THE CASE AGAINST FEDERALIZING TRADE SECRECY

Christopher B. Seaman*

ABSTRACT

TRADE secrecy is unique among the major intellectual property ("IP") doctrines because it is governed primarily by state law. Recently, however, a number of influential actors—including legislators, academics, high-technology firms, and organizations representing IP attorneys and owners—have supported the creation of a private civil cause of action for trade secret misappropriation under federal law. Proponents assert that federalizing trade secrecy would provide numerous benefits, including substantive uniformity, the availability of a federal forum for misappropriation litigation, and the creation of a unified national regime for IP rights.

This Article engages in the first systematic critique of the claim that federalizing trade secrecy is normatively desirable. Ultimately, it concludes that there are multiple reasons for trade secrecy to remain primarily the province of state law, including preservation of the states' ability to engage in limited experimentation regarding the scope of trade secret protection and federalization's potential negative impact on the disclosure of patenteligible inventions. Finally, it proposes an alternative approach—a modest expansion of federal courts' jurisdiction over state law trade secret claims—that can help address the issue of trade secret theft without requiring outright federalization.

^{*}Assistant Professor, Washington and Lee University School of Law. I thank Jonas Anderson, Michael Burstein, Jorge Contreras, Kyle Dolinsky, Jill Fraley, Tim Holbrook, Will Hubbard, Justin Hughes, Megan La Belle, Dave Levine, Daryl Lim, Kristin Osenga, David Osteen, Elizabeth Rowe, Sharon Sandeen, Dave Schwartz, Ben Spencer, Sally Wiant, Robin Wilson, and participants of faculty workshops at William & Mary Law School and Wake Forest University School of Law, the Virginia Junior Faculty Forum at the University of Richmond School of Law, the Thirteenth Annual Intellectual Property Scholars Conference at Cardozo School of Law, the 2014 Trade Secret and Information Policy workshop at the University of Florida Levin College of Law, and the Vanderbilt Intellectual Property Scholars Roundtable for their helpful feedback on this project. I also thank Tiffany Eisenbise for her excellent research assistance. Most importantly, I thank my family, especially Allison, for their love and support. Comments welcome at seamanc@wlu.edu.

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Introduction

Intellectual property ("IP") theft is estimated to cost U.S. firms billions of dollars annually. Much of this loss is due to misappropriation of trade secrets by foreign actors and entities. For instance, alleged cyber-espionage by members of China's People's Liberation Army ("PLA") Unit 61398 has received widespread press coverage due to the scale of the conduct and value of the proprietary information allegedly

¹ See Comm'n on the Theft of Am. Intellectual Prop., The IP Commission Report 1 (2013), available at http://ipcommission.org/report/IP_Commission_Report_052213.pdf ('The scale of international theft of American intellectual property (IP) is unprecedented—hundreds of billions of dollars per year"); Office of the Nat'l Counterintelligence Exec., Foreign Spies Stealing US Economic Secrets in Cyberspace: Report to Congress on Foreign Economic Collection and Industrial Espionage, 2009–2011, at 4 (2011), available at http://www.ncix.gov/publications/reports/fecie_all/Foreign_Economic_Collection_2011.pdf [hereinafter ONCIX Report] ("Estimates from academic literature on the losses from economic espionage range . . . from \$2 billion to \$400 billion or more a year . . .").

² See Comm'n on the Theft of Am. Intellectual Prop., supra note 1, at 15 ("For almost all categories of IP theft, currently available evidence and studies suggest that between 50% and 80% of the problem, both globally and in the United States, can be traced back to China."); U.S. Int'l Trade Comm'n, China: Effects of Intellectual Property Infringement and Indigenous Innovation Policies on the U.S. Economy, Inv. No. 332-519, USITC Pub. 4226, at xiv (May 2011), available at http://www.usitc.gov/publications/332/pub4226.pdf (estimating that in 2009, U.S. firms lost between \$14.2 billion and \$90.5 billion due to IP infringement in China); see also Office of the U.S. Trade Representative, Exec. Office of the President, 2013 Special 301 Report 4–6 (2013), available at http://www.ustr.gov/sites/default/files/05012013%202013%20Special%20301%20Report.pdf (identifying forty-one countries as deficient in IP enforcement).

stolen.³ At the same time, technological developments like the digitization of business records, widespread use of portable electronic devices, and cloud computing have rendered U.S. businesses more vulnerable to electronic means of trade secret theft.⁴ Moreover, the scope of this problem is growing, potentially undermining domestic businesses, placing American jobs at risk, and ultimately threatening the health of the U.S. economy.⁵

In response, government officials, academics, and others have proposed a variety of measures to counter the growing problem of trade secret theft. One of these is the creation of a civil cause of action for trade secret misappropriation under federal law. Trade secrecy is unique among the major forms of IP because it is not governed primarily by federal law. Unlike patents and copyrights, trade secrecy is a creature of state law, arising out of state court decisions in the nineteenth century to

³ See David E. Sanger et al., China's Army Seen as Tied to Hacking Against U.S., N.Y. Times, Feb. 19, 2013, at A1; see also Mandiant, APT1: Exposing One of China's Cyber Espionage Units 3, 25 (2013), available at http://intelreport.mandiant.com/Mandiant_APT1_Report.pdf (asserting that PLA Unit 61398 electronically infiltrated dozens of organizations and accessed a "broad range of information from its victims," including product development information, manufacturing procedures, business plans, and other valuable data). In May 2014, five members of PLA Unit 61398 were charged with violations of U.S. federal criminal law for trade secret misappropriation and identity theft involving domestic firms, including U.S. Steel, Westinghouse Electric, and Alcoa. Indictment at 3–4, 6–7, 43, 47, United States v. Wang Dong, Crim. No. 14-118 (W.D. Pa. May 1, 2014); see also Michael S. Schmidt & David E. Sanger, 5 in China Army Face U.S. Charges of Cyberattacks, N.Y. Times, May 20, 2014, at A1 (reporting on the indictment).

⁴ Office of Mgmt. & Budget, Exec. Office of the President, Administration Strategy on Mitigating the Theft of U.S. Trade Secrets 8 (2013), available at http://www.whitehouse.gov/blog/2013/02/19/launch-administration-s-strategy-mitigate-theft-us-trade-secrets.

⁵Id. at 1; see also Office of the U.S. Trade Representative, supra note 2, at 13 ("The theft of trade secrets and other forms of economic espionage, which results in significant costs to U.S. companies and threatens the economic security of the United States, appears to be escalating.").

