The six factors used to establish the existence of a trade secret contained in the Restatement (First) of Torts are still relevant, but not dispositive for determining the existence of trade secrets.

The adoption of the Restatement (Third) of Unfair Competition coincided with the move towards federalization of trade secrets law.

80. Id. at 289. See also Learning Curve Toys, Inc., 342 F.3d at 723.
81. See POOLEY, supra note 28, § 2.03.
82. See 1 JAGER, supra note 9, § 3:29. The trade secret protection granted in each state may still vary considerably, yet for the purpose of establishing general principles of trade secrets protection in the U.S., the UTSA and the Restatements are sufficient.
84. Consequently, information that has commercial value from a negative viewpoint, for example the results of lengthy and expensive research which proves that a certain process will not work, could be of great value to a competitor. See UNIF. TRADE SECRETS ACT § 1, cmt. 5; 1 MILGRIM, supra note 12, § 1.01(2)(a).
86. See 1 JAGER, supra note 9, § 3:6.
The Economic Espionage Act\(^87\) (EEA), adopted in 1996,\(^88\) established a comprehensive and systematic scheme using criminal sanctions to protect trade secrets at the federal level.\(^89\) Similar to the UTSA, the EEA defines trade secrets as:

[A]ll forms and types of financial, business, scientific, technical, economic, or engineering information, including patterns, plans, compilations, program devices, formulas, design, prototypes, methods, techniques, processes, procedures, programs, or codes, whether tangible or intangible, and whether or how stored, compiled, or memorized physically, electronically, graphically, photographically or in writing if—

(A) The owner thereof has taken reasonable steps 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 by proper means by the public.\(^90\)

Although there are important differences between the UTSA, the Restatement of Unfair Competition, and the EEA, they are all designed to protect information that is 1) valuable information in that it confers some sort of competitive advantage, which 2) derives its value from not being publicly known, and 3) with respect to which

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\(^{89}\) The EEA makes trade secrecy misappropriation a federal offense, punishable by fines up to $5,000,000 and imprisonment up to 10 years. Trade secret theft is defined as knowingly engaging in a trade secret conversion, with an intent to benefit someone other than the trade secret owner and with an intent or knowledge that the information will injure an owner of the trade secret. See 18 U.S.C. § 1832 (2000). Foreign economic espionage, defined as knowing misappropriation of trade secrets by foreign governments and agents or anyone acting on their behalf, is subject to even more severe penalties: up to 15 years imprisonment and up to $10,000,000 fine. The injured parties do not, however, have a federal cause of action for the loss of a trade secret. See 18 U.S.C. § 1831 (2000).

\(^{90}\) 18 U.S.C. § 1839 (2000). Arguably, the EEA extends the definition of trade secrets contained in the UTSA; its references to information in any form, "whether tangible or intangible, and whether or how stored, compiled or memorized . . . " suggest that memorizing a trade secret may be a means of misappropriating it under the EEA.
the holder took reasonable steps to keep it secret. Whereas intellectual property rights (IPRs) are usually limited to a particular type of information, 91 or a particular way information is used or expressed, 92 trade secrets are broadly defined as "information." Technical or non-technical and nonscientific business information, 93 ideas and facts, or a particular way they are expressed all can be protected as trade secrets. There is no review of novelty or non-obviousness, as in the case of patents, or originality, as under copyright law; it suffices that the information gives a demonstrable competitive advantage. 94 The information must not be readily available and it must be specific enough. General skill and knowledge cannot be protected under trade secrets law; 95 readily ascertainable ideas or trivial advances in known formulas or processes are not protectable. 96 These concepts are open-ended and, to some extent, vague. Thus, the determination of what constitutes a trade secret is very fact-specific; it depends upon the nature of the information and the circumstances surrounding its secrecy and the maintenance thereof. 97 In principle, the thresholds are not high. For example, a mixture of commonly-known chemicals will not qualify as a trade secret, yet a special proportion of well-known ingredients might constitute a trade secret. 98 In another case, the Connecticut Supreme Court affirmed the trial court’s finding that essentially the entirety of the plaintiff’s business, its manufacturing process, its source of supply, its economics (including raw material costs and resale prices), and the identity of its customers, was a trade secret. 99 The court concluded that the condition that information

91. Patents protect only inventions in the field of technology.
92. Copyright protection extends only to the particular form in which an idea is expressed; ideas or facts as such are not copyrightable. Trademarks give an exclusive right to use a particular sign for a specified type of good or service; protection does not extend, e.g., to artistic works where trademark is employed.
93. See 1 JAGER, supra note 9, § 3:3.
94. See 1 MILGRIM, supra note 12, §§ 1.03 and 1.08. The information claimed to be a trade secret must also be sufficiently identified. See, e.g., Nilssen v. Motorola, Inc., 963 F. Supp. 664, 672 (N.D. Ill. 1997); Basic Am., Inc. v. Shatila, 992 P.2d 175 (Idaho 1999).
95. See UNIF. TRADE SECRETS ACT § 1(4)(i), (amended 1985), 14 U.L.A 536 (1985); see also 1 MILGRIM, supra note 12, § 5.02.
96. See 1 MILGRIM, supra note 12, § 1.03.
98. See 1 MILGRIM, supra note 12, § 1.09(1)(b).
99. See Elm City Cheese Co., Inc. v. Federico, 752 A.2d 1037, 1053-54 (Conn. 1999). The plaintiff was a small, family run cheese producer and the defendant was a close friend as well as the accountant for the plaintiff. The profitability of the plaintiff’s business depended upon the use of a particular ingredient, which ingredient could not be discerned in the final product, and it was a supplier of an intermediate material to but three customers. The individual
asserted as a trade secret derives independent economic value from not being generally known was satisfied by the internal economics of the plaintiff's business. The fact that the economics and process information yielded a business result which was highly profitable satisfied this standard. The Court of Appeals of Arizona took a different approach in Enterprise Leasing Co. of Phoenix v. Ehmke. The court determined that confidential documents comprising detailed financial data, strategic plans, and methods and approaches of a particular business met the requirement that information protected as a trade secret affords a demonstrable competitive advantage. The court reasoned that value of the information can be inferred if the owner can show that the information confers upon it an economic advantage over others in the industry. The documents at stake in this case provided economic value for the plaintiff because they would allow a competitor to gain an advantage if the documents were discovered in the marketplace.

The single most important requirement is that the information at stake is in fact secret. Matters that are general knowledge in an industry or which were publicly disclosed cannot be protected as trade secrets. The value of the information stems from its secrecy; its use by competitors is likely to lead to the unjust enrichment of the actor or injury of the owner. If the information passes this relatively low threshold, it can be properly considered a trade secret. Secrecy does not need to be absolute. It suffices that it would be difficult or costly for others who could exploit the information to acquire it without defendant, after serving as plaintiff's accountant for many years, began participating directly in the business, first in an independent way and then ultimately as an employee.

100. Id. at 1053.
102. The documents included: (1) year-to-date fiscal activities by branch office; (2) revenue per car for each branch office; (3) number of vehicles per branch office; (4) ancillary sales activities; (5) analysis of each branch office’s productivity; (6) operating plans for the fiscal year; (7) expansion plans; (8) market-by-market break-even points; (9) gross revenue and costs on an area basis; (10) number of rental vehicles per branch office; (11) rental revenue derived from daily rates and ancillary sales; (12) profitability statements on a per unit basis; (13) fleet size; (14) overall profitability; and (15) a 'Customer Service Worksheet.' Id. at 1067 n.1. The documents were quite dated.
103. Id. at 1070 (citing Rivendell Forest Prods. v. Georgia-Pacific Corp., 28 F.3d 1042, 1046 (10th Cir. 1994)).
104. Id.
106. See 1 MILGRIM, supra note 12, § 1.03; 1 JAGER, supra note 9, § 3:2.
107. POOLEY & GRAVES, supra note 28, § 2.03[2][b], [4][c].
resort to wrongful conduct. Both under the UTSA and the Restatement of Unfair Competition, the security precautions taken by the owner of the information to maintain secrecy are of the essence. The UTSA makes the efforts to maintain secrecy a necessary element of a trade secret. The Restatement of Unfair Competition provides that the efforts to maintain secrecy can be evidence of the value of the information and of its actual secrecy.\textsuperscript{108} The security precautions must be reasonable under the circumstances.\textsuperscript{109}

Trade secret protection is limited; only misappropriation or attempted misappropriation is actionable. The owner of a trade secret does not have an exclusive right to possession or use of the secret information.\textsuperscript{110} Trade secret law does not afford protection against independent development and reverse engineering.\textsuperscript{111} It does not create rights against good faith purchasers.\textsuperscript{112} Misappropriation involves unauthorized disclosure or use by third persons who are under the obligation to maintain secrecy or limit use, or acquisition of secret information by improper means.\textsuperscript{113} Only a person who acquires information that she knows or should have known to be a trade secret may be held liable.\textsuperscript{114} It is not the act of discovering someone else's

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\item \textsuperscript{108} See \textsc{Restatement (Third) of Unfair Competition} § 39, cmt. g (1995).
\item \textsuperscript{109} See 1 Milgrim, supra note 12, § 1.04.
\item \textsuperscript{110} See \textsc{Restatement (Third) of Unfair Competition} § 43, cmt. a (1995).
\item \textsuperscript{111} See 1 Jager, supra note 9, §§ 3:11-3:12.
\item \textsuperscript{112} Under the First Restatement of Torts, a person who innocently acquires a trade secret and thereafter learns that the original acquisition was improper is not liable even for subsequent use or disclosure, provided that she acquired the information in good faith and paid value for it or otherwise substantially changed her position before receiving the notice. Lao, supra note 53, at 1660. However, under the UTSA and under the Third Restatement of Unfair Competition, a person who continues to use a trade secret after learning of the initial improper acquisition is still liable, even if she paid value for the secret or otherwise changed her position before she received the notice of improper acquisition. Id.
\item \textsuperscript{113} See \textsc{Uniform Trade Secrets Act} § 1(2)(ii), (amended 1985), 14 U.L.A 536 (1985); \textsc{Restatement (First) of Torts} § 757 (1939); \textsc{Restatement (Third) of Unfair Competition} § 40 (1995).
\item \textsuperscript{114} See \textsc{Restatement (First) of Torts} § 757, cmt. f (1939); \textsc{Restatement (Third) of Unfair Competition} §§ 40 and 43 (1995). The UTSA defines misappropriation of trade secrets as:
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\item 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
\item disclosure or use of a trade secret of another without express or implied consent by a person who
\begin{enumerate}
\item used improper means to acquire knowledge of the trade secret; or
\item at the time of disclosure or use knew or had reason to know that his knowledge of the trade secret was
\end{enumerate}
\end{enumerate}
trade secrets that is unlawful, but only doing so by improper means, such as theft, fraud, misrepresentation, espionage, or other wrongful means. Actionable misappropriation of a trade secret requires proof of conduct that falls below an acceptable level of commercial morality or a violation of some express or implied promise to hold a particular matter in confidence. In *E. I. duPont de Nemours & Co., Inc. v. Christopher*, gathering information by using means that are otherwise lawful – in this case taking pictures from an airplane – was held to be an encroachment on trade secrecy, because the circumstances of the case made the means in which information was obtained unfair and improper. Third parties may be liable for trade secrets misappropriation if they knowingly or negligently obtain confidential information from someone who acquired it or disclosed it unlawfully.

The efforts to harmonize and strengthen protection for trade secrets and the introduction of federal means to prosecute trade secrets theft coincided with the efforts to promote high standards of protection for trade secrets at the international level. Trade secrets provisions largely analogous to those found in the UTSA were included in the North American Free Trade Agreement (NAFTA) and in TRIPS. NAFTA contains a number of provisions intended to bolster and harmonize the domestic IP laws of the U.S., Canada, and

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(1) derived from or through a person who has 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.


115. See *RESTATEMENT (FIRST) OF TORTS* § 757, cmt. f (1939); *RESTATEMENT (THIRD) OF UNFAIR COMPETITION* § 43 (1995). The "wrongful means" are usually prohibited under criminal or tort law; a more difficult question is whether "wrongful means" under trade secrets law could include non-criminal and non-tortious "bad acts." This question was answered in the affirmative in *E. I. duPont deNemours & Co., Inc. v. Christopher*, 431 F.2d 1012 (5th Cir. 1970), but this opinion remains controversial.

116. See, e.g., POOLEY & GRAVES, supra note 28, § 2.03.
117. *E.I. duPont.*, 431 F.2d at 1017.
Mexico, the three contracting countries. The trade secrets provisions are contained in Article 1711, which defines trade secrets in accordance with the basic principles established under U.S. law. Trade secrets are protected against disclosure, use, or acquisition by third persons in a manner contrary to honest commercial practices. Shortly after NAFTA was agreed upon, similar provisions on trade secrets’ protection were also included in the TRIPS Agreement.

There is still much dissatisfaction with the law of trade secrets in the U.S. It has been pointed out that it lacks the systematic approach of federal patent and copyright regimes. Definitions of trade secrets were criticized as insufficient to analyze and decide potential trade secret issues in a consistent and predictable manner. The level of uniformity of trade secrets laws across jurisdictions has also been described as unsatisfactory, and federalization has been called for. Having said that, recent years have been marked by steady development and strengthening of trade secrets law in the U.S. The Restatements and the UTSA largely harmonized the common law of trade secrets. The EEA created criminal sanctions for trade secrets misappropriation at the federal level. The U.S. government has also been effectively promoting trade secrets protection standards at the international arena.


121. 2 MILGRIM, supra note 12, §9.07[4][a].