⁶ See Comm'n on the Theft of Am. Intellectual Prop., supra note 1, at 4–7, 63–84 (detailing a variety of short, medium, and long-term proposals to address international IP theft); Office of Mgmt. & Budget, supra note 4, at 3–12 (identifying action items to address trade secret theft); see also infra Section II.B (describing proposed legislation regarding trade secret misappropriation).

⁷ See Comm'n on the Theft of Am. Intellectual Prop., supra note 1, at 73 (proposing "a private civil cause of action under the [Economic Espionage Act]").

⁸ See Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 493 (1974) ("Congress, by its silence over these many years, has seen the wisdom of allowing the States to enforce trade secret protection."); David S. Almeling, Four Reasons to Enact a Federal Trade Secrets Act, 19 Fordham Intell. Prop. Media & Ent. L.J. 769, 770 (2009) ("Trade secrets stand alone as the only major type of intellectual property governed primarily by state law.").

become an important source of protection against the improper acquisition, disclosure, and use of commercially valuable information that has been maintained in confidence. And unlike trademarks, which also originally arose under state law but now are primarily protected under the federal Lanham Act, trade secrecy has largely maintained its state law status, the despite recent encroachment by federal statutory law.

Proponents have offered several justifications for federalizing trade secret law. First, they contend a federal statute would create substantive uniformity in trade secret law. Second, they assert that it would provide the advantages of a federal forum for litigating trade secret misappropriation claims. Hard Third, they suggest that federal legislation is required to comply with the United States's obligations under international trade agreements such as the North American Free Trade Agreement ("NAFTA") and the Agreement on Trade-Related Aspects of Intellectual Property Rights ("TRIPS"). Finally, they argue that federalization of trade secrecy would better promote innovation by creating a unified national IP regime. In the secretary se

This Article engages in the first systematic critique of proponents' arguments that federalizing trade secrecy is normatively desirable. First, proponents' concerns regarding the purported lack of substantive uniformity in state law are largely overstated. Forty-seven states have adopted the Uniform Trade Secrets Act ("UTSA"), which provides a common foundation for state trade secret law.¹⁷ In addition, federalizing

⁹ See Robert G. Bone, A New Look at Trade Secret Law: Doctrine in Search of Justification, 86 Calif. L. Rev. 241, 247 (1998) ("Since its emergence in the middle of the nineteenth century, trade secret law has developed primarily as a creature of state common law."); Mark A. Lemley, The Surprising Virtues of Treating Trade Secrets as IP Rights, 61 Stan. L. Rev. 311, 315 (2008) ("While patent and copyright law were well established . . . by the founding of the Republic, . . . trade secret law in its modern form in Anglo-American jurisprudence is a common law creation of the nineteenth century.").

¹⁰ Pub. L. No. 79-489, 60 Stat. 427 (1946) (codified as amended at 15 U.S.C. §§ 1051–1141n (2012)); see Kenneth L. Port, Trademark Extortion: The End of Trademark Law, 65 Wash. & Lee L. Rev. 585, 595–600 (2008) (reviewing the history of the Lanham Act and expansion of trademark protection by federal law).

¹¹ See infra Section I.A.

¹² See infra Section I.B.

¹³ See infra text accompanying notes 238–44.

¹⁴ See infra text accompanying notes 344–50.

¹⁵ See infra text accompanying notes 377–80.

¹⁶ See infra text accompanying notes 393–96.

¹⁷ Unif. Trade Secrets Act, 14 U.L.A. 536–659 (2005) [hereinafter UTSA]; see also infra Appendix A (listing the jurisdictions that have adopted the UTSA).

trade secrecy likely would not accomplish proponents' goal of uniformity, particularly if the legislation does not preempt parallel state trade secret law. Moreover, there are benefits to a decentralized approach that permits states to engage in a limited degree of experimentation regarding the scope of trade secret protection. Second, although there are advantages to litigating trade secret claims in federal court, a federal forum is already available in many trade secret cases. Third, existing state law regarding trade secret protection already substantially complies with relevant international agreements. Finally, and perhaps most significantly, federalizing trade secrecy may undermine patent law's objective of promoting the disclosure and widespread dissemination of information regarding new inventions because it will likely cause more inventors to opt out of the patent system.

The balance of this Article is organized into five parts. Part I traces trade secrecy's state law origins and development, as well as the growing scope of federal law regarding trade secrecy to provide a foundation for understanding the current state of play in this area. Part II presents recent calls for federal trade secret protections and analyzes pending legislation in Congress intended to accomplish this goal. Part III contends that Congress has the power under the Commerce Clause to create a private civil cause of action to combat trade secret misappropriation, at least in most circumstances. Part IV offers a detailed critique of four key arguments that have been advanced in favor of federalizing trade secrecy. Finally, Part V proposes an alternative approach—a modest expansion of federal courts' jurisdiction over state law trade secret claims—that can help address the harms of trade secret theft without requiring outright federalization.

I. THE DEVELOPMENT OF TRADE SECRET LAW

This Part chronicles the development of trade secret law, starting with its origins at common law in the nineteenth century. It then traces several efforts in the twentieth century to harmonize state law regarding trade secrecy, culminating with the promulgation and widespread adoption of

¹⁸ See infra Subsection IV.A.3.

¹⁹ See infra Subsection IV.A.4.

²⁰ See infra Section IV.B.

²¹ See infra Section IV.C.

²² See infra Section IV.D.

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the UTSA. Finally, it discusses the limited but growing body of federal statutory law related to trade secrecy.

A. State Law

1. Common Law Origins

Trade secrecy is the youngest sibling of the major IP doctrines, arising from the common law during the first half of the nineteenth century. 23 The recognition of trade secret misappropriation as an independent cause of action coincided with the Industrial Revolution.²⁴ In preindustrial economies, the proprietary knowledge needed to practice a trade or craft often was passed from a master to an apprentice. 25 In turn, the apprentice was contractually required to keep secret the know-how learned from the master. 26 This restriction lasted for only the duration of the apprenticeship; afterward, the apprentice could "freely depart with whatever skill and knowledge [he] had acquired."²⁷

Mass industrialization undermined this contract-based protection for proprietary information. The concentration of production in large factories greatly diminished the master-apprentice model, ²⁸ creating a mobile labor force not bound by any secrecy obligations. ²⁹ At the same time, the

²³ See Elizabeth A. Rowe & Sharon K. Sandeen, Cases and Materials on Trade Secret Law 14 (2012) ("From the late 1860s through 1988, trade secret law in the United States was primarily governed by common law "); Michael Risch, Why Do We Have Trade Secrets?, 11 Marq. Intell. Prop. L. Rev. 1, 13 (2007) ("Trade secrets owe their origination to the common law.").

²⁴ See Restatement (Third) of Unfair Competition § 39 cmt. a (1995) ("The modern law of

trade secrets evolved in England in the early 19th century, apparently in response to the growing accumulation of technical know-how and the increased mobility of employees during the industrial revolution.").

⁵ Catherine L. Fisk, Working Knowledge: Trade Secrets, Restrictive Covenants in Employment, and the Rise of Corporate Intellectual Property, 1800–1920, 52 Hastings L.J. 441, 451 (2001); see also W.J. Rorabaugh, The Craft Apprentice: From Franklin to the Machine Age in America 32–33 (1986) (discussing the transfer of knowledge from master to appren-

tice).

²⁶ Fisk, supra note 25, at 451 & n.23; see also S.R. Epstein, Craft Guilds, Apprenticeship, and Technological Change in Preindustrial Europe, 58 J. Econ. Hist. 684, 694 (1998) (explaining that "the standard oath sworn by an early modern London apprentice stipulated that he 'his said master faithfully his secrets keep'" (footnote omitted)).

²⁷ Fisk, supra note 25, at 450.

 $^{^{28}}$ Id. at 451.

²⁹ See Restatement (Third) of Unfair Competition § 39 cmt. a (1995) (noting "the increased mobility of employees during the industrial revolution"); Margo E.K. Reder & Christine Neylon O'Brien, Managing the Risk of Trade Secret Loss Due to Job Mobility in

technological developments that enabled the Industrial Revolution often were readily observable to employees in the factories and mills where they worked.³⁰ Thus, a new source of protection was needed.

The first reported trade secret case occurred in England, the birthplace of the Industrial Revolution, in 1817.³¹ Protection for trade secrecy migrated to the United States two decades later, when the Supreme Judicial Court of Massachusetts granted specific performance of a contractual agreement regarding the "exclusive use" of a secret method for making chocolate.³² Subsequently, numerous state courts recognized a property-like interest in trade secret information and granted injunctive relief to prevent its unauthorized disclosure or use.³³

2. Restatement (First) of Torts

By the early 1900s, many of the core concepts of trade secrecy had been established through case law:³⁴ The holder of a trade secret was required to take precautions to preserve its secrecy,³⁵ but this secrecy did not have to be absolute.³⁶ Information generally known to the public could not qualify as a trade secret.³⁷ And an obligation not to disclose or

an Innovation Economy with the Theory of Inevitable Disclosure, 12 J. High Tech. L. 373, 386 (2012) ("The modern concept of trade secret law developed in response to employees' increased mobility during the Industrial Revolution." (footnote omitted)).

³⁰ See Doron S. Ben-Atar, Trade Secrets: Intellectual Piracy and the Origins of American Industrial Power 90–93, 104–09 (2004) (discussing American efforts to recruit European factory and mill employees in an attempt to bring technological developments to the United States).

³¹ Newbery v. James, (1817) 35 Eng. Rep. 1011 (Ch.) 1011–12; 2 Mer. 446, 446–50; see also 1 Melvin F. Jager, Trade Secrets Law § 2:2 (2013) ("A secret formula for treating gout was the subject of a legal battle which resulted in what appears to be the first reported trade secret case in England: *Newbery v. James*." (footnote omitted)).

³² Vickery v. Welch, 36 Mass. (19 Pick.) 523, 525–27 (1837).

³³ See Donald S. Chisum et al., Understanding Intellectual Property Law § 3B[2], at 203–06 (2d ed. 2011) (summarizing nineteenth century and early twentieth century trade secret decisions).

³⁴ See Restatement (Third) of Unfair Competition § 39 cmt. a (1995) ("In the United States... by the end of the [nineteenth] century the principal features of contemporary trade secret law were well established."); 1 Jager, supra note 31, § 2:3, at 2–17 (noting that "[t]he common law of trade secrets was... developing rapidly in the United States").

³⁵ See, e.g., O. & W. Thum Co. v. Tloczynski, 72 N.W. 140, 142 (Mich. 1897).

³⁶ See, e.g., Peabody v. Norfolk, 98 Mass. 452, 461 (1868); Pressed Steel Car Co. v. Standard Steel Car Co., 60 A. 4, 9 (Pa. 1904).

³⁷ See, e.g., Nat'l Tube Co. v. E. Tube Co., 13-23 Ohio C.C. Dec. 468, 470–71 (1902), aff'd, 70 N.E. 1127 (Ohio 1903); 1 Jager, supra note 31, § 2:3, at 2–17.

use proprietary information was enforceable through an injunction.³⁸ But trade secret law did not develop uniformly because of the nature of the common law process. For example, some state courts issued numerous published decisions to provide guidance, while others had few binding precedents on trade secret issues.

In the 1920s and 1930s, the American Law Institute ("ALI") embarked on an ambitious project to clarify, harmonize, and, in some cases, shape the development of the common law though various Restatements of the Law.³⁹ The ALI addressed trade secrets in Sections 757–58 of the Restatement (First) of Torts ("Restatement"), published in 1939. Although these sections are relatively brief, they articulate some basic principles that were highly influential in shaping trade secret law.⁴⁰

Section 757 of the Restatement defined a trade secret as "any formula, pattern, device or compilation of information which is used in one's business, and which gives [the business] an opportunity to obtain an advantage over competitors who do not know or use it."⁴¹ In addition, as suggested by the word "secret," the Restatement provided that "a substantial element of secrecy must exist, so that [the relevant information would be difficult to acquire], except by the use of improper means."⁴² The Restatement further provided that misappropriation included acquisition of the secret through "improper means," as well as through disclosure or use of the secret in violation of a duty of confidence. ⁴³

The Restatement "served as the primary source for an understanding of trade secret law for at least 50 years." Despite this, it was criticized

³⁸ See, e.g., Eastman Co. v. Reichenbach, 20 N.Y.S. 110, 110, 116 (N.Y. Sup. Ct. 1892), aff'd sub nom. Eastman Kodak Co. v. Reighenbach, 29 N.Y.S. 1143 (N.Y. Gen. Term 1894); Fralich v. Despar, 30 A. 521, 521–22 (Pa. 1894).