122. See supra Part II(A).

123. The Restatement (First) of Torts concludes that: “[a]n exact definition of a trade secret is not possible.” RESTATEMENT (FIRST) OF TORTS § 757, cmt. b (1939). The major commentators agree that the there is no good, reliable, and bright-line definition of the term “trade secret.” See, e.g., 1 MILGRIM, supra note 12, § 1.01; 1 JÄGER, supra note 9, at § 2:1; Pooley, supra note 56, at 1181-82. See also Chiappetta, supra note 23, at 80-85.

B. Trade Secrets in the EU: In Search of the Common Principles

1. Harmonization of IP Rights in the EU and Trade Secrets

Differences between national IP laws may constitute barriers to intra-state trade and distort competition. For example, a Member State with extremely strict counterfeiting laws could take action against counterfeiting products coming from a Member State whose laws were less stringent. Thus, harmonization of IP laws throughout the Community was seen as necessary to eliminate barriers to intra-Community trade. Since the mid 1980s, the European Union has taken many legislative initiatives that led to harmonization of trademark law,\textsuperscript{125} industrial designs law,\textsuperscript{126} and major parts of copyrights.\textsuperscript{127} Standards relating to the protection of semiconductors,\textsuperscript{128} software,\textsuperscript{129} databases,\textsuperscript{130} and biotechnological inventions\textsuperscript{131} have been established at the EU level. Unitary IP rights, EU Trade Mark\textsuperscript{132} and EU Design\textsuperscript{133} have been created. A proposal for a regulation establishing a European Patent is currently under consideration.\textsuperscript{134} Harmonization largely contributed to the development of IP laws in Europe, stimulating the debate that resulted in adopting high and progressive IP protection standards. The Database Directive, for example, introduced a 15 year \textit{sui generis} right to protect the contents of a database against improper

Prior to the adoption of the Directive, such a right existed only in Denmark.\(^{136}\)

Though voices advocating harmonization of trade secret laws are not uncommon\(^{137}\), the Community has so far shied away from harmonizing trade secrets law. This is unfortunate. Trade secret cases increasingly implicate many countries, partly because of the growth in the international licensing and partly because proprietary information is often ephemeral and has no set location. The divergent trade secrets laws may create problems in the context of licensing agreements, if some information qualifies for protection in one Member State, but does not in another. This could impede transfer of technology. The discrepancies in national trade secrets laws may also create barriers to trade, for example, when a product which is lawful in one country violates the trade secrets laws of another Member State.

2. An Overview of Selected National Trade Secrets Regimes

Taken there are no EU standards for trade secrets protection, what follows are some general observations about protection of trade secrets in various European jurisdictions to set the field for the discussion of trade secret protection in the EU.

Confidential information is known under many different names in various EU jurisdictions: “know-how”, “trade secret”, “confidential information”, or “businesses secret” are among them. No clear distinction can be made between these notions and they are often used interchangeably.\(^ {138}\) For example, § 17 of the German Unfair Competition Law (UWG)\(^ {139}\) uses the terms Geschäftsgeheimnisse (trade secrets) and Betriebsgeheimnisse (industrial secrets) to describe


\(^{136}\) See Vinje, supra note 134, at 366.

\(^{137}\) See EUROPEAN COMMISSION, ENTERPRISE DIRECTORATE GENERAL, PATENTS AND OPEN SOURCE SOFTWARE: WHAT PUBLIC AUTHORITIES NEED TO KNOW (2005), http://europa.eu.int/idabc/servlets/Doc?id=20675. There seems to be an agreement that trade secrets should be afforded a high level of protection. For example, Turkey was obliged to adopt legislation on protection of know-how information and trade secrets legislation in line with Member States’ legislation, as one of the conditions concerning EU accession. See Council Decision No 1/95, art. 7, 1996 O.J. (L 35) 1 (EC).


secrets of technical nature rather than "know-how", but these terms are effectively interchangeable. Nor is the distinction clear in France, where the terms "savoir-faire" (know-how), "secrets de fabrique" (manufacturing secrets) and "secrets de commerce" (commercial secret) are used.\textsuperscript{140} English courts have been referring to confidential information, trade secrets, and know-how.\textsuperscript{141} In Poland, the terms tajemnica przedsiębiorstwa (trade secret) and know-how are in use. To complicate the situation even more, legal definitions of these terms are scarce and there is little agreement in the doctrine as to their precise meaning.\textsuperscript{142}

Trade secret protection has a long tradition in European civil law jurisdictions. In France, criminal law has been traditionally used to protect trade secrets. While the French criminal code has had provisions dealing with the theft of trade secrets since 1844,\textsuperscript{143} no section of the civil code relates directly to trade secrets. The Code of Industrial Property\textsuperscript{144} does not regulate trade secret protection; it refers solely to exclusive rights and trade secrets are not regarded as such.\textsuperscript{145} At present, the key provision for protection of trade secrets in France is Article L. 152-7\textsuperscript{146} of the Labor Code, under which an employee divulging a manufacturing secret (secret de fabrique) of his employer may be subject to criminal sanctions. This provision does not define manufacturing secrets. It has a rather limited scope of application: only trade secret theft by directors or employees may be sanctioned.\textsuperscript{147} Confidentiality obligations may also be created contractually; French courts have inferred such obligations from the

\textsuperscript{140} See Coleman, supra note 34, at 8-9; 2 Wise, supra note 140, §2.01, §2.03, §2.05 (discussing the difference between these notions).

\textsuperscript{141} See FABRE, supra note 19, at 37-65 (commenting on Article 418 of the Criminal Code, its interpretation and the development of French trade secrets law); Wise, supra note 140, §3.07.


\textsuperscript{143} Article L621-1 of the Industrial Property Code (Code de la propriété industrielle) states that the penalties for misappropriation of trade secrets are provided in Article L152-7 of the Labor Code.


\textsuperscript{145} See Gasmier et al., supra note 42, at 196.
nature of the agreement between the parties. In the absence of an agreement to protect confidentiality, general principles of tort liability may be invoked if a third party uses or divulges secrets communicated in good faith and the disclosure or use of the information would violate the standards of commercial fairness.

The key provisions of the German trade secrets law are embodied in the law of unfair competition (UWG), which was first passed in 1909. In 2004, a new UWG was adopted, which essentially took over the law of trade secrets from the 1909 Act. Under Article 17(1) of the UWG, employees may be subject to criminal liability if they divulge trade secrets for the purpose of competition, personal gain, or with the intent to damage the owner's business. Article 17(2) UWG prohibits using or communicating a trade secret without authorization, if the trade secret has been obtained from an employee subject to liability under 17(1), or in violation of bonos mores, e.g., through larceny, trespass, extortion, trade espionage, or by systematic sounding out of former employees of a competitor. Article 18 criminalizes use or disclosure of confidential designs, models, drawings, technical instructions, etc., without authorization and either for personal gain or for competitive purposes. It applies to third persons who lawfully obtained trade secrets in the course of their business, typically licensees. UWG does not define the notion of a trade secret. Violation of the UWG provisions gives rise to a claim for damages under Sec. 823(2) of the German Civil Code (BGB).

Poland, following the German model, adopted a law against unfair competition which contains provisions on trade secret protection. The first Polish law of unfair competition was passed shortly after Poland became an independent state, in 1926. The new

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148. Id. at 198.
149. Id. at 196-97. For a comprehensive review of the civil law means to protect trade secrets in France, see, e.g., FABRE, supra note 19, at 129-63; WISE, supra note 140, §3.08.
151. Gesetz gegen den unlauteren Wettbewerb. [Act Against Unfair Competition], July 3, 2004 BGBl. I at 1414.. Since the provisions of the Act concerning trade secrets have not been subject to significant changes in comparison with the 1909 Act, the literature on the subject predating the entry into force of the 2004 Act remains authoritative.
152. See Krasser, supra note 50, at 40-45.
153. Ustawa z dnia 2 sierpnia 1926 r. o zwalczaniu nieuczciwej konkurencji [Polish Act Against Unfair Competition of 2 August 1926], Official Journal 1930, No. 56, item. 467. Under Article 10 trade secrets theft was subject to criminal liability.
Act against Unfair Competition,\(^{154}\) adopted in 1993, was seen as a necessary part of the economic and political transition following the fall of the communist regime. Article 11 of the Act provides that passing, disclosing, or using a trade secret, or its acquisition from a third person without authorization, is an act of unfair competition if it endangers or affects the interest of the trade secret holder. Article 11(4) broadly defines a trade secret as undisclosed information of technical, technological or organizational nature, or other type of information having a commercial value, whose owner took steps to keep it secret. Article 18 provides for civil remedies against acts of unfair competition, including injunctive relief and monetary compensation. Article 23 creates criminal sanctions for disclosure or using a trade secret in commerce if it damages the business of the trade secret’s owner. Any person subject to the duty of confidentiality and third persons who obtained information by illegal means may be subject to criminal liability.

The first English cases involving trade secrets date from the beginning of the 19\(^{th}\) century.\(^{155}\) The breach of confidence action is the major tool for trade secret protection. To prove breach of confidence, a plaintiff must show the existence of confidential information, its divulgence in circumstances importing an obligation of confidence, and the subsequent use or disclosure of the information to the plaintiff’s detriment.\(^{156}\) Since no formalities are required to obtain protection, courts decide whether particular information is protectable when a dispute arises. The threshold is not high. In *Saltman Engineering Co., Ltd. v. Campbell Engineering Co., Ltd.*,\(^{157}\) Lord Greene M.R. said that “what makes [the information] confidential is the fact that the maker of the document has used his brain and thus produced a result which can only be produced by somebody who goes through the same process.” In *Douglas v. Hello Ltd.*, the Court of Appeal of England held that equity protects “the opportunity to profit from confidential information about oneself in the same circumstances that it protects the opportunity to profit from

\(^{154}\) Ustawa z dnia 16 kwietnia 1993 r. o zwalczaniu nieuczciwej konkurencji [Polish Act Against Unfair Competition of 16 April 1993], Official Journal 1993 No 47 item. 211.

\(^{155}\) See *Newbery v. James*, (1817) 35 Eng. Rep. 1011 (Ch.); *Yovatt v. Winyard*, (1820) 37 Eng. Rep. 425 (Ch.). For an overview of the historical development of the early English common law relating to trade secrets, see, e.g., I JAGER, supra note 9, §2:2; CORNISH & LLEWELYN, supra note 34, at 304-05.

\(^{156}\) See *Coco v. A.N. Clark (Eng’rs)*, Ltd., [1968] F.S.R. 415 (Ch.). See also CORNISH & LLEWELYN, supra note 34, at 305-27.

confidential information in the nature of a trade secret.

The remedies for a "breach of confidence" include injunctive relief, damages, and third-party liability. However, unlike the continental jurisdictions, English law has not created criminal sanctions for breach of confidence or trade secret theft.

3. A Few Common Principles

Trade secrets laws vary significantly across the EU Member States. For example, unlike other surveyed jurisdictions, Germany and Poland require that a trade secret holder have a justifiable interest to keep the information secret, which is assessed in relation to the relevance of the subject of the secret for the competitiveness of the enterprise. Still, some basic principles as to what constitutes a trade secret may be distilled from German, French, Polish, and English jurisprudence. Protection is afforded to confidential information, which has commercial value, and whose owner takes reasonable measures to keep it secret. The de facto secrecy of information and the owner's continued efforts to maintain this secrecy are the key ingredients of a trade secret. In the absence of secrecy, no claim to the information can be made. If any interested party can learn

160. See KRASSER, supra note 50, at 33. With respect to Polish law, see Ustawa z dnia 16 kwietnia 1993 r. o zwalczaniu nieuczciwej konkurencji [Polish Act Against Unfair Competition], Official Journal 1993 No 47 item 211, Art. 11(1) (referring to "the interests of the entrepreneur" as the legal basis for the requirement).
161. The German Federal Supreme Court (Bundesgerichtshof) ruled that "A trade secret or business secret is any fact in relation to a business which is not apparent but is known to a narrow circle only, and which according to the manifest intention of the owner of the business, based on a sufficient economic interest, is to be kept secret. BGH GRUR 2003, 356, 358 – Präzisionsmessgeräte." Roger M. Milgrim, Commission Proposed Capital Punishment-by Definition-for Trade Secrets, A Uniquely Valuable IP Right, 88 J. PAT. & TRADEMARK OFF. SOC’Y 919, 939 n.83 (2006).
162. In France it is required that trade secrets have a certain degree of originality and/or commercial value and that they are kept secret from competitors, Court of Appeal in Paris, 13 June 1972; Supreme Court (Cour de cassation), 26 June 1973, Ann. 1974-85. Id. at 939 n.83.
163. For a legal definition of trade secrets in Poland, see Ustawa z dnia 16 kwietnia 1993 r. o zwalczaniu nieuczciwej konkurencji [Polish Act Against Unfair Competition], Official Journal 1993 No 47 item 211, Art. 11(4).
164. In England, proprietary information is protected if it is used in a trade or business and the owner must limit the dissemination of it or at least not encourage or permit widespread publication. See Lansing Linde Ltd. v. Kerr [1991], W.L.R. 251.
of the information without a great deal of sacrifice, the matter is public and cannot be considered a trade secret.\(^{165}\) It is also usually required that a trade secret holder has the intention to keep the information secret and takes steps to protect secrecy.\(^{166}\) Secrecy is the source of competitive advantage, and it takes precedence over all other conditions of protection.\(^{167}\) Secrecy alone is not sufficient; there must be a link between secrecy and economic advantage. The value of trade secrets stems from the fact that they are useful for doing business and not generally known; other companies would have to expand considerable sums of money to obtain the protected information. The fact that competitors are trying to obtain the information at stake may constitute *prima facie* evidence of the information's commercial value.\(^{168}\)

There is also an agreement that a trade secret need not to be patentable.\(^{169}\) Although in some jurisdictions there seems to be a requirement that a trade secret is "novel," it is not novelty in the patent sense,\(^{170}\) taken that often a combination of known components in a novel and attractive way suffices for obtaining protection.\(^{171}\)

165. *See* IPR Helpdesk, *supra* note 53, Section C:

A substantial element of secrecy must exist. Information generally known to the public or inside a particular industry is not typically afforded trade secret protection. While secrecy need not to be absolute, it must be sufficient to confer actual or potential economic advantage on one who possesses the information. Thus the requirement of secrecy is satisfied if it would be difficult or costly for others to acquire and exploit the information without resorting to some form of wrongful conduct.