³⁹ John P. Frank, The American Law Institute, 1923–1998, 26 Hofstra L. Rev. 615, 616–19 (1998); see also Arthur L. Corbin, The Restatement of the Common Law by the American Law Institute, 15 Iowa L. Rev. 19, 26–27 (1929) (explaining that the Restatement drafters sometimes "adopt[ed] a minority rule, hoping to direct the stream of decisions in this manner by using its influence and authority in the judicial community").

⁴⁰ See Ramon A. Klitzke, The Uniform Trade Secrets Act, 64 Marq. L. Rev. 277, 282 (1980) (noting that despite its limitations, "the *Restatement* greatly contributed to the evolution of trade secrets law").

⁴¹ Restatement (First) of Torts § 757 cmt. b (1939).

⁴² Id.

⁴³ Id. § 757(a)–(c).

⁴⁴ Rowe & Sandeen, supra note 23, at 27; see also Sharon K. Sandeen, The Evolution of Trade Secret Law and Why Courts Commit Error When They Do Not Follow the Uniform Trade Secrets Act, 33 Hamline L. Rev. 493, 502 (2010) [hereinafter Sandeen, The Evolution of Trade Secret Law] ("Between 1939 and 1988, the Restatement First was the primary

for not harmonizing the laws governing trade secrecy. 45 This was due in part to the inherent limitations of the Restatement project, which "depend[ed] upon its adoption by courts for its ultimate efficacy." 46 In addition, "the slow pace and frequently inconsistent development of the common law" hindered harmonization. 47 For instance, Wyoming did not recognize an express cause of action for trade secret misappropriation until 2006. 48

3. The Uniform Trade Secrets Act

A new attempt to harmonize trade secret law was launched in the late 1960s. ⁴⁹ This effort culminated with the promulgation of the UTSA by the National Conference of Commissioners on Uniform State Laws. The UTSA's drafters sought to create "unitary definitions of trade secret and trade secret misappropriation," ⁵⁰ as well as to codify basic principles that had been developed through case law. ⁵¹ Thus, the UTSA "represent[s] the first major attempt to legislate trade secrets misappropriation[,] rather than to leave it in the hands of the courts." ⁵²

source for an understanding of the purpose and meaning of trade secret law in the United States." (footnote omitted)).

⁴⁵ See UTSA, supra note 17, at prefatory note ("Notwithstanding the commercial importance of state trade secret law...its development [has been] uneven."); Rowe & Sandeen, supra note 23, at 27 ("[B]eginning in the 1960s, concern was expressed by legal commentators and the practicing bar that trade secret law was not developing in a consistent fashion...").

⁴⁶ Klitzke, supra note 40, at 283.

Argument Sandeen, The Evolution of Trade Secret Law, supra note 44, at 502.

⁴⁸ See Briefing.com v. Jones, 2006 WY 16, ¶ 10, 16, 126 P.3d 928, 934, 936 (Wyo. 2006) (noting that "Wyoming is the only jurisdiction in the United States that has not given specific legislative or judicial recognition to a tort cause of action for misuse of trade secrets," but concluding that "[t]he common law cause of action for misappropriation of trade secrets . . . is part of the common law in the State of Wyoming"). Shortly after this decision, the Wyoming legislature enacted the Uniform Trade Secrets Act. Wyo. Stat. Ann. §§ 40-24-101 to -110 (2013).

⁴⁹ UTSA, supra note 17, at prefatory note.

⁵⁰ Id.

⁵¹ Klitzke, supra note 40, at 284; see also Christopher Rebel J. Pace, The Case for a Federal Trade Secrets Act, 8 Harv. J.L. & Tech. 427, 432–33 (1995) ("The National Conference's intent in proposing the UTSA was not to revolutionize the standards for trade secret misappropriation, but to codify existing common law standards and to provide a uniform approach to trade secret misappropriation among the states." (footnote omitted)).

⁵² Pace, supra note 51, at 433.

Like the Restatement, the UTSA requires both "the existence of a 'trade secret'" and an act of "misappropriation' before liability attaches."⁵³ The UTSA defines a trade secret as:

information, including a formula, pattern, compilation, program, device, method, technique, or process, that:

- (i) derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use, and
- (ii) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.⁵⁴

Misappropriation exists under the UTSA when a party learns a trade secret with knowledge or reason to know that it was acquired through "improper means." "Improper means' includes theft, bribery, misrepresentation, breach or inducement of a breach of a duty to maintain secrecy, or espionage through electronic or other means, "56 as well as "otherwise lawful conduct which is improper under the circumstances." In addition, the UTSA identifies several proper means that do not qualify as misappropriation, including independent invention, reverse engineering, and "observation of the [alleged secret] in public use or on public display." 58

Misappropriation also exists when a party discloses or uses a trade secret without consent if the party:

- (A) used improper means to acquire knowledge of the trade secret; or
- (B) at the time of disclosure or use, knew or had reason to know that his knowledge of the trade secret was

⁵³ Marina Lao, Federalizing Trade Secrets Law in an Information Economy, 59 Ohio St. L.J. 1633, 1653 (1998).

⁵⁴ UTSA, supra note 17, § 1(4).

⁵⁵ Id. § 1(2)(i).

⁵⁶ Id. § 1(1).

⁵⁷ Id. § 1 cmt.

⁵⁸ Id. "Reverse engineering is the process of [starting] with [a] known product and work[ing] backward to divine the process that aided in its development or manufacture." Geraldine Szott Moohr, The Problematic Role of Criminal Law in Regulating Use of Information: The Case of the Economic Espionage Act, 80 N.C. L. Rev. 853, 912 n.305 (2002) (citing Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 476 (1974)).

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- (I) derived from or through a person who had utilized improper means to acquire it;
- (II) acquired under circumstances giving rise to a duty to maintain its secrecy or limit its use; or
- (III) derived from or through a person who owed a duty to the person seeking relief to maintain its secrecy or limit its use; or
- (C) before a material change [in] 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

"Actual or threatened [trade secret] misappropriation may be enjoined" under the UTSA, but injunctive relief must terminate when the "commercial advantage... from the misappropriation" has ended. ⁵⁹ If the grant of a prohibitive injunction is unreasonable, a reasonable royalty can be awarded instead to compensate for future uses of the secret. ⁶⁰ Damages can be recovered for the "actual loss caused by [the] misappropriation" and any "unjust enrichment... that is not taken into account" in calculating actual loss. ⁶¹ In addition, punitive damages and attorney's fees may be awarded for willful and malicious misappropriation. ⁶² Finally, the original version of the UTSA preempted "conflicting tort, restitutionary, and other law... pertaining to civil liability for misappropriation of a trade secret" and imposed a three-year statute of limitations for asserting misappropriation. ⁶⁴

In 1985, the National Conference of Commissioners on Uniform State Laws adopted several amendments, all relatively minor, to the UTSA.⁶⁵ First, a reasonable royalty was permitted in lieu of a prohibitive injunction only in "exceptional circumstances."⁶⁶ In addition, the UTSA's preemption clause was altered to clarify that claims for breach of con-

⁵⁹ Id. § 2(a).

⁶⁰ Unif. Trade Secrets Act § 2(b) (1979) (amended 1985) [hereinafter UTSA (1979)].

⁶¹ UTSA, supra note 17, § 3(a).

⁶² Id. §§ 3(b), 4.

⁶³ UTSA (1979), supra note 60, § 7(a).

⁶⁴ UTSA, supra note 17, § 6. Eight of the forty-seven jurisdictions that have enacted the UTSA have modified the statute of limitations period. See Infra Appendix B.

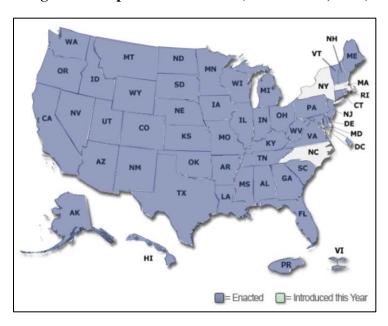
⁶⁵ For a detailed summary of the history behind the 1985 amendments to the UTSA, see Sandeen, The Evolution of Trade Secret Law, supra note 44, at 535–38.

⁶⁶ UTSA, supra note 17, § 2(b).

tract and related contractual remedies, as well as criminal laws prohibiting misappropriation, were not precluded.⁶⁷

Forty-seven states and the District of Columbia have enacted the UTSA (either the 1979 original or 1985 amended version) since its promulgation, 68 with some states modifying portions of the model statute's provisions. 69 The extent of the UTSA's adoption is depicted in Figure I.

Figure I: Adoption of the UTSA (as of Feb. 23, 2015)⁷⁰



⁶⁸ See infra Appendix A (listing the jurisdictions that have adopted the UTSA and its effective date in each jurisdiction); see also Uniform Law Comm'n, Legislative Enactment Status: Trade Secrets Act: Enactment Status, http://www.uniformlaws.org/LegislativeMap.aspx?title= Trade%20Secrets%20Act (last visited Feb. 23, 2015) (indicating that there is legislation pending in Massachusetts). The U.S. territories of Puerto Rico and the U.S. Virgin Islands have also adopted the UTSA. Id. For a discussion of whether North Carolina should be counted as a UTSA jurisdiction, see infra note 247.

⁶⁷ Id. § 7(b).

⁶⁹ See Lao, supra note 53, at 1661-65; see also infra notes 253-59 and accompanying text (discussing states' modifications of the UTSA).

⁷⁰ Uniform Law Comm'n, supra note 68.

4. Restatement (Third) of Unfair Competition

The Restatement (Third) of Unfair Competition ("Restatement (Third)"), promulgated by the ALI in 1995, is analogous to the UTSA in most respects. Its definition of what constitutes a trade secret is similar to the UTSA. The scope of the Restatement (Third)'s standard for misappropriation "is intended to be identical with . . . the [UTSA]" as well. Furthermore, its remedial provisions are generally consistent with the UTSA.

However, the Restatement (Third) has had only a modest impact at best on the development of trade secret law. Most states have adopted the UTSA as statutory law and thus the Restatement (Third) is frequently disregarded.⁷⁴

B. Federal Law

Although trade secret protection remains governed primarily by state law, there is a significant body of federal statutory law that is potentially applicable to trade secret theft.

1. General Criminal Statutes

Prior to 1996, there was no federal criminal law directed specifically at trade secret misappropriation by private actors.⁷⁵ Instead, "federal

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⁷¹ See Restatement (Third) of Unfair Competition § 39 (1995) (defining a "trade secret" 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"); see also id. § 39 cmt. b ("The concept of a trade secret as defined in this Section is intended to be consistent with the definition of 'trade secret' in § 1(4) of the [UTSA].").

⁷² Id. § 40 Reporters' Note cmt. a.

⁷³ Compare UTSA, supra note 17, §§ 2–3, with Restatement (Third) of Unfair Competition §§ 44–45 (1995). There are two exceptions. First, the Restatement (Third) does not cap punitive damages like the UTSA. Restatement (Third) of Unfair Competition § 45 cmt. i (1995). Second, the Restatement (Third) does not expressly authorize an award of attorney's fees. Id. § 45 cmt. j.

⁷⁴ See Annemarie Bridy, Trade Secret Prices and High-Tech Devices: How Medical De-

⁷⁴ See Annemarie Bridy, Trade Secret Prices and High-Tech Devices: How Medical Device Manufacturers Are Seeking to Sustain Profits by Propertizing Prices, 17 Tex. Intell. Prop. L.J. 187, 201 n.76 (2009) ("Whereas the UTSA and [the Restatement] are often read together by courts as complementary sources of definitional authority, the sections of the Restatement (Third) . . . that deal with trade secrets are seldom invoked." (citation omitted)).

⁷⁵ See Ben Shiffman et al., Intellectual Property Crimes, 49 Am. Crim. L. Rev. 929, 932 (2012) ("[N]o federal criminal statute dealt directly with the theft of commercial trade secrets until . . . 1996."). While the Trade Secrets Act, 18 U.S.C. §§ 1905–09 (2012), makes it

prosecutors wanting to charge a defendant with theft of trade secrets had to utilize other federal criminal statutes." These included the federal mail fraud and wire fraud provisions, which "criminalize the use of the federal mail or interstate wire or electronic communications to execute any scheme to deprive a person of his or her property or money." Federal prosecutors have pursued numerous claims of stolen trade secrets under these provisions. However, their impact has been limited because many acts of misappropriation, such as a "faithless employee" who photocopies documents containing trade secret information and brings them to a new employer, do not involve use of the mail or electronic communications. In addition, these statutes may not apply when "trade secret thieves merely copy information" because this "do[es] not necessarily 'defraud' the victims permanently of the data."

Similarly, another federal criminal statute, the National Stolen Property Act ("NSPA"), ⁸³ has been invoked to prosecute the unauthorized transfer of trade secret information across state or foreign boundaries. ⁸⁴

a misdemeanor offense for federal officials and employees to publicly disclose trade secret information learned during their official duties, this law does not apply to private actors.