*See also* Krasset, *supra* note 50, at 33-34.

166. *See* IPR Helpdesk, *supra* note 53, Section B ("the de facto secrecy of information and the owner's continued efforts to maintain this secrecy are the key ingredients of a trade secret").


170. *See* CORS\_N\_ISH & LLEWELYN, *supra* note 34, at 300-02 (discussing the relation of confidence to patents in English Law); 2 Wise, *supra* note 140, §2.02 (commenting on English Law).

IV. ANTITRUST AND TRADE SECRETS

The policy underlying trade secrets is to encourage development of new ideas by rewarding inventors and innovators with some measure of exclusivity over their inventions. Antitrust law is designed to promote free competition and ensure unfettered flow of ideas in the public domain. The problems created by the existence of trade secrets are similar to those resulting from the existence of other forms of IP. Yet, differences between other forms of IP and trade secrets merit consideration. First, the scope of rights enjoyed by a trade secret holder is usually such that it generally does not confer significant market power or restrict competition. A trade secret holder cannot restrain independent development or even reverse engineering; he does not enjoy the exclusivity given to a patentee. Thus, in principle, trade secrets contribute less to creation or maintenance of market power than other forms of IP. In the U.S., unlike in the EU, these differences resulted in less vigorous application of antitrust rules to trade secret transactions than to transactions involving patents. In the EU, antitrust enforcers do not seem to have addressed these issues.

Licensing of trade secrets (or know-how), just as patent licensing, is generally pro-competitive; it allows dissemination of technology and its fuller exploitation. Typically, a know-how license allows the licensee to enter a new market. In the case of a patent, the use of a licensed technology by third parties could be enjoined by the courts. A know-how license may save time and money involved in reverse engineering or independent R&D by avoiding duplicative research. But the license can also be a mere sham to cover price fixing or territory sharing between competitors. In that case, consumers do not obtain the benefits of disseminating technology and competition is unreasonably restrained.

With respect to monopolization, the main source of controversy is interoperability standards that are kept secret, sometimes, in addition to being protected by other forms of IP. A company enjoying a dominant position in a relevant market can effectively limit competition in a neighboring market by refusing to disclose the interoperability standards. Interoperability standards often qualify for

172. See 1 JAGER, supra note 9, § 1:4.
173. See 3 MILGRIM, supra note 12, § 10.01(1)(a)(ii) and (c)(ii).
174. See 2 JAGER, supra note 9, § 11:2.
175. The Ninth Circuit pointed out the pro-competitive effects of know-how licensing in A. & E. Plastik Pak Co., Inc. v. Monsanto Co., 396 F.2d 710, 714-15 (9th Cir. 1968).
protection under trade secret laws; they may also be covered by patents, copyrights, or other forms of IPRs. Should a monopolist be obliged to publish information on its innovations and new products before they reach the market? Can a monopolist change the product or product interfaces in a way that increases the costs of rivals operating in neighboring markets? As it will be seen, the European and U.S. antitrust enforcers addressed these issues quite differently.

A. U.S. Antitrust Law and Trade Secrets

Claims based on restraint of trade were made in the first U.S. reported case involving trade secrets: the 1837 Supreme Judicial Court of Massachusetts decision in *Vickery v. Welch*.\(^\text{176}\) The principal question of law was whether an agreement whereby the seller of a chocolate mill who conveyed a secret method of making chocolate on the buyer and agreed not to use the secret method himself was in restraint of trade. The court reasoned that the agreement was not an illegal restraint of trade because it was "of no consequence to the public whether the secret art be used by" the seller or the buyer of the mill.\(^\text{177}\) Perhaps more convincingly, holding that confidentiality clauses were not illegal restraints of trade, the U.S. Court of Appeals for the Sixth Circuit reasoned that since the public has "no right to compel publication", it "loses no right by respecting a restricted disclosure."\(^\text{178}\)

American courts felt that there was no ground to interfere with the parties' decision as to the duration of the agreement and an obligation to pay royalties. An obligation to pay royalties even after the licensed know-how ceases to be secret is valid and can potentially last forever.\(^\text{179}\) Thus, unlike patent or copyright licenses, which are strictly limited to the duration of the term of protection, a trade secret license is not subject to any time limitation. In *Warner-Lambert*,\(^\text{180}\)

\(^{176}\) Vickery v. Welch, 36 Mass. 523 (1837). *See also* Jager, *supra* note 9, § 2:3.

\(^{177}\) Vickery, 36 Mass. at 527. This does not really address the real question, as if there was no restraint, that the secret method of making chocolate could be used by both the seller and the buyer of the mill.

\(^{178}\) John D. Park & Sons Co. v. Hartman, 153 F. 24, 30 (6th Cir. 1907).


\(^{180}\) The case concerned a license agreement for the formula of Listerine (antiseptic mouthwash) concluded in 1891. The licensee had paid the licensor over $22 million over 75 years; thereafter the licensee challenged the contract as invalid. The agreement was attacked on the ground that it lacked any future consideration, because the secret formula was disclosed in a 1931 Journal of American Medical Society and in the course if an FTC action against the
the court explicitly rejected the argument that the antitrust ban on royalty payments that go beyond the life of a patent or copyright should be extended to know-how licenses.\textsuperscript{181} In the case of licenses covering both patents and trade secrets, the payment of license fees for expired patents is banned, but the royalties for the use of know-how can continue beyond the life of the licensed patent.\textsuperscript{182}

The limited exclusionary effect of trade secrets was a significant factor in the antitrust assessment of restrictions in trade secret licenses.\textsuperscript{183} To be sure, American courts did not ignore competitive concerns resulting from trade secret exploitation. A trade secret license that is merely a sham to restrain competition violates antitrust laws.\textsuperscript{184} Contractual and licensing rights of a trade secret owner are subject to antitrust laws. Licensing restrictions are legal as long as they have a valid business purpose, such as the granting of a right to use a bona fide trade secret. In \textit{Dr. Miles Medical Co. v. John D. Park \& Sons Co.},\textsuperscript{185} the principal issue was whether the owner of a secret medicine formula was entitled to control the prices of products made by a secret process at a wholesale or retail level. Dr. Miles, a manufacturer of trademarked medicines prepared in accordance with secret formulas, entered into numerous distribution agreements with wholesalers and retailers, which prohibited resale to unauthorized dealers and set minimum resale prices. John D. Park \& Sons, a wholesale drug concern, which was not a party to Dr. Miles' distribution network, obtained the medicines from authorized distributors and sold it at cut prices. Dr. Miles brought suit against the wholesaler for wrongful interference with a contract. The defendant licensee. The court upheld the validity of the contract reasoning that if the parties wished to terminate the royalty payments upon the disclosure of the secret formula they could have provided so in the agreement. The court distinguished the case before it from those concerning patents or copyrights licenses, on the ground that the latter involve exclusive rights that are limited in time and granted in exchange for publication of the information at stake.


\textsuperscript{182} See, e.g., Brulotte v. Thys Co., 379 U.S. 29, 32 (1964) (regardless of state contract law, a licensing agreement that extends a patent's monopoly beyond the life of the patent involved is a \textit{per se} violation of federal patent law); Pitney Bowes, Inc. v. Mestre, 701 F.2d 1365 (11th Cir. 1983). See also 2 JAGER, supra note 9, § 11:7; 3 MILGRIM, supra note 12, § 10.01(2)(a)(ii)[B].

\textsuperscript{183} See generally 2 WILLIAM C. HOLMES, INTELLECTUAL PROPERTY AND ANTITRUST LAW § 28.1 (2007); 3 MILGRIM, supra note 12, § 10.01(1)(a)(ii).

\textsuperscript{184} See, e.g., A. \& E. Plastik Pak Co., Inc. v. Monsanto Co., 396 F.2d 710, 715 (9th Cir. 1968); CVD, Inc. v. Raytheon Co., 769 F.2d 842, 851 (1st Cir. 1985); Boeing Co. v. Sierracin Corp., 738 F.3d 665, 677 (Wash. 1987).

\textsuperscript{185} Dr. Miles Medical Co. v. John D. Park \& Sons Co., 220 U.S. 373 (1911). For an in-depth discussion of the case, see 8 PHILIP E. AREEDA \& HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION § 1620 (2d ed. 2002).
counterclaimed that the price and customer resale restrictions violated the Sherman Act. In response, Dr. Miles argued that the restrictions were legal since they related to "proprietary medicines manufactured under a secret process." The U.S. Supreme Court rejected the argument that trade restraints were valid because they related to medicines manufactured under a secret process. The restraints at stake in this case concerned the sales of the manufactured product and not the secret manufacturing process. They were not designed to protect good will or Dr. Miles' right to exploit the secret manufacturing process. A restraint of trade which would be unlawful if applied to other manufactured articles cannot be justified because the article in question is a proprietary medicine made under a secret formula. Since Dr. Miles, the Court has consistently condemned resale price maintenance as *per se* unlawful. The Court upheld, however, other restrictions in Dr. Miles' agreements, in particular those concerning confidentiality obligations and territorial restraints.

In principle, antitrust analysis of other types of restraints in trade secret licenses does not differ from those found in patent licenses. Both the 1988 Antitrust Enforcement Guidelines for International Operations and the 1995 IP Licensing Guidelines provide that all forms of IP, including patents, copyrights, and trade secrets, are essentially comparable to other forms of tangible or intangible property. The IP Licensing Guidelines add that the governing antitrust principles are the same regardless of the type of IP regime at stake. Also, prior to the adoption of the IP Licensing Guidelines, the agencies treated restrictions in trade secret licenses just as those in

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186. *Dr. Miles Medical*, 220 U.S. at 400.
187. *Id.* at 402.
188. *Id.* at 407.
189. *Id.* at 403-04.
191. *Dr. Miles Medical*, 220 U.S. at 402.
194. The Agencies note that there are "clear and important differences in the purpose, extent, and duration of protection provided under the intellectual property regimes of patent, copyright, and trade secret", and that these differences "are taken into account in evaluating specific market circumstances in which transactions occur." *Id.*
The equal treatment of patent licenses and know-how licenses makes sense because the economics of such licenses are essentially the same. A trade secret license, just like a patent license, is a transfer of valuable technology allowing for its efficient exploitation. In addition, the licensed technology is often a bundle of patents and secret know-how. In such situations, application of different antitrust standards to patents and trade secrets could impede the transfer of technology.

Back in the 1970s, U.S. antitrust enforcers considered a number of licensing practices to be per se illegal without regard to economic effect. The list of prohibited licensing practices, known as the Nine No-No’s, was later abandoned for a more economics-based and flexible approach. Today, U.S. antitrust enforcers perceive IP licensing as generally welfare-enhancing and pro-competitive. Application of the per se rule in the context of licensing restraints is limited. The antitrust analysis of licensing restraints focuses on whether an IP licensing agreement inhibited competition that would have been present but for the license. Non-price restraints are rarely challenged as anticompetitive, and there has also been some

195. See 3 MILGRIM, supra note 12, §10.01(1)(c)(ii). The Department of Justice took the view that restrictions in trade secret licenses cannot be greater than those permitted in the patent context. This premise was based on the presumption that since trade secrets were not congressionally conferred, in no event could a trade secret holder enjoy greater licensing privileges than a patentee. Id.

196. Though unlike in the case of patents the value of the technology at stake is not confirmed by the Patent Office, the commercial value of a trade secret can be inferred from the fact that the licensee is willing to pay for the access to the licensed trade secrets.

197. See Bruce B. Wilson, Remarks before the Michigan State Bar Antitrust Law Section and the Patent Trademark and Copyright Law Section in Detroit (Sept. 21, 1972), in CCH TRADE REGULATION REPORTER: TRANSFER BINDER CURRENT COMMENT 1969-1983 ¶ 50,146 (Commerce Clearing House, Inc., 12th ed. 1983) (1972). The list of prohibited practices included: royalties not reasonably related to sales of the patented product; restraints on licensee’s commerce outside the scope of the patent (tie-outs); tying of unpatented supplies; mandatory package licensing; exclusive grant-backs; licensee’s veto power over grants of further licenses; restraints on sale of unpatented products made with a patented process; resale price maintenance and post-sale restraints on resale. For economic assessment of the “Nine No-No’s” and history of IP and antitrust intersection, see, e.g., Richard Gilbert & Carl Shapiro, Antitrust Issues in the Licensing of Intellectual Property: The Nine No-No’s Meet the Nineties, 1997 BROOKINGS PAPERS ON ECON. ACTIVITY. MICROECONOMICS 283 (1997); ABA SECTION OF ANTITRUST LAW, THE FEDERAL ANTITRUST GUIDELINES FOR THE LICENSING OF INTELLECTUAL PROPERTY: ORIGINS AND APPLICATIONS (2d ed. 2002).


199. See 1 HOVENKAMP ET AL., supra note 190, § 24.3a.
relaxation of price restraints.\textsuperscript{200} Just like a patent owner, a trade secret holder is entitled to license his invention in all fields of use or in limited areas.\textsuperscript{201} Territorial restrictions in trade secrets licenses are also considered valid,\textsuperscript{202} as long as they do not amount to naked market division among competitors.\textsuperscript{203} Grant-backs are assessed under the rule of reason;\textsuperscript{204} non-exclusive grant-backs are deemed pro-competitive.\textsuperscript{205} Tying arrangements, package licensing, and exclusive dealing give rise to antitrust liability in limited circumstances.\textsuperscript{206} Horizontal restraints are subject to greater antitrust scrutiny, as there is a fear that they may lead to cartel-like arrangements.\textsuperscript{207} In particular, patent pools and cross-licenses may give rise to serious competitive concerns, e.g., when two or more patentees-manufacturers use such arrangements to limit their output or fix prices.\textsuperscript{208}

All in all, trade secrets were essentially treated as other forms of IP rights for the purpose of applying §1 of the Sherman Act. If

\begin{footnotes}
\textsuperscript{200} For example, the DOJ and the FTC recently filed a joint amicus brief in \textit{Leegin Creative Leather Prods. Inc. v. PSKS, Inc.}, 127 S. Ct. 2705 (2007), arguing essentially that \textit{Dr. Miles} should be overruled as irreconcilable with modern antitrust policy. Brief for the United States as Amici Curiae Supporting Petitioner, \textit{Leegin Creative Leather Prods. Inc. v. PSKS, Inc.}, 127 S. Ct. 2705 (2007) (No. 06-480).

\textsuperscript{201} See, e.g., \textit{A. & E. Plastik Pak Co., Inc. v. Monsanto Co.}, 396 F.2d 710, 714-15 (9th Cir. 1968); \textit{Susser v. Carvel Corp.}, 332 F.2d 505 (2d Cir. 1964).

\textsuperscript{202} The U.S. Supreme Court confirmed the legality of territorial restrictions in \textit{Dr. Miles}. \textit{Dr. Miles Medical Co. v. John D. Parks & Sons Co.}, 220 U.S. 373 (1911). See also \textit{Shin Nippon Koki Co. v. Irvin Indus., Inc.}, 1975 WL 15505, at *3 (N.Y. Sup. Ct. May 23, 1975) (territorial restrictions are valid as long as they are reasonably related to licenses of know-how); IP Licensing Guidelines, supra note 193, §§ 2.3 and 5.1.

\textsuperscript{203} See 2 \textsc{Hovenkamp et al.}, supra note 190, § 33.3.


\textsuperscript{205} See \textit{Shin Nippon Koki Co.}, 1975 WL 15505 at *3; \textit{Santa Fe-Pomeroy, Inc. v. P & Z Co., Inc.}, 569 F.2d 1084, 1101-02 (9th Cir. 1978). See also 1 \textsc{Hovenkamp et al.}, supra note 190, § 25.2 (2002); 2 \textsc{Holmes}, supra note 183, §29.3.

\textsuperscript{206} See IP Licensing Guidelines, supra note 193, §§ 5.3-5.4. Tying may be \textit{per se} illegal if the party imposing the tie has market power in the market for the tying product to appreciably restrict competition in the market for the tied product and more than an insubstantial amount of trade of the tied product is affected by the tie. See also 2 \textsc{Holmes}, supra note 183, §§ 28.2-29.2; 1 \textsc{Hovenkamp et al.}, supra note 190, §§ 24.3b-24.4.

\textsuperscript{207} In applying the rule of reason to horizontal license arrangements, the Agencies consider whether the restraints increase the risk of price co-ordination, output restriction, or the creation of market power. See IP Licensing Guidelines, supra note 193, §§ 3.3 and 5.1; see also 2 \textsc{Hovenkamp et al.}, supra note 190 §§ 30.1-30.5.

\textsuperscript{208} See, e.g., \textit{Hartford-Empire Co. v. U.S.}, 323 U.S. 386 (1945); \textit{Am. Equip. Co. v. Tuthill Bldg. Material Co.}, 69 F.2d 406 (7th Cir. 1934). See also 2 \textsc{Hovenkamp et al.}, supra note 190, §§ 32.1-32.3 and 34.3(discussing anticompetitive and pro-competitive effects of patent pools and cross-licensing).
\end{footnotes}
anything, there are grounds to assert that trade secrets have been treated more benign than other forms of IP. Unlike patents or copyrights,\textsuperscript{209} trade secrets have never been presumed to create market power.\textsuperscript{210} This has had a significant impact on the assessment of tying arrangements in trade secret licenses.\textsuperscript{211} Territorial restraints with respect to trade secret rights were ruled legal in \textit{Dr. Miles}. In the 1970s, the Department of Justice recognized that a trade secret licensor may be able to restrict sales of an unpatented product for reasonable periods, even if the same restrictions were considered illegal in patent licenses.\textsuperscript{212} As it has been mentioned above, contractual clauses extending the duration of royalties payments after the information protected as a trade secret became publicly available were upheld by courts, whereas clauses extending royalty payments beyond life of a patent in license agreements were held to be an illegal extension of patent monopoly and a violation of antitrust laws.

The right of the owner to assert and defend her trade secret in court has been recognized in the \textit{CVD} case.\textsuperscript{213} Enforcement of trade secrets, however, may amount to monopolization if trade secrets are asserted in bad faith, with the knowledge that a trade secret does not exist or that the rights have not been violated.\textsuperscript{214} Other elements of monopolization, such as market power in the relevant market, must also be established to succeed on the monopolization claim.\textsuperscript{215} The non-disclosure of trade secrets accompanying patent claims was held

\textsuperscript{209} See, e.g., U.S. v. Paramount Pictures, Inc., 334 U.S. 131 (1948) (presumption that copyrights confer market power); U.S. v. Loew's, Inc., 371 U.S. 38, 45 (1962) ("The requisite economic power is presumed when the tying product is patented or copyrighted"); Int'l Salt Co., Inc. v. U.S., 332 U.S. 392 (1947) (presumption that patents confer market power); U.S. v. Times-Picayune Pub. Co., 345 U.S. 594, 608 (1953) (patents confer monopolistic, albeit lawful, market control). In \textit{Jefferson Parish Hosp. Dist. No. 2 v. Hyde}, 466 U.S. 2, 16 (1984), the U.S. Supreme Court confirmed the presumption in dicta, whereas the concurring Justices concluded that there should be no such presumption. \textit{Id.} at 38 n.7. Finally, in \textit{Ill. Tool Works Inc. v. Indep. Ink, Inc.}, 547 U.S. 28, 45-46 (2006), the Court unanimously ruled that the fact that a tying product is patented does not support the presumption of market power in a patented product.

\textsuperscript{210} See \textit{In re Data Gen. Corp. Antitrust Litig.}, 490 F. Supp. 1089, 1113-14 (N.D. Cal. 1980) ("[It has never been held that trade secrets protection is sufficient to create a presumption of economic power"); 3 P.M., Inc. v. Basic Four Corp., 591 F. Supp. 1350, 1359 (E.D. Mich. 1984) (same); see also 2 JAGER, supra note 9, § 11:10.

\textsuperscript{211} There have been only a few cases where the question of the legality of using a trade secret as the tying product was raised. See 2 JAGER, supra note 9, § 11:10.

\textsuperscript{212} See 3 MILGRIM, supra note 12, § 10.01(1)(c)(ii).

\textsuperscript{213} CVD, Inc. v. Raytheon Co., 769 F.2d 842, 850 (1st Cir. 1985).


\textsuperscript{215} See CVD, 769 F.2d at 851; Colt II, 766 F. Supp. at 688.
not to constitute monopolization in *Christianson v. Colt.*\(^{216}\) In this case, the U.S. Court of Appeals for the Seventh Circuit reversed the district court holding that Colt’s insufficient disclosure of information concerning a finished rifle in the patent applications for the rifle’s parts allowed it to retain monopoly over the rifle that extended beyond the life of the patents. The Seventh Circuit pointed out that while information at stake might have been valuable for Colt’s rivals, patent law did not oblige Colt to disclose it, as it was not within the scope of the invention claimed in the patent application. Thus, the summary judgment on antitrust claims could not stand.\(^{217}\) On remand, Christianson argued that Colt’s trade secrets were impossible to reverse engineer, thus allowing Colt to perpetuate a commercial monopoly previously protected by a patent. The district court rejected this claim, holding that neither the federal patent regime nor antitrust law mandate striking down trade secrets simply because they are difficult to reverse engineer.\(^{218}\)

The use of a trade secret to obtain a competitive advantage, even by a company enjoying monopoly power, does not violate antitrust laws. In a series of cases decided in the late 1970s, American courts rejected the argument that a monopolist should be forced to pre-disclose its new products to facilitate competition in an ancillary market. The problem first arose in the context of changes in IBM’s policies in response to increasing competition from “plug-compatible” manufacturers.\(^{219}\) IBM began bundling peripheral equipment control functions into mainframe hardware and changed from a full disclosure policy to keeping operating system software source code secret, as well as limiting and delaying interface disclosures. This strategy was challenged both by antitrust authorities and by IBM’s competitors in private litigation.\(^{220}\) The claim that antitrust laws mandated IBM to disclose its technological changes to

\(^{216}\) *Christianson v. Colt Indus. Operating Corp.*, 870 F.2d 1292 (7th Cir. 1989) [hereinafter Colt I].

\(^{217}\) *Colt I*, 870 F.2d at 1303. For a discussion of the case, see, e.g., 2 HOLMES, *supra* note 183, § 11.4; 2 JAGER, *supra* note 9, §§ 10:2 and 11:11.

\(^{218}\) *Colt II*, 766 F.Supp at 690.

\(^{219}\) In the late 1960s and early 1970s, IBM was a dominant manufacturer of computers in the United States, but its market shares plummeted due to increased competition from peripheral equipment (tape storage drives, disc drives, and add-on memory units that plugged into the standard interfaces used on IBM System 360 and then System 370 mainframes) manufacturers. IBM also faced competition from mainframe producers whose computers could be used interchangeably with IBM computers and were cheaper.

\(^{220}\) For an overview of the IBM cases, see 3 AREEDA & HOVENKAMP, *supra* note 185, § 616.
its rivals in advance of general release, so that they can make their products compatible with IBM was firmly rejected; IBM was under no duty to help its rivals survive or expand. IBM’s behavior did not completely foreclose rivals since they successfully reverse-engineered IBM’s products. Notably, the courts reasoned that depriving IBM of its lead time would remove its incentive to invent.\textsuperscript{221} The same considerations were important in cases involving compulsory licensing of IP rights.\textsuperscript{222}

In \textit{Berkey Photo},\textsuperscript{223} the U.S. Court of Appeals for the Second Circuit further elaborated on antitrust assessment of a refusal to pre-disclosure of secret information about new products and strategic product integration. The case focused on Kodak’s simultaneous launch of a “Pocket Instamatic” camera and a film in a new format, developed specifically to match the camera. Kodak’s strategy precluded competitors in the film or camera markets from offering substitute films and cameras, giving Kodak a valuable lead-time advantage. Berkey, one of Kodak’s competitors, alleged that Kodak’s failure to disclose information on its new offerings amounted to an illegal monopolization or attempted monopolization of amateur camera and film markets. Since Kodak was in a position to set industry standards, rivals could not compete effectively without offering products similar to Kodak’s.\textsuperscript{224} The refusal to pre-disclose information on Kodak’s new product allowed it to foster its monopoly power and reap profits from its innovations.\textsuperscript{225} This strategy gave Kodak illegitimate advantage in the camera market and foreclosed its rivals from a substantial part of the market, until they were able to produce cameras compatible with the new film format.\textsuperscript{226} The court agreed that Kodak’s control of the film and camera market reached the level of a monopoly.\textsuperscript{227} It also held that leveraging monopoly power to gain advantage in a neighboring market is illegal, regardless

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\footnotetext{223. Berkey Photo, Inc. v. Eastman Kodak Co., 603 F.2d 263 (2d Cir. 1979).}
\footnotetext{224. \textit{Id.} at 279.}
\footnotetext{225. \textit{Id.}}
\footnotetext{226. \textit{Id.} at 279-80 and 282.}
\footnotetext{227. \textit{Id.} at 273.}
\end{footnotes}
of whether a monopolist is close to gaining control of the neighboring
market.\footnote[228]{Id. at 276. This conclusion is no longer valid taken the U.S. Supreme Court's ruling in \textit{Spectrum Sports v. McQuillian}, 506 U.S. 447, 459 (1993) ("§ 2 [of the Sherman Act] makes the conduct of a single firm unlawful only when it actually monopolizes or dangerously threatens to do so").} Yet, the claim that the lack of pre-disclosure of secret information on new products violated §2 of the Sherman Act failed to convince the court. The court asserted that a duty to pre-disclose information on new products cannot be imposed simply because a monopolist is present also in an ancillary market.\footnote[229]{\textit{Berkey Photo}, 603 F.2d at 276.} Preservation of the incentives to innovate was central for the Court's reasoning:

It is the possibility of success in the marketplace, attributable to superior performance, that provides the incentives on which the proper functioning of our competitive economy rests. If a firm that has engaged in the risks and expenses of research and development were required in all circumstances to share with its rivals the benefits of those endeavors, this incentive would very likely be vitiates.\footnote[230]{\textit{Id.} at 281.}

Thus:

Withholding from others advance knowledge of one's new products, therefore, ordinarily constitutes valid competitive conduct. Because, as we have already indicated, a monopolist is permitted, and indeed encouraged, by § 2 to compete aggressively on the merits, any success that it may achieve through "the process of invention and innovation" is clearly tolerated by the antitrust laws.\footnote[231]{\textit{Id.} at 282-83.}

Since both the camera and the new film format were substantial innovations, the changing of the format was legitimate\footnote[232]{\textit{Id.} at 281.} and Kodak's monopoly power and its ability to set \textit{de facto} industry standards did not create a duty to pre-disclose its new products to competitors.\footnote[233]{\textit{Id.} at 281. For a comment on cases involving disclosure of innovations, see \textit{Hovenkamp et al., supra} note 190, § 12.4.}

The key restraint of competition in the \textit{IBM} and \textit{Berkey Photo} cases was the use of a trade secret to gain advantage in another market.\footnote[234]{\textit{See} \textit{Berkey Photo}, 603 F.2d at 275-76.} Similar controversies arose in relation to proprietary spare parts designs and the resulting advantage that original equipment producers secured in the aftermarkets. The courts were generally not
receptive of independent service providers’ claims that a refusal to sell patented parts and to license copyrighted software violated antitrust laws. Two circuit courts adopted a strong, but rebuttable presumption that a refusal to license is legal. In *Data General*, the U.S. Court of Appeals for the First Circuit concluded that “while exclusionary conduct can include a monopolist’s unilateral refusal to license a copyright, an author’s desire to exclude others from use of its copyrighted work is a presumptively valid business justification for any immediate harm to consumers.” The court did not exclude the possibility of imposing antitrust liability for a refusal to license in “rare cases in which imposing antitrust liability is unlikely to frustrate the objectives of the Copyright Act,” but it did not give any examples of such situations.