⁷⁶ Rowe & Sandeen, supra note 23, at 521; see also Restatement (Third) of Unfair Competition § 39 cmt. b (1995) ("In some circumstances the appropriation of a trade secret may also violate the federal wire and mail fraud statutes and the National Stolen Property Act." (citations omitted)); Peter J.G. Toren, The Prosecution of Trade Secrets Thefts Under Federal Law, 22 Pepp. L. Rev. 59, 64 (1994) ("Case law . . . recognizes that under certain circumstances the theft of trade secrets and proprietary information may violate a number of federal criminal statutes which prohibit the misappropriation of property or goods.").

⁷⁷ 18 U.S.C. § 1341 (2012).

⁷⁸ Id. § 1343.

⁷⁹ Francisco J. Morales, Comment, The Property Matrix: An Analytical Tool to Answer the Question, "Is This Property?", 161 U. Pa. L. Rev. 1125, 1138 (2013).

⁸⁰ See, e.g., United States v. Howley, 707 F.3d 575, 579–81 (6th Cir. 2013); United States v. Martin, 228 F.3d 1, 18–19 (1st Cir. 2000); United States v. Seidlitz, 589 F.2d 152, 153, 155 (4th Cir. 1978); Abbott v. United States, 239 F.2d 310, 311–12 (5th Cir. 1956).

⁸¹ See H.R. Rep. No. 104-788, at 6–7 (1996), *reprinted in* 1996 U.S.C.C.A.N. 4021, 4025–26 ("The mail fraud statute is only applicable when the mails are used to commit the criminal act and the fraud by wire statute requires proof that wire, radio, or television technology was used to commit the crime.").

⁸² James H.A. Pooley, Mark A. Lemley & Peter J. Toren, Understanding the Economic Espionage Act of 1996, 5 Tex. Intell. Prop. L.J. 177, 180 (1997).

^{83 18} U.S.C. §§ 2314–15 (2012).

⁸⁴ See, e.g., United States v. Bottone, 365 F.2d 389, 391, 393–94 (2d Cir. 1966) (affirming criminal convictions under the NSPA when the defendants removed documents describing a secret drug manufacturing process from their employer's premises, made copies, and subsequently sold the copies to the employer's European competitors); see also Pooley, Lemley &

However, the NSPA only applies if the defendant actually knows a trade secret has been stolen and then intentionally discloses it to a third party. 85 Furthermore, some courts have held that "[p]urely intellectual property," including trade secrets, is not a good, ware, or merchandise protected by the NSPA.86

2. The Economic Espionage Act

Due to these statutes' inherent limitations, ⁸⁷ as well as the increasing value of trade secrets to the U.S. economy, ⁸⁸ Congress enacted the Economic Espionage Act ("EEA") in 1996. 89 The EEA protects "trade secrets of all businesses operating in the United States, foreign and domestic alike, from economic espionage and trade secret theft...."90 It criminalizes two types of trade secret theft: (1) espionage on behalf of a foreign entity, 91 and (2) theft of trade secrets for pecuniary gain. 92 These provisions define "misappropriation" essentially identically, imposing liability on any individual or entity that:

- (1) steals, or without authorization appropriates, takes, carries away, or conceals, or by fraud, artifice, or deception obtains a trade secret;
- (2) without authorization copies, duplicates, sketches, draws, photographs, downloads, uploads, alters, destroys, photocopies, replicates,

Toren, supra note 82, at 179-85 (describing cases in which 18 U.S.C. § 2314 was used to prosecute the misappropriation of trade secrets).

⁸⁵ 1 Jager, supra note 31, § 4:4.

⁸⁶ See, e.g., United States v. Brown, 925 F.2d 1301, 1307 (10th Cir. 1991).

⁸⁷ See S. Rep. No. 104-359, at 10 (1996) ("[N]o Federal law protects proprietary economic information from theft and misappropriation in a systematic, principled manner. As a result, prosecutors have had trouble shoe-horning economic espionage into these laws."); H.R. Rep. No. 104-788, at 6-7 (1996), reprinted in 1996 U.S.C.C.A.N. 4021, 4025 ("The principal problem appears to be that there is no federal statute directly addressing economic espionage or which otherwise protects proprietary information in a thorough, systematic manner."); see also Toren, supra note 76, at 96 (explaining the limited reach of pre-Economic Espionage Act federal criminal statutes).

⁸ See R. Mark Halligan, Protection of U.S. Trade Secret Assets: Critical Amendments to the Economic Espionage Act of 1996, 7 J. Marshall Rev. Intell. Prop. L. 656, 657-58 & n.11

⁸⁹ Pub. L. No. 104-294, 110 Stat. 3488 (1996) (codified as amended at 18 U.S.C. §§ 1831–

<sup>32 (2012)).

90</sup> Statement by President William J. Clinton upon Signing H.R. 3723, 32 Weekly Comp. Pres. Doc. 2040 (Oct. 14, 1996), reprinted in 1996 U.S.C.C.A.N. 4034, 4034

⁹¹ 18 U.S.C. § 1831(a) (2012).

⁹² Id. § 1832(a).

transmits, delivers, sends, mails, communicates, or conveys a trade secret; [or]

(3) receives, buys, or possesses a trade secret, knowing the same to have been stolen or appropriated, obtained, or converted without authorization[.]⁹³

The EEA also prohibits attempts and conspiracies to commit misappropriation.⁹⁴ In addition, the EEA applies to extraterritorial conduct by U.S. citizens or entities, as well as non-citizens, if "an act in furtherance of the offense was committed in the United States."⁹⁵

Unlike trade secret misappropriation under state law, the EEA demands proof of unlawful intent. Section 1831, the "foreign espionage" provision, requires that the misappropriating party intend or know "that the [misappropriation] will benefit any foreign government, foreign instrumentality, or foreign agent." The terms "foreign instrumentality" and "foreign agent" are narrower than they may appear at first glance. For example, "[f]oreign companies or individuals do not fall within the ambit of [S]ection 1831 unless they are 'substantially owned, controlled, sponsored, commanded, managed or dominated by a foreign government."" This interpretation is consistent with Congress's intent that Section 1831 target espionage conducted at the behest of foreign governments, not foreign corporations.