In *Kodak*, the U.S. Court of Appeals for the Ninth Circuit extended the possible means of rebutting the presumption to include evidence that the defense and exploitation of the copyright grant was merely a pretextual business justification to mask anticompetitive conduct. Most recently, the Federal Circuit held that a unilateral refusal to license a valid IP right is legal, regardless of the patent holder’s subjective motivation. The court further asserted that a patent owner who brings suit to enforce the statutory right to exclude others from making, using, or selling the claimed invention is exempt from the antitrust laws, even though such a suit may have an anticompetitive effect. The court recognized two limited exceptions to this rule. Antitrust immunity does not extend to patent enforcement if 1) the asserted patent was obtained through knowing and willful fraud or 2) the infringement suit was a mere sham to cover what is actually no more than an attempt to interfere directly with the business relationships of a competitor. Although there is some tension between these three approaches, in all cases mentioned here the courts were extremely wary of holding that a


236. *Id.* note 64.

237. *Image Tech. Servs., Inc. v. Eastman Kodak Co.*, 125 F.3d 1195, 1219 (9th Cir. 1997) [hereinafter Kodak]. Both courts agreed that the presumption could be rebutted by evidence that “the monopolist acquired the protection of the intellectual property laws in an unlawful manner.” *Id.* (citing *Data Gen.*, 36 F.3d at 1188).

238. *See In re Indep. Serv. Orgs. Antitrust Litig.*, 203 F.3d 1322, 1329 (Fed. Cir. 2000). The U.S. Supreme Court’s decision in *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko*, LLP, 540 U.S. 398 (2004), suggests that, in general, there is a very limited scope for antitrust intervention in refusal to deal cases. *See also 1 HOVENKAMP ET AL., supra note 190, § 13.3.*

239. *See In re Indep. Serv. Orgs.*, 203 F.3d at 1326.

240. *Id.*
refusal to license a valid IP right violates the antitrust laws. Like the holders of other IPRs, possessors of trade secrets are entitled to assert their rights against would-be infringers and to defend their rights in court. Just as in the case of patents, the assertion of a trade secret claim in bad faith, in an attempt to monopolize, can be a violation of the antitrust laws.\textsuperscript{241} Notably, in \textit{Colt II}, the United States District Court for the Central District of Illinois specifically rejected the claim that a trade secret owner should have the burden to prove that its trade secrets were valid in order to benefit from antitrust immunity.\textsuperscript{242}

Finally, in \textit{Intergraph Corp. v. Intel Corp.},\textsuperscript{243} trade secrets were attacked on the essential facility theory.\textsuperscript{244} Intel cut off the supply of microprocessors and proprietary information to Intergraph, one of its customers, as a retaliatory measure for the latter's attempt to enforce its IPRs against Intel. Intergraph claimed, among other things, that Intel's chips and technical knowledge were so vital for its interests that they constituted an essential facility and that they should be licensed on reasonable and nondiscriminatory terms. The lower court agreed and granted a preliminary injunction that obliged Intel to supply Intergraph with the relevant product information.\textsuperscript{245} The U.S. Court of Appeals for the Federal Circuit reversed the decision. In the court's view, the condition for the application of the essential facilities doctrine was a competitive relationship between the company controlling the facility and the company requesting the access.\textsuperscript{246} Since Intel did not compete with Intergraph in the downstream market for workstations, the essential facilities doctrine did not apply. Even though it was established that Intel's withholding of proprietary information lacked business justification, it was not

\begin{itemize}
\item \textsuperscript{241} See CVD, Inc. v. Raytheon Co., 769 F.2d at 851 ("[T]he proper balance between the antitrust laws and trade secrets law is achieved by requiring an antitrust plaintiff to prove, in addition to the other elements of an antitrust violation, by clear and convincing evidence, that the defendant asserted trade secrets with the knowledge that no trade secrets existed"). See also Forro Precision, Inc. v. Int'l Bus. Machs. Corp., 673 F.2d 1045, 1060 (9th Cir. 1982); HydroTech Corp. v. Sundstrand Corp., 673 F.2d 1171, 1177 (10th Cir. 1982).
\item \textsuperscript{243} Intergraph Corp. v. Intel Corp., 195 F.3d 1346 (Fed. Cir. 1999) [herinafter \textit{Intergraph II}].
\item \textsuperscript{244} Intel's copyrights and other IP rights were also at stake.
\item \textsuperscript{245} Intergraph Corp. v. Intel Corp., 3 F. Supp. 2d 1255 (N.D. Ala. 1998), vacated, 195 F.3d 1346 (Fed. Cir. 1999).
\item \textsuperscript{246} \textit{Intergraph II.}, 195 F.3d at 1357. The court's reasoning suggested, however, that the essential facilities doctrine could be applied to IPRs.
\end{itemize}
established that Intel’s behavior contributed to creating, maintaining, or enlarging Intel’s dominance.\textsuperscript{247}

Although the refusals to license cases discussed above all involved a bundle of rights, including copyrights or patents, there are good reasons to assert that trade secrets should be treated in the same manner as other forms of IP for the purpose of applying §2 of the Sherman Act. The fact that a trade secret owner takes advantage of lead time after a new product is introduced on the market is not a ground for a valid antitrust claim. Difficulty in reverse engineering does not support the finding of an illegal restraint of trade. First, forced disclosure of trade secrets undermines the private incentives to innovate in the same way as compulsory licensing does. Second, the continued existence of a trade secret does not necessarily preclude the prospective licensee from competing with goods, services, or processes of the trade secret owner.\textsuperscript{248} There is an additional argument for caution when it comes to compulsory licensing of trade secrets: the continuing existence of the trade secrets depends in part on how licensees behave and, in particular, whether they take appropriate measures to guard trade secrets.\textsuperscript{249} This means that the trade secret holder should be free to choose licensees with whom she can entrust her trade secrets.

\textsuperscript{247} Id. at 1358-59. Interestingly, the government also challenged Intel’s conduct, but on different grounds and with more success. The Federal Trade Commission (FTC) alleged a pattern of conduct whereby Intel denied technical information to its customers who asserted their innovations in microprocessor technology, which helped Intel to maintain its monopoly by discouraging leapfrogging innovations. The case ended with a consent decree in which Intel agreed not to cease dealing with companies merely because they sued to enforce their IPRs. See FTC Complaint, \textit{In re} Intel Corp., No. 9288 \textsuperscript{11} (filed June 8, 1998), http://www.ftc.gov/os/1998/06/intelcmp.pdf; FTC, \textit{Analysis of Proposed Consent Order to Aid Public Comment}, http://www.ftc.gov/os/1999/03/d09288intelenalysis.htm. For a comment on the Intel case, see, e.g., 1 HOVENKAMP ET AL., \textit{supra} note 190, § 13.4d; 1 HOLMES, \textit{supra} note 183, § 11.4; Maureen A. O’Rourke, \textit{Striking a Delicate Balance: Intellectual Property, Antitrust, Contract, and Standardization in the Computer Industry}, 12 HARV. J. L. & TECH. 1, 12-18 (1998).

\textsuperscript{248} See 3 MILGRIM, \textit{supra} note 12, § 10.01(2)(j).

\textsuperscript{249} See 1 HOVENKAMP ET AL., \textit{supra} note 190, § 13.2d, note 28. The authors note that in \textit{Telecomm Technical. Services. Inc. v. Siemens Rolm Communications, Inc.}, 150 F. Supp. 2d 1365, 1370 (N.D. Ga. 2000), the District Court for the Northern District of Georgia held that the per se legality rule established by the Federal Circuit in \textit{In re Indep. Serv. Orgs. Antitrust Litig.} does not extend to trade secrets, reasoning that with a “broad definition of trade secret, virtually every anticompetitive refusal to deal would be beyond reach of antitrust law.” \textit{Telecomm Tech. Servs.}, 150 F. Supp. 2d at 1370. There does not seem to be any broader authority to support this line of reasoning; indeed, the Intel case referred to above largely concerned trade secrets.
B. EU: Regulating Trade Secrets through Antitrust Law?

The history of European competition law touching IP rights has been turbulent. At first, national IP rules were considered a nuisance when they were used to limit competition across frontiers between resellers of identical products. The EU antitrust enforcers viewed IPRs as *ex post* barriers to entry, rather than *ex ante* incentives to invest in R&D. There was little doubt that the competition rules may override IPRs; the EU antitrust enforcers constrained national IP law by deciding that it had valid parts, referred to as "specific subject matter", and non-valid parts. This policy solved the market integration problem, while doing some violence to national property rights.

From the mid-1980s, with the judgments in *Café Hag II* and *Ideal Standard*, IP rights gained recognition in EU law and new EU legislation governing IP innovations emerged. On the competition law side, block exemption regulations for patent licenses were adopted in 1984 as well as pure know-how and mixed patent-and-know-how licenses in 1988. The recognition of the need to protect IP resulted in the adoption of standards for IP protection at the EU level and the establishment of unitary trademark and design rights at the EU level. At the same time, the new source of tension between IPRs and antitrust law emerged: the alleged conflict between IP law and the rules concerning abuse of dominance. Although, as it will be seen, similar traits can be found in the developments at the intersection of trade secret and antitrust law, trade secrets were treated particularly harshly by EU antitrust enforcers, who, in the absence of harmonized

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250. For an overview of the historical attitude of the Commission and EU courts towards licensing, see VALENTINE KORAH, INTELLECTUAL PROPERTY RIGHTS AND EC COMPETITION RULES 25-43 (2006).

251. See KORAH, supra note 250, at 27.

252. Examples of this policy include the judgments of the ECJ in Joined cases 56/64 & 58/64, Etablissements Consten S.A.R.L. v. Commission, 1966 E.C.R. 299 and in Case 40/70, Sirena S.r.l. v Eda S.r.l., 1971 E.C.R. 69. For an overview, see KORAH, supra note 250, at 1-20; KEELING, supra note 134, at 22-29.


standards for trade secret protection, decided from case to case what qualified for protection as a trade secret.

1. Article 81: From Troubled Beginnings to Recognition

Trade secrets have had a thorny way to their recognition by the European Commission's Directorate General for Competition. In \textit{Reuter/BASF}, the first decision addressing trade secrets protection, the Commission attacked the validity of a non-compete clause and a know-how assignment agreement under Article 81(1). Dr. Gottfried Reuter, a research chemist, sold his shares in Elastomer, a group of companies dealing with manufacturing of polyurethanes. In a separate agreement, Dr. Reuter transferred all his know-how and technology, including documents containing most of the scientific and technical data and know-how possessed by Elastomer AG, to one of BASF's subsidiaries. The know-how agreement imposed an eight-year non-compete obligation on Dr. Reuter; it also provided that Dr. Reuter was not to divulge to any third party any protected or unprotected know-how and experience in the relevant field. A few years later, Dr. Reuter complained to the Commission that the non-compete agreement was a threat to his "professional and economic livelihood," and that its duration should have been limited to what was necessary to safeguard operations while the group was being transferred. BASF pointed out that the non-compete agreement did not affect competition, as there was a number of other producers active in the relevant market. The essence of the transaction with Dr. Reuter was the transfer of goodwill and technical know-how. BASF submitted that the acquirer of know-how, like the acquirer of a patent, was entitled to its sole use. The Commission decided that the restrictions on using know-how and the non-compete agreement violated Article 81(1). It reasoned that the post-transfer ban on use had to be limited in time since the transfer of legally unprotected know-how confers no exclusive rights on the purchaser. Under no circumstances could an obligation to keep know-how secret from third parties be used to prevent Dr. Reuter, after the expiry of the reasonable term of a non-compete clause, from competing with BASF and developing the transferred know-how. The Commission also questioned the obligation of secrecy towards third parties, arguing that in view of the rapid development of technology in polyurethane chemistry, it may be questioned whether such know-how has at the present time sufficient economic value to justify its continued protection by an obligation of

\footnote{257. Commission Decision 76/743/EEC, 1976 O.J. (L 254) 40.}
secrecy. Under Reuter/BASF, restrictions on the use of know-how were justified only in the context of a non-compete agreement and only for the period necessary to ensure smooth transition of the acquired company. The attack on the non-disclosure clause was indicative of the Commission's hostility to trade secrets. This decision effectively questioned the validity of know-how assignment and licensing agreements. It is now seen as a mistake.  

Two years later, the Commission took a more favorable view of trade secrets in Campari when it confirmed the validity of an exclusive license agreement under which licenses were provided with a mixture of herbs and a recipe of how to make bitters by infusing these herbs in local wines. The licensees bottled the wine and sold it under the Campari brand in designated territories. Although the recipe for the herbs was not disclosed, the instructions for making the wine qualified as know-how. The Commission noted that the recipe was a trade secret which the licensor cannot be required under Community law to reveal to its licensees and that the fact that the licensees are required to refrain from divulging the manufacturing processes to third parties was essential if secret techniques or recipes are to be passed on for use by other undertakings. The Commission decided that the exclusivity of the licenses, the restraints on active sales outside the assigned territory, and the obligation to buy the secret raw materials from the licensor were contrary to Article 81 (1), but that they could by exempted under Article 81(3) on the ground that they did not go beyond what was necessary to ensure quality control by the trademark holder.

Though Campari was a step in the right direction, it was not enough to stamp out the consequences of the Reuter/BASF decision. This happened in the 1980s, when the Commission took a more favorable approach to IP, conceded that licensing was desirable, and acknowledged that know-how had to be guarded by contractual arrangements if its owner was not to lose the benefits of innovation. In 1984, the Commission granted a group exemption for patent licenses and, under specified conditions, mixed patent-and-know-

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260. See VALENTINE KORAH, KNOW-HOW LICENSING AGREEMENTS AND THE EEC COMPETITION RULES REGULATION 556/89, 10-11 (1989). This was part of a general tendency for more favorable treatment of IPRs.
how licenses. The latter were covered as long as know-how permitted better exploitation of the licensed patents and the licensed patents were necessary in implementing the licensed technology.\textsuperscript{262} The block exemption was very narrow and did not include pure know-how and other licenses. This was a major problem: there was evidence that U.S. firms were hesitant to grant technology licenses in Europe due to doubts as to the validity of know-how licenses under EU competition law.\textsuperscript{263}

The ECJ addressed some of these concerns in its 1986 \textit{Pronuptia} judgment.\textsuperscript{264} The case involved franchise agreements setting up a chain of wedding gown stores. The franchisees were given the exclusive right to use the Pronuptia mark in specific territories. They were obliged to equip their shops in accordance with the specification of the franchisor, not to move its location, and obtain 80\% of their merchandise from the franchisor. The ECJ noted the importance of trade secrets and stressed that:

\begin{quote}
[T]he franchisor must be able to communicate his know-how to the franchisees and provide them with the necessary assistance in order to enable them to apply his methods, without running the risk that that know-how and assistance might benefit competitor, even indirectly. It follows that provisions which are essential in order to avoid that risk do not constitute restrictions on competition for the purposes of Article [85(1)].\textsuperscript{265}
\end{quote}

Thus, the ECJ held that a number of restrictions designed to protect know-how, such as non-compete clauses, restrictions on the transferability of the franchisee's business or obligations to use the know-how provided by the franchisor, were enforceable.\textsuperscript{266} Conversely, restrictions that the ECJ deemed unnecessary for the protection of know-how or for the maintenance of network's identity and reputation were held to violate competition law, and as such, were unenforceable.\textsuperscript{267} Examples of such provisions are those which

\begin{itemize}
\item \textsuperscript{262} In Boussois/Interpane, Commission Decision 87/123/EEC, 1987 O.J. (L 50) 30, the Commission made it clear that a mixed license was not covered if the licensed know-how dominated the technology and did not merely permit better exploitation of the licensed patents. The Commission eventually granted an individual exemption in this case.
\item \textsuperscript{263} See \textsc{Steven D. Anderman}, \textsc{EC Competition Law and Intellectual Property Rights: The Regulation of Innovation}, 78-79 (1998).
\item \textsuperscript{264} Case 161/84, Pronuptia de Paris GmbH v. Pronuptia de Paris Irmgard Schillgallis, 1986 E.C.R. 353.
\item \textsuperscript{265} \textit{Id.} \textsuperscript{16}.
\item \textsuperscript{266} \textit{Id.} \textsuperscript{16-20}.
\item \textsuperscript{267} \textit{Id.} \textsuperscript{23-25}.
\end{itemize}
shared markets between the franchisor and franchisees, those which shared markets between franchisees, and those that prevented franchisees from competing with each other.

Following suit, the Commission recognized the need for a more coherent policy with respect to know-how licensing and adopted a number of decisions confirming the legality of some common restrictions contained in such agreements. One of these decisions was Rich Products/Jus-rol, a case concerning a license of know-how for the manufacture of frozen yeast dough products. The license agreement granted Jus-rol an exclusive right to produce the licensed product in the United Kingdom. It contained an obligation to keep the know-how secret, not to grant sub-licenses, and banned the use of the know-how by the licensee following termination of the agreement. The Commission noted that the transfer of technical knowledge is in principle a factor favorable to competition, since it enables firms other than the owner of the know-how to exploit a body of technical knowledge that has not been made public with a view to the manufacture and sale of a product. It also acknowledged the existence of the exclusive right which the owner enjoys over its know-how. Thus, the obligation not to use the licensed know-how 10 years following the termination of the agreement was not in violation of Article 81(1), as long as know-how did not become a part of the public domain, since the owner is free to decide whether it intends to transfer the confidential information permanently or temporarily in granting a license. The Commission found that the obligation to keep the licensed know-how secret and the obligation not to grant sub-licenses was outside the scope of Article 81(1), and so was a non-exclusive grant-back clause contained in the agreement. The Rich Products/Jus-rol decision opened a new era in the Commission’s approach to know-how and know-how licenses by explicitly recognizing the existence of exclusive rights in know-how and the legality of common provisions to be found in know-how licensing agreements.


The theories advanced in Rich Products/Jus-rol were incorporated in the Commission’s Know-How Block Exemption Regulation, which received approval on 30 November 1988 and came into force on April 1, 1989. The Commission noted:

[T]he increasing economic importance of non-patented technical information (e.g. descriptions of manufacturing processes, recipes, formulae, designs or drawings), commonly termed ‘know-how’, the large number of agreements currently being concluded by undertakings including public research facilities solely for the exploitation of such information (so-called ‘pure’ know-how licensing agreements) and the fact that the transfer of know-how is, in practice, frequently irreversible make it necessary to provide greater legal certainty with regard to the status of such agreements under the competition rules, thus encouraging the dissemination of technical knowledge in the Community.

In the absence of applicable Community laws, the regulation defined “know-how” as substantial, secret, and identified technical information. The actual definition of these terms, which remains valid until this day, is not particularly strict. “Secret” means that the know-how package is not generally known or easily accessible. The regulation specifically states that the term should not be construed narrowly so as to require every element to be totally unknown or unobtainable outside the licensor’s business. “Substantial” means that the know-how must be important for the whole or a significant part of a manufacturing process or a product or service, or for the development thereof. The licensed know-how must be useful in improving the competitive position of the licensee. Thus, “know-how” is limited to technical information. “Identified” means that the

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272. Know-How Block Exemption Regulation at ¶ 1.
273. Id. at art. 1, ¶ 7.
274. Id.
275. Id.
276. Id.
277. The requirement of substantiality is not very strictly defined; it suffices that the licensed know-how can “reasonably be expected at the date of the conclusion of the agreement to be capable of improving the competitive position of the licensee, for example by helping him to enter a new market or giving him an advantage in competition with other manufacturers or providers of services who do not have access to the licensed secret know-how or other comparable secret know-how.” Id.
know-how must be described or recorded so as to make it possible to verify that it fulfilled the criteria of secrecy and substantiality. The definition is quite limited when compared to the definitions of a trade secret used in national laws. It appears that the Commission was anxious to make sure that the block exemption would otherwise encourage cartels to operate customer/market-sharing under the auspices of a license of trivial know-how.

The Know-How Block Exemption Regulation provided a safe harbor for a narrowly defined class of pure know-how and mixed patent-and-know-how licenses. It contained a list of "white," permitted clauses which did not infringe Article 81(1), and a blacklist of provisions that precluded the application of the exemption. The white list contained clauses typically found in know-how licenses that relate to protection of the licensed know-how such as an obligation not to divulge the know-how, a ban on sub-licensing and assignments, a post-term use ban, and an obligation to inform about infringements. The permitted restrictions included certain restrictions as to exclusivity, territoriality, and field-of-use. Among the blacklisted restrictions were resale price maintenance, tie-ins, non-challenge clauses, customer restrictions, automatic renewals of the agreement, post-term use ban when the know-how is in the public domain, and exclusive grant-backs. Such restrictions were deemed illegal regardless of whether the relation between the parties was of vertical or horizontal nature; the parties' market shares were not taken into account. If a license included clauses not listed in the Regulation as permissible, it had to be notified to the Commission, which had an option of opposing it.

The Know-How Block Exemption Regulation treated know-how licenses essentially in the same manner as patent licenses were treated.

278. Id.
279. See Price, supra note 271, at 275.
280. Under Article 1, such agreements did not violate Article 81(1) of the EC Treaty. The Know-How Block Exemption Regulation applied only to bilateral agreements; it did not cover agreements relating to marketing know-how communicated in the context of franchising arrangements, joint ventures, know-how pools, and cross-licenses. See Know-How Block Exemption Regulation, art 5, 1989 O.J. (L 61) 1.
281. Id. at art. 2.
282. In particular, these included: 1) an exploitation ban (including a ban on active and passive sales) in areas reserved for the licensor; 2) a manufacture/use ban in areas licensed to other licensees; 3) an active sales ban in areas licensed to other licensees; 4) a passive sales ban in areas licensed to other licensees; and 5) exclusive licenses. Id.
283. Id. at art. 4.
under the 1984 Patent Block Exemption Regulation. However, unlike in the case of patent licenses, the exemption for territorial restrictions in know-how licenses was limited to ten years from the day the first license agreement was signed (the same restriction did not apply to patent licenses). The Commission explained that this was necessary since it would be difficult to determine when the licensed know-how ceases to be secret otherwise. This explanation is not entirely persuasive, since this feature of know-how has an impact on the duration of the agreement as a whole. If the know-how required a substantial investment and the parties believed that a longer period was necessary to implement their agreement, they would have to apply to the Commission for an individual exemption.

Both the Know-How Block Exemption Regulation and the Patent Block Exemption Regulation were formalistic, narrow, and overly restrictive. The antitrust assessment of the agreements was made irrespective of the parties’ market shares and the nature of their relations. The Commission’s policy largely resembled the Department of Justice’s infamous Nine No-No’s.

The more IP friendly and economic-based approach, which prevailed in the 1990s, resulted in further reforms. In “recognition of the stimulus provided by technology transfers to economic development in today’s society[,]” the Commission initiated consultations which resulted in the adoption of the Technology Transfer Block Exemption Regulation (TTBER) in 1996. The TTBER removed disparities between the old patent and know-how block exemptions and liberalized competition rules applicable to technology licensing. It covered bilateral agreements for pure patent
licensing, pure know-how licensing, mixed licenses of patents and know-how, and ancillary provisions regarding non-patent IPRs. Licensing of copyrights, designs, trademarks, or software fell outside the ambit of the TTBER except when the licensing of such rights was clearly ancillary to the main purpose of the agreement. In general, the exemption provided by the regulation was broader and simpler than that under the earlier group exemption regulations. Nonetheless, the 1996 TTBER remained limited in scope and inflexible, with lists of “white” clauses, which could be included in a licensing agreement, and “black”, illegal, clauses. It also upheld the distinction between the treatment of territorial restrictions between patent and know-how licenses, allowing the know-how agreement to be exempted only for a period of ten years.

The evolution of EC competition law applicable to technology transfers culminated in 2004, when the new TTBER and the Guidelines on Transfer of Technology were adopted. Following the Commission Report of December 2001 and the public debate on the rules concerning technology licensing in Europe, the Commission released a draft TTBER and draft Technology Transfer Guidelines. The drafts were uniformly criticized as being too restrictive. After further consultations, the TTBER and the Technology Transfer Guidelines were somewhat liberalized; they both came into force on May 1, 2004. The new TTBER is wider in scope than the 1996 TTBER; it is based on the same core principles as the U.S.

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291. Patent applications, utility models, and supplementary protection certificates (SPCs) for pharmaceutical products were treated like patents.


296. It applies not only to patent (including patent applications, utility models, and SPCs) and know-how licenses, but also to agreements concerning software copyright. At the same time, the new TTBER is narrower than its predecessors in that it applies if the parties have market shares that do not exceed the levels provided for in Article 3 of the new TTBER. These thresholds are low: 20% of combined market shares, if the parties are competitors, or 30% each, if the relation between companies is of a vertical nature. There is no presumption that a license
Licensing Guidelines: (1) licensing is generally considered pro-competitive; and (2) anti-competitive effects are most likely to occur when there is market power, but market power cannot be inferred from IPRs alone. In comparison with the older block exemptions, the new TTBER is more firmly based on economic principles: horizontal and vertical restraints are assessed differently and the market power of the involved parties is taken into account. The list of blacklisted hardcore restraints is shorter in comparison to the 1996 TTBER and contains essentially classic cartel provisions: price fixing, allocation of markets, and output limitations. The list of hardcore restrictions is different depending on whether the licensor and licensee compete with each other. The new TTBER does not exempt exclusive grant-backs and non-challenge clauses, but their inclusion in the license does not preclude the application of the block exemption to other provisions. Unlike the older block-exemptions, it does not contain a “white list” of acceptable clauses.

In the first draft of the new TTBER, the Commission narrowed the scope of the definition of know-how by requiring that the information be “indispensable” rather than just “useful” for the manufacture or supply of the contract products. Following an outcry from the industry and legal scholars, the Commission withdrew this idea and the new TTBER did not introduce significant changes to the definition of know-how, as compared with the 1988 and 1996 TTBERs. In the new TTBER, the Commission acknowledges the agreement between parties with market shares exceeding these thresholds violates EU competition rules, but the companies involved cannot benefit from the safe harbor of the TTBER, making it less useful to many companies and increasing legal uncertainty. See KORAH, supra note 250, at 45-46; ALISON JONES & BRENDA SUFRIN, EC COMPETITION LAW 720 (2d ed. 2004).