Section 1832, the "theft of trade secrets" provision, contains three separate mens rea requirements. ⁹⁹ Specifically, it requires the defendant (1) knowingly commit an act of misappropriation; (2) intentionally "convert a trade secret" to his own or another's "economic benefit"; and (3) commit misappropriation with the intent or knowledge that it will "injure any owner of that trade secret." ¹⁰⁰ It also contains a jurisdictional

 $^{^{93}}$ Id. § 1831(a)(1)–(3); id. § 1832(a)(1)–(3) (containing the same definition with the exception of replacing each instance of "a trade secret" with the phrase "such information").

⁹⁴ Id. §§ 1831(a)(4)–(5), 1832(a)(4)–(5).

⁹⁵ Id. § 1837.

⁹⁶ Id. § 1831.

⁹⁷ Pooley, Lemley & Toren, supra note 82, at 197–98 (quoting 18 U.S.C. § 1839(1) (2012)).

⁹⁸ Id. at 198 & n.121.

⁹⁹ U.S. Dep't of Justice, Prosecuting Intellectual Property Crimes 177–82, 185–86 (4th ed. 2013); Pooley, Lemley & Toren, supra note 82, at 199.

¹⁰⁰ 18 U.S.C. § 1832 (2012).

limitation that the trade secret be "related to a product or service used in or intended for use in interstate or foreign commerce." ¹⁰¹

Somewhat surprisingly in light of its status as the centerpiece federal criminal law for trade secret theft, the EEA has not been widely utilized by federal prosecutors. According to a recent study, the federal government has filed 124 total criminal cases under the EEA as of September 2012, an average of fewer than eight indictments per year. The relative paucity of enforcement actions has caused commentators to call the EEA a "disappointment" and conclude that it is "not acting as a deterrent against theft of trade secrets."

3. The Computer Fraud and Abuse Act

Another federal statute, the Computer Fraud and Abuse Act ("CFAA"), ¹⁰⁵ has been used to protect trade secrets that are computer-accessible. Congress originally enacted the CFAA in 1984 as a criminal antihacking law for "information stored on computers belonging to the

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¹⁰¹ Id. This statutory language was recently amended in response to *United States v. Aleynikov*, 676 F.3d 71, 82 (2d Cir. 2012), where the Second Circuit dismissed a § 1832 prosecution against a defendant accused of stealing source code from Goldman Sachs's high-frequency trading ("HFT") platform, reasoning that "[b]ecause the HFT system was not designed to enter or pass in commerce, or to make something that does, [the defendant]'s theft of source code relating to that system was not an offense under the EEA." In December 2012, Congress enacted the Theft of Trade Secrets Clarification Act of 2012, Pub. L. No. 112-236, 126 Stat. 1627 (2012), which broadened § 1832's scope to include services as well as products used, or intended for use, in interstate or foreign commerce. See generally Robert Damion Jurrens, Note, Fool Me Once: *U.S. v. Aleynikov* and the Theft of Trade Secrets Clarification Act of 2012, 28 Berkeley Tech. L.J. 833 (2013) (discussing the *Aleynikov* case and Congress's subsequent enactment of the Theft of Trade Secrets Clarification Act).

¹⁰² Peter J. Toren, An Analysis of Economic Espionage Act Prosecutions: What Companies Can Learn From It and What the Government Should Be Doing About It!, 84 Bloomberg BNA's Pat. Trademark & Copyright J. 884, 885 (2012); see also Recent Case, Criminal Law—Economic Espionage—Ninth Circuit Upholds First Trial Conviction Under § 1831 of the Economic Espionage Act of 1996.—*United States v. Chung*, 659 F.3d 815 (9th Cir. 2011), *cert. denied*, No. 11-1141, 2012 WL 929750 (U.S. Apr. 16, 2012), 125 Harv. L. Rev. 2177, 2177 (2012) ("[S]urprisingly few cases have been prosecuted under the [EEA]." (footnote omitted)).

¹⁰³ Chris Carr et al., The Economic Espionage Act: Bear Trap or Mousetrap?, 8 Tex. Intell. Prop. L.J. 159, 199 (2000).

¹⁰⁴ Toren, supra note 102, at 886; see also Recent Case, supra note 102, at 2181 ("[F]ederal prosecutors have taken a markedly tentative approach toward prosecuting § 1831 offenses."). ¹⁰⁵ 18 U.S.C. § 1030 (2012).

government and financial institutions." ¹⁰⁶ But in 1994, Congress created a civil remedy permitting "[a]ny person who suffers damage or loss" due to a CFAA violation to pursue damages and injunctive relief. ¹⁰⁷ In 1996, Congress further broadened the CFAA's scope to include any computer "used in or affecting interstate or foreign commerce or communication" ¹⁰⁸—which today effectively means any computer capable of connecting to the Internet. ¹⁰⁹

The CFAA contains seven categories of prohibited conduct, ¹¹⁰ several of which can be invoked by trade secret plaintiffs. ¹¹¹ Section 1030(a)(2) prohibits anyone from intentionally accessing any protected computer "without authorization or exceed[ing] authorized access," and "thereby obtain[ing]...information." ¹¹² Information protected by the CFAA need not be a trade secret; any proprietary, technical, or business information held on a computer may qualify. ¹¹³ In addition, Section 1030(a)(4) prohibits the knowing access of a computer "without authorization, or [that] exceeds authorized access" with the "intent to defraud," and "by means of such conduct... obtain[ing] anything of value." ¹¹⁴ Finally, for civil liability, the CFAA requires an additional showing of

¹⁰⁶ See Graham M. Liccardi, Comment, The Computer Fraud and Abuse Act: A Vehicle for Litigating Trade Secrets in Federal Court, 8 J. Marshall Rev. Intell. Prop. L. 155, 160 (2008).

¹⁰⁷ 18 U.S.C. § 1030(g).

¹⁰⁸ Id. § 1030(e)(2)(B).

¹⁰⁹ See, e.g., *United States v. Trotter*, 478 F.3d 918, 921 (8th Cir. 2007) (per curiam) (holding that the accessed computer was "protected" because the defendant "admitted the computers were connected to the Internet"); Nat'l City Bank, N.A. v. Prime Lending, Inc., No. CV-10-034-EFS, 2010 WL 2854247, at *4 n.2 (E.D. Wash. July 19, 2010) ("[A]ny computer connected to the internet is a protected computer [under the CFAA]." (citation omitted)); see also Kyle W. Brenton, Trade Secret Law and the Computer Fraud and Abuse Act: Two Problems and Two Solutions, 2009 U. Ill. J.L. Tech. & Pol'y 429, 433 (2009) (explaining that "given the decentralized nature of computer networks and the Internet, it is difficult to imagine a functioning, networked computer that does not fit the [CFAA's] definition" of a "protected computer" (footnotes omitted)).

¹¹⁰ 18 U.S.C. § 1030(a)(1)–(7).

¹¹¹ See Brenton, supra note 109, at 451 (explaining that "the same allegedly wrongful act will frequently give rise to both CFAA and UTSA liability").

¹¹² 18 U.S.C. § 1030(a)(2). The term "exceeds authorized access" is defined in the CFAA as "to access a computer with authorization and to use such access to obtain or alter information in the computer that the accesser is not entitled so to obtain or alter." Id. § 1030(e)(6).

¹¹³ Brenton, supra note 109, at 430–31.

¹¹⁴ 18 U.S.C. § 1030(a)(4). If the object of value is only use of the computer, then the value of this use must exceed \$5000 in any one-year period. Id.

harm to the plaintiff, 115 which can be satisfied by a damage or loss exceeding \$5000 in value in a one-year period. 116 This effectively serves as an amount-in-controversy requirement. 117

4. Section 337of the Tariff Act of 1930

In addition, Section 337 of the Tariff Act of 1930¹¹⁸ ("Section 337") has been invoked to combat extraterritorial acts of trade secret misappropriation. The United States International Trade Commission ("ITC"), an independent federal agency, has authority under Section 337 to conduct investigations of "[u]nfair methods of competition and unfair acts in the importation . . . or in the sale" of goods in the United States. 119 If a Section 337 violation is established, the ITC can issue an exclusion order preventing importation of the relevant goods. 120

Section 337 "has evolved into an almost exclusive intellectual property enforcement statute," primarily for claims of patent infringement. 121 But Section 337 is applicable to trade secret misappropriation as well. In a recent decision, TianRui Group Co. v. International Trade Commission, the U.S. Court of Appeals for the Federal Circuit affirmed an exclusion order entered under Section 337 for goods manufactured in China using trade secret information misappropriated from an American company. 122 The complainant in TianRui, Amsted Industries Inc. ("Amsted"), licensed its secret ABC process for making cast steel railway wheels to a Chinese firm called Datong ABC Castings Company Limited ("Datong"). 123 After unsuccessfully attempting to obtain a license to the manufacturing technology, another Chinese firm, TianRui Group

¹¹⁵ Id. § 1030(g) (requiring a showing of one of the harms listed in 18 U.S.C. \$\$ 1030(c)(4)(A)(i)(I)–(V)).

116 Id. \$ 1030(c)(4)(A)(i)(I).

¹¹⁷ Brenton, supra note 109, at 435.

¹¹⁸ 19 U.S.C. § 1337 (2012).

¹¹⁹ Id. § 1337(a)(1)(A). For a more detailed explanation of § 337 and the ITC's administrative enforcement process, see generally William P. Atkins, Appreciating 337 Actions at the ITC: A Primer on Intellectual Property Issues and Procedures at the U.S. International Trade Commission, 5 U. Balt. Intell. Prop. L.J. 103 (1997).

¹²⁰ 19 U.S.C. § 1337(d).

¹²¹ Atkins, supra note 119, at 104–05; see also Press Release, U.S. Int'l Trade Comm'n, Facts and Trends Regarding USITC Section 337 Investigations 1 (Apr. 15, 2013), available at http://www.usitc.gov/press_room/documents/featured_news/337facts.pdf ("Most Section 337 investigations involve allegations of infringement of patents ").

¹²² 661 F.3d 1322, 1323–24 (Fed. Cir. 2011).

¹²³ Id. at 1324.

Company Limited ("TianRui"), hired nine of Datong's employees, some of whom had been trained in the secret ABC process. 124

At the ITC, Amsted alleged the former Datong employees improperly disclosed information to TianRui regarding the secret ABC process and thereby misappropriated Amsted's trade secrets. 125 TianRui then partnered with another firm to manufacture railway wheels using the ABC process and export them to the United States. 126 Amsted argued that TianRui's conduct violated Section 337's prohibition on "[u]nfair methods of competition."127 Applying Illinois trade secret law (which is based on the UTSA), the administrative law judge concluded there was "overwhelming direct and circumstantial evidence" that TianRui had misappropriated multiple trade secrets related to the ABC process. 128

Affirming the ITC's decision, the Federal Circuit held that trade secret misappropriation claims qualify as "unfair competition" under Section 337. 129 Notably, the court rejected the ITC's application of Illinois trade secret law, holding that "a single federal standard, rather than the law of a particular state, should determine what constitutes a misappropriation of trade secrets . . . under [S]ection 337." Thus, after *TianRui*, federal courts and the ITC have the authority to develop a federal common law of trade secrecy for Section 337 violations. 131

Section 337 is a potentially powerful tool against foreign entities that misappropriate trade secret information and then use that information to manufacture a product and attempt to export it to the United States. 132

¹²⁴ Id. In addition, eight of the nine employees had signed confidentiality agreements before leaving Datong to work at TianRui. Id. 125 Id.

¹²⁶ Id.

¹²⁷ Id. at 1325 (alteration in original).

¹²⁹ Id. at 1326-27 ("The Commission has long interpreted [S]ection 337 to apply to trade secret misappropriation." (citation omitted)). But see id. at 1337–38 (Moore, J., dissenting) (contending that § 337 does not extend to "entirely foreign acts" of misappropriation).

¹³⁰ Id. at 1327 (majority opinion).

¹³¹ Id. ("[W]here the question is whether particular conduct constitutes 'unfair methods of competition' and 'unfair acts' in importation, in violation of [S]ection 337, the issue is one of federal law and should be decided under a uniform federal standard, rather than by reference to a particular state's tort law."); see also 19 Charles Alan Wright et al., Federal Practice and Procedure § 4514 (2d ed. Supp. 2014) (explaining that under TianRui, "uniquely federal interests justify federal common law interpretation of trade secrets under Tariff Act of 1930").

¹³² See P. Andrew Riley & Jonathan R.K. Stroud, A Survey of Trade Secret Investigations at the International Trade Commission: A Model for Future Litigants, 15 Colum. Sci. &

The ITC's authority over trade secret misappropriation claims, however, is limited in two important ways. First, Section 337 only applies to goods manufactured abroad and subsequently imported into the United States; it cannot remedy purely domestic trade secret misappropriation. Second, Section 337 requires a showing of serious or threatened domestic harm—specifically, the misappropriation must "destroy or substantially injure" a domestic industry, prevent its establishment, or "restrain or monopolize" commerce in the industry. Despite these requirements, Section 337 is a potentially potent alternative for American firms to combat