297. New TTBER at ¶ 5; see also Technology Transfer Guidelines at ¶¶ 9 and 17. It is explicitly confirmed that IPRs as such do not give rise to competition concerns, and that in fact technology transfer agreements usually improve economic efficiency and are pro-competitive, in particular because they reduce duplication of R&D, strengthen the incentive for the initial R&D and spur incremental innovation by increasing expected returns, facilitate diffusion, and generate product market competition.

298. New TTBER at ¶ 6; see also Technology Transfer Guidelines at ¶ 15.

299. For a comment on the new TTBER, see, e.g., KORAH, supra note 250, at 45-76; JONES & SUFRIN, supra note 297, at 720-38.

300. New TTBER, art. 4. Just as in the case of older block exemptions, inclusion of the blacklisted provisions is not only illegal and void in itself, but also prevents the application of the block exemption to the other provisions in the license.

301. Id. at art. 5.

302. Id. at art. 1, ¶ 1(i). The Technology Transfer Guidelines offers further guidance on the notion of “substantial” as follows:
status of know-how as IP: the regulation defines “IPRs” as including “industrial property rights, know-how, copyright and neighboring rights.” Unlike the 1988 and 1996 TTBERs, the new TTBER allows exemption for territorial restrictions in know-how licenses until the licensed know-how is no longer secret, or, in the event that secrecy has been compromised by the license, the length of the agreement. It is fair to say that the new TTBER and the Technology Transfer Guidelines treat know-how as a form of IP; anticompetitive restraints in patent and know-how licenses are assessed broadly in the same manner.

The new rules on the transfer of technology brought EU antitrust rules applicable to IP licensing closer to the 1995 U.S. Licensing Guidelines. However, unlike their U.S. counterparts, EU antitrust enforcers failed to account for the specific features of know-how. The legal protection of the licensed patent is secured by the exclusive rights stemming from the patent itself; the only protection which a know-how licensor has, in relation to the know-how, lies in the licensing agreement itself. In addition, unlike a patent, know-how does not exclude independent innovation or reverse engineering, which means that a network of know-how licenses is more likely challenged by the new entry than a network of patent licenses. It also remains unclear why the European Commission has to adopt a special definition of know-how for the purpose of antitrust law. The argument that know-how licenses could be used to cover cartel arrangements is not very convincing. Most cartel arrangements are clandestine. Typically, rather than trying to cover their agreement by disguised licenses, cartel participants concentrate on keeping the paper-trail to a minimum. If the concern really is sham know-how

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[T]he information must significantly contribute to or facilitate the production of the contract products. In cases where the licensed know-how relates to a product as opposed to a process, this condition implies that the know-how is useful for the production of the contract product. This condition is not satisfied where the contract product can be produced on the basis of freely available technology. However, the condition does not require that the contract product is of higher value than products produced with freely available technology. In the case of process technologies, this condition implies that the know-how is useful in the sense that it can reasonably be expected at the date of conclusion of the agreement to be capable of significantly improving the competitive position of the licensee, for instance by reducing his production costs.


303. New TTBER, art. 1, § 1(g).
licenses, a provision excluding such arrangements from the block exemption could be included in the TTBER instead of the definition of know-how, which has the undesirable effect of limiting the legal certainty when it comes to licensing a large body of information which is eligible for protection as trade secrets in the Member States.

The Commission's approach was followed by some of the Member States, which adopted their own definitions of know-how for the purpose of applying their national competition law. This situation only increases the uncertainty about trade secrets protection and means for their legal exploitation in Europe.

2. Trade Secrets and Article 82: The Confusing Message of Microsoft

Since the early 1990s, there have been a few cases in which a refusal to license an IPR was held to be anticompetitive and a compulsory license was ordered as a remedy. These cases have been analyzed extensively elsewhere; suffice it to say that they established rather strict conditions for compulsory licensing of IPRs. The Microsoft case is the first instance where Article 82 has been applied to information protected by a bundle of IPRs including patent, copyrights, and trade secrets. It is groundbreaking,
first, because the Commission proposes a new test to be applied in compulsory licensing cases, which seems to extend the scope of antitrust intervention as compared to earlier case-law, and, second, because the Commission takes a rather controversial position on the status of trade secrets. The focus of this section is on the second aspect of the *Microsoft* decision and the litigation that ensued.

In essence, Microsoft was accused of having refused to supply "interoperability information" to competitors for the purpose of developing their own technology in making operating systems for server computers performing so-called work-group functions. The triggering event for the case against Microsoft was Sun’s complaint alleging that Microsoft’s refusal to supply the technology necessary to allow interoperability of its work group server operating system with the Windows Client PC operating system constituted an abuse of a dominant position. Sun essentially claimed that Microsoft’s refusal to fully disclose interoperability information created an unfair advantage for Microsoft in the work group server operating systems market because Sun’s work group server operating system could not interact with Windows PC operating system as well as Microsoft’s work group server operating system.

After reviewing the applicable case law, including *Magill*, a case in which compulsory licensing of copyrights was ordered, the Commission decided that there is no particular set of circumstances

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309. Microsoft was accused of having integrated improved media functionality into its Windows personal computer operating systems without simultaneously offering a version of Windows without that media functionality. The violation was not the adding of the new features but the failure to offer at the same time a version lacking those features. As a remedy for this infringement, Microsoft had to develop a "fully-functioning" version of Windows which did not support certain media functionality and license it to customers in Europe on reasonable and non-discriminatory terms.

310. In 1998, Sun requested Microsoft to provide the complete information required to allow Sun’s software to fully cooperate with Microsoft’s software. The request pertained to client-to-server and server-to-server interoperability. See Microsoft Decision, COM (2004) 900 final (Apr. 21, 2004), ¶¶ 185-187.

making a refusal to share IP illegal. Instead, the Commission decided that all relevant circumstances surrounding the refusal to supply must be taken into account for the purpose of applying Article 82.\textsuperscript{312} Microsoft's refusal to supply the information requested by Sun was abusive and not objectively justified because "on balance, the possible negative impact of an order to supply on Microsoft's incentives to innovate is outweighed by its positive impact on the level of innovation of the whole industry (including Microsoft)."\textsuperscript{313} Thus, the Commission acknowledged that the information Microsoft was asked to share with its competitors may have value which justifies its protection under trade secret laws; however, these considerations are outweighed by the pro-competitive effects that the sharing of this information will have on the market. This test appears arbitrary, particularly in light of the fact that the Commission gives little guidance on how to assess the value of the information at stake, the effect that the disclosure of the information will have on the incentives to innovate, and the pro-competitive effects of compulsory licensing. Although the CFI upheld the Commission's finding that Microsoft violated Article 82 by refusing to provide its rivals with interoperability information, its ruling casts doubt on the validity of the balancing test.\textsuperscript{314} In its assessment whether Microsoft's refusal to license violated Article 82 of the EC Treaty, the court relied on the test established by the European Court of Justice in \textit{Magill} and confirmed in the IMS case.\textsuperscript{315} Further, the CFI ruled, rather disapprovingly, that the Commission did not, in fact, establish a new test under which refusals to license should be assessed under Article

\textsuperscript{312} In this case, the Commission took into account the following factors in particular: the indispensability of the technology; the risk of elimination of competition; the negative impact on technical development to the prejudice of consumers; the absence of objective justification; and the disruption of previous levels of supply of technology. The test developed by the Commission significantly differs from the criteria for a compulsory license adopted by the ECJ in \textit{Magill} and confirmed in the IMS case (Commission Decision 2001/165/EC of 3 July 2001 (NDC Health/IMS Health: Interim Measures), 2002 O.J. (L 59) 18, withdrawn by Commission Decision 2003/741/EC of 13 August 2003 (NDC Health/IMS Health: Interim Measures), 2003 O.J. (L 268) 69; Case C-418/01, IMS Health GmbH & Co. OHG v. NDC Health GmbH & Co. KG, 2004 E.C.R. I-5039. In the IMS case, the court stated that compulsory licensing would only be ordered in "exceptional circumstances" where: 1) the product or service protected by intellectual property is indispensable for carrying on a particular business; 2) the refusal prevents the emergence of a new product for which there is a potential consumer demand; 3) the refusal is not objectively justified; and 4) the refusal is such as to exclude all competition on the secondary market. \textit{Id.} \textit{at} 332-35. For the discussion of the IMS test see note 315.

\textsuperscript{313} \textit{See} Microsoft Decision, COM (2004) 900 final (Apr. 21, 2004), ¶ 783.

\textsuperscript{314} Case T-201/04, Microsoft v. Commission, ¶¶ 666-710 [hereinafter Microsoft Judgment] (not yet reported).

\textsuperscript{315} \textit{Id.} at ¶¶ 332-35. For the discussion of the IMS test see note 315.
82, but rather, that the balancing test was a part of the assessment of whether Microsoft's refusal to deal was objectively justified.  

The EU case against Microsoft presented certain similarities with the U.S. Microsoft case, and the Commission conceded that the U.S. settlement had addressed some of its concerns. In particular, Section III.E of the U.S. Settlement required Microsoft to make available licenses to Communications Protocols that Windows clients used to communicate with Windows servers for the purpose of allowing third party products to interoperate with those Windows clients on reasonable and non-discriminatory terms. Microsoft made licenses for the Communications Protocols available beginning in August 2002, in accordance with the timing requirements of the Final Judgments. Microsoft provided licensees with technical documentation that described each Communication Protocol, as well as licenses to Microsoft's relevant patents, copyrights, and trade secrets pertaining to the licensed technology. The requirement to disclose interoperability information was limited to interfaces and other technical information used by Microsoft's applications to interoperate with its operating system. It did not cover the specifications for its server-to-server communications protocols, although it did require Microsoft to license all the protocols implemented in a Windows Client PC operating system used for interoperating with a Windows server operating system. The goal of the licensing obligation under the U.S. settlement was to protect opportunities for the development and use of non-Microsoft middleware by ensuring that competing, non-Microsoft server products on which such middleware could be hosted and served would have the same access and ability to interoperate with Windows operating system products as Microsoft's server operating systems. In addition, the government wanted to make sure that the non-

316. Id. at ¶706-10.
318. See Joint Status Report on Microsoft's Compliance with the Final Judgments at 22 (July 3, 2003) (No. 98-1232 (CKK)), http://www.usdoj.gov/atr/cases/f201100/201135.pdf. To date, a number of companies have licensed Microsoft's protocol technology. Id. at 22-23.
319. Id. at 22.
320. Id. Microsoft worked to improve its licensing program and declared that the licensing program would continue past the expiry of the decree. See Joint Status Report on Microsoft's Compliance with the Final Judgments at 6-8 (August 30, 2006) (No. 98-1232 (CKK)), available at http://www.usdoj.gov/atr/cases/f218000/218096.pdf.
Microsoft server operating systems could interoperate, or communicate, with the ubiquitous Windows PC client. In the Commission's view, this was insufficient, as the information provided by Microsoft did not create a level playing field between Microsoft and its competitors in the market for work group server operating systems. Microsoft's rivals needed more interoperability information to compete effectively with Microsoft. The Commission concluded that Microsoft's refusal to supply this information was abusive because the interoperability information was an essential facility and a refusal to supply it amounted to illegal leveraging and resulted in market foreclosure. The remedies imposed by the Commission go further than the U.S. settlement. The Commission ordered Microsoft to disclose complete and accurate specifications for the protocols necessary for its competitors' server products to be able to interact on an equal footing with Windows PCs, and hence compete on a level playing field. In particular, the Commission required the disclosure of certain server-to-server protocols not covered by the U.S. case.

Microsoft maintained that the information to be delivered to competitors was secret, protected by copyright and covered by patents, and the fruit of years of engineering effort. The Commission initially questioned whether the interoperability information that Microsoft was asked to deliver was covered by IPRs, and asserted that in any case the duty to provide the interoperability information would not violate Microsoft's IPRs. The Commission also relied on the Software Directive, which explicitly allows reverse engineering for the purpose of achieving


325. In particular, it has been pointed out that the communications protocols in dispute are not truly valuable or innovative, and that the patents or pending patent applications which covered the communications protocols might be invalid, or might not be issued, or alternatively that the licensees might have been able to find means of implementing the licensed technology so as to avoid the techniques over which Microsoft held patent protection.

interoperability. The Commission reasoned that a secret technology does not deserve more protection than one which has been publicly disclosed. It asserted that the principles applicable to refusals to license other forms of IP developed by the EU Courts should not apply to trade secrets because the act of not licensing an IP right created by law is fundamentally different to that of not revealing a 'secret', the existence of which merely results from a unilateral business decision. Under competition law, legitimacy of a refusal to reveal a "secret" should depend upon the interest at stake, and secret information is not protected in the same way as other forms of IP. In support of this view, the Commission relied on the Court of First Instance (CFI) judgment in *Tetra Pak II.* The case concerned a clause contained in contracts for the sale or lease of Tetra Pak's packaging machines, requesting supplies of cartons for use with the machines to be obtained exclusively from Tetra Pak or a supplier designated by it. Tetra Pak argued that the tying arrangement was objectively justified by the concern to protect public health and its reputation through control of the entire packaging process. The CFI replied that Tetra Pak's reputation and reliability of its packaging equipment could have been safeguarded by "disclosing to users of Tetra Pak machines all the technical specifications concerning the cartons to be used on those systems, without the applicant's IPRs being thereby prejudiced." Yet, in *Tetra Pak II*, the CFI merely suggested, in the context of a tying agreement, that there was a less restrictive method of safeguarding reputation: selling or licensing of know-how necessary to use the machine in an appropriate manner. The CFI was not asked to determine whether the specifications in question were protected as trade secrets.

The Commission's position on refusals to provide confidential information was confirmed in the Article 82 Discussion Paper, which outlines an agenda for the reform of EU law of abuse of dominance. Reflecting on antitrust liability in refusal to deal cases,


328. Microsoft judgment, ¶ 280 and ¶ 302.

329. See CFI order, ¶ 126, 182 and Microsoft judgment, ¶ 280.


331. Id., ¶ 139.

the Commission asserted that a refusal to supply interoperability information should be treated differently than a refusal to license IP rights.\textsuperscript{333} The Commission conceded that "there is no general obligation even for dominant companies to ensure interoperability."\textsuperscript{334} However, a refusal to supply interoperability information by a dominant company which allows it to leverage its market power from one market to another may be an abuse of a dominant position.\textsuperscript{335} The Commission did not specify whether, as one could expect, a refusal to provide interoperability information must also create a risk of a total foreclosure in a secondary market. It seems reasonable to assume it would be necessary to prove anticompetitive effects. Most dominant companies have some degree of control over interoperability standards, which naturally gives them an advantage in neighboring markets. Unless there is a requirement of a risk of a total foreclosure, any vertical integration by a dominant company could be challenged and a dominant company would be under the obligation to create a level-playing field for its competitors in neighboring markets. The standard required for a refusal to supply interoperability information to be deemed abusive is lower than the standard applied to assess a refusal to license other forms of IP. With respect to the latter, the Commission seems to take a more cautious position. Drawing from ECJ jurisprudence, the Commission acknowledged that "[o]nly under exceptional circumstances can the refusal to license an IPR be considered an abuse."\textsuperscript{336} In particular, a refusal to license may be condemned if it leads to market foreclosure, has no objective justification, and "prevents the development of the market for which the license is an indispensable input, to the detriment of consumers."\textsuperscript{337}

The Commission acknowledged that such an interpretation of Article 82 practically eliminates the existence of trade secret rights that the dominant company may have in the interoperability information. However, it took the view that even if trade secrets are involved, it may not be appropriate to apply the same high standards to a refusal to share such information as to those that are applied if

\textsuperscript{333.} Compare ¶¶ 237-40 (refusal to license IPRs) and ¶¶ 241-42 (refusal to supply interoperability information) of the Article 82 Discussion Paper. \textit{Id.}

\textsuperscript{334.} \textit{Id.} ¶ 241.

\textsuperscript{335.} \textit{Id.} The Commission characterizes a refusal to supply interoperability information as a "special case" among refusals to deal.

\textsuperscript{336.} \textit{Id.} ¶ 239.

\textsuperscript{337.} \textit{Id.}
other forms of IP are involved.\textsuperscript{338} It is not clear whether the lower standard should apply in all cases where trade secrets are involved or rather solely in cases where interoperability information is at stake. The differentiation between trade secrets and other forms of IP is not justified taken that it may be possible to obtain patents, copyrights, designs, and other IPRs to protect some or all aspects of a secret technology. The value of the subject matter of a trade secret and that of an IPR is often impossible to quantify. In both cases, the antitrust intervention comes at a price of undermining the incentives to innovate. The Commission seems to neglect that and essentially makes it impossible for dominant companies to use their trade secrets.

The EU rules applicable to compulsory licensing of IP are neither clear nor straightforward. The Microsoft decision, the CFI judgment upholding the decision, and the Article 82 Discussion Paper further blur the picture. The theory advanced by the Commission, as confirmed in the Article 82 Discussion Paper, is that competition law may more readily compel a license in a case involving trade secrets than in a case involving other IP interests. Yet, it is neither clear what are exactly the standards applicable to a refusal to license trade secrets, nor that such a different treatment is justified. Ordering disclosure not only destroys trade secrets, but also precludes the proprietor from obtaining a patent on the invention at stake, and eliminates the incentives to innovate. The Commission disregards special features of trade secrets such as the ease of misappropriation, the need to protect secrecy, and the fact that their existence does not preclude competitors from developing or reverse engineering the information at stake. The Commission seems to ignore the economic effects of reverse engineering in its analysis of refusals to provide interoperability information and competitive concerns resulting from trade secrets. In the Article 82 Discussion Paper, it assumes that trade secrets afford a similar degree of exclusivity and create similar barriers to entry as patents. When analyzing market power in after-markets, the Commission stated that "[o]ften patents or know-how will allow the supplier of the primary product to have a monopolistic position on the aftermarket,"\textsuperscript{339} which indicates that the Commission treats patents and know-how alike as a strong indication of market power in after-markets.

The reasoning adopted by the Commission in the Microsoft decision, as confirmed by the CFI, significantly differs from the

\textsuperscript{338} Id. ¶ 242.
\textsuperscript{339} Id. ¶ 245.
ECJ’s recent line of essential facilities case law. Since Bronner, the ECJ has been skeptical about imposing a duty to deal on a dominant company. Bronner involved a small newspaper publisher of a newspaper and Mediaprint, a bigger publishing house that operated the only nationwide newspaper home-delivery scheme. The combined market share of Mediaprint’s newspapers was 46.8% of total circulation and 42% of total advertising revenues. Bronner, the small publisher, argued that under the doctrine of essential facilities as established by the ECJ, Mediaprint was obliged to allow, at market prices, access to the home-delivery service by competing products. The ECJ firmly rejected the argument that a dominant company is obliged to create a level playing field for its competitors. It suggested that refusal would constitute an abuse only if the home-delivery service was indispensable to the carrying on of the business of the person requesting the service. A product or service is indispensable if there are no products or services which constitute alternative solutions, even if they are less advantageous, or if there are no technical, legal, or economic obstacles capable of making it impossible or at least unreasonably difficult for any undertaking seeking to operate in the market to create, possibly in cooperation with other operators, the alternative products or services. In order to accept the existence of economic obstacles, it must be established, at the very least, that the creation of those products or services is not economically viable for production on a scale comparable to that of the undertaking which controls the existing product or service. A refusal to license may be abusive only in exceptional circumstances. The CFI noted that the ECJ had

341. Id. ¶ 43, 44.
342. Id. ¶ 46.
344. IMS, ¶ 103.
345. Id. ¶ 95.
346. Id.
interpreted its earlier case law as establishing three cumulative conditions making a refusal to license of an indispensable product abusive: if the refusal 1) prevents the emergence of a new product for which there is a potential consumer demand, 2) it is unjustified, and 3) it excludes any competition on a secondary market. In the Microsoft decision, the Commission assessed the refusal to deal under different standards. Furthermore, the Commission required of a dominant company more than access to an essential facility: it required disclosing so much interoperability information as to create "full interoperability," a level playing field between the dominant company and its competitors. The level playing field requirement made the implementation of the Microsoft decision troublesome. Quite predictably, a dispute arose as to which protocols had to be disclosed and how much protection they deserve, which gave rise to further legal disputes.

One way to explain the onerous responsibilities imposed on Microsoft are the circumstances of the case. Indeed, in the Article 82 Discussion Paper, the Commission took the view that the conduct of "super-dominant" companies should be assessed under more stringent standards. At the same time, the principles relating to refusals to provide interoperability information established in the Article 82 Discussion Paper suggest that the Commission meant to establish a precedent. If this is the case, the Microsoft decision is very troubling.

Unfortunately, the long-awaited CFI ruling does not provide decisive answers to the legal questions relating to treatment of trade secrets raised by the Microsoft case. Importantly, the CFI specifically refused to rule on the question whether trade secrets should be treated as intellectual property rights for the purpose of applying Article 82. Taken that the Commission conceded that IP rights might have been involved, the CFI held that it was necessary to assume that

347. Id. ¶¶ 95-98.
348. In July 2006, the Commission issued a Decision holding that Microsoft was not complying with its obligation to supply complete and accurate interoperability information and to make that information available on reasonable terms. The Decision imposed a penalty payment of €280.5 million on Microsoft and threatened it with a daily penalty payment of up to €3 million, should it continue its non-compliance. In late November 2006, Microsoft submitted a revised version of the Technical Documentation with a view to meeting these requirements. Microsoft also challenged the non-compliance decision before the ECJ. See Press Release, European Commission, Competition: Commission imposes penalty payment of €280.5 million on Microsoft for continued non-compliance with March 2004 Decision, (July 12, 2006), http://europa.eu/rapid/pressReleasesAction.do?reference=IP/06/979&guiLanguage=en.
349. See Article 82 Discussion Paper, supra note 332, ¶¶ 59, 91-92.
Microsoft was able to rely on intellectual property rights in this case.\textsuperscript{351} Further, although the CFI applied the test coined by the European Court of Justice in cases involving refusals to license IP rights, it seemed to have indicated that other circumstances, such as those listed by the Commission, may be relevant for the finding that a refusal to license was abusive.\textsuperscript{352} Still, the Court failed to give its opinion on the additional circumstances which can make a refusal to deal abusive.

The implementation of the Commission’s decision has created further questions as to exactly how much protection Microsoft’s trade secrets should be given. The Commission intended that open source software developers benefit from the technology disclosed by Microsoft,\textsuperscript{353} yet, open source software cannot be based on technology supplied under a traditional software license, which requires the licensee to protect trade secrets. To solve this problem, the Commission required Microsoft not to charge royalties for interoperability information lacking “significant innovation.”\textsuperscript{354} In addition, the Commission required Microsoft to allow the publication of software source code developed by the licensees and based on Microsoft’s interface documentation, unless the interfaces in question “do not embody innovations.”\textsuperscript{355} Consequently, if no “innovation” is involved, third party software developers are allowed to access Microsoft’s trade secrets without giving Microsoft the possibility of ensuring that its trade secrets are kept confidential through licensing terms as is the case for licensees. This effectively destroys Microsoft’s trade secrets that do not embody innovations.\textsuperscript{356}

The Commission Decision creates two categories of trade secrets: those “embodying innovation,” which deserve some level of deference from antitrust enforcers, and those that are not innovative.

\begin{itemize}
\item \textsuperscript{351} \textit{Id.} at ¶ 283-90.
\item \textsuperscript{352} \textit{Id.} at ¶ 332-36.
\item \textsuperscript{355} \textit{See} European Commission, \textit{supra} note 353.
\item \textsuperscript{356} Microsoft challenged this interpretation before the CFI. \textit{See} Case T-313/05, Microsoft Corp. v. Comm’n, 2005 O.J. (C 257) 31 (not yet decided).
\end{itemize}
enough, and which must fully give way to antitrust laws. It is not entirely clear what is the required standard of innovativeness and how it relates to the national trade secrets and patent laws, or the TTBER definition of know-how. Inevitably, this was the source of another dispute between the Commission and Microsoft. In March 2007, nearly 3 years after the adoption of the Microsoft decision, the Commission issued a Statement of Objections alleging that Microsoft failed to comply with its decision by charging unreasonable prices for the interoperability information. The Commission concluded that there is no significant innovation in Microsoft’s unpatented protocols and, consequently, that license prices proposed by Microsoft are unreasonable. The protocols did not involve significant innovations because “all of the described features were considered either to have been Microsoft implementations of prior developments by others, or to have been anticipated by prior developments and to be immediately obvious minor extensions to that prior work.” It seems that the required standard of innovativeness is akin to that required to obtain a patent. Consequently, unless a trade secret embodies a patentable invention, it does not merit any protection for the purpose of applying Article 82 of the EC Treaty. This means that “know-how” which merits protection when Article 81 is applied to it does not necessarily merit protection if it is owned by a dominant company which behavior is subject to Article 82. Thus, the Microsoft decision significantly limits the ability of dominant companies to rely on trade secrets laws to protect their innovation.

As is proven by the U.S. Settlement, which recognized that Microsoft’s interoperability information is protected by IP and allowed introduction of security-based limitations on disclosures of the information in question, elimination of Microsoft’s trade secrets is not the only means to achieve interoperability. The Microsoft decision is clearly an example of overeager application of antitrust laws to intellectual property. It illustrates how, in the absence of the EU standards of trade secret protection, the Commission coins trade secret protection standards as it sees fit when applying antitrust laws in a particular case. The CFI judgment did little to clarify the status of

358. Id.
359. Id.
trade secrets under EU competition rules. The adoption of harmonized trade secret protection laws at the EU level may be the only way to create an environment of legal certainty necessary to stimulate investment in innovation and diffusion of new technologies.

V. CONCLUSIONS

As with other forms of IP, trade secrets may give rise to competitive concerns. Such concerns should be addressed by antitrust enforcers; by no means should trade secret holders enjoy immunity from antitrust scrutiny. Still, the role which trade secrets play as an incentive to innovate means that antitrust enforcers should treat them with a similar level of deference to that afforded to intellectual property rights. Furthermore, the specific features of trade secrets, such as the ease of misappropriation and the relatively limited scope of protection they afford, should be taken into account when applying antitrust rules. U.S. antitrust enforcers took these considerations into account in cases involving trade secrets. By contrast, EU antitrust enforcers questioned the merit of protecting trade secrets and treated their uncertain status as an invitation to shape trade secret standards for the purpose of application of antitrust law. The results of this approach are not only at odds with national and international standards of trade secret protection, but also internally incoherent.

The comparative analysis of trade secret laws and application of antitrust laws to trade secrets in the U.S. and in the EU shows that the legal environment surrounding trade secrets in the EU is troubling. Different standards for trade secret protection in different member states may discourage cross-border licensing of know-how. The application of EU antitrust laws has increased the uncertainty surrounding the status of trade secrets in Europe. It is unfortunate that the Court of First Instance did not take the opportunity to clarify the principles of competition law applicable to trade secrets in its September 2007 Microsoft judgment. Insufficient protection of trade secrets may forestall innovation and limit the dissemination of new technologies. Harmonization of trade secret laws in Europe may be necessary to achieve legal certainty and a higher degree of trade secret protection. It would also be in line with EU efforts to create a good regulatory environment for private R&D spending.  

361. A competitive IPR regime and better regulation in support of new technologies are an important part of the EU’s strategy to increase R&D spending. For the latest policy statements on encouraging R&D spending and increasing the innovativeness of EU economy, see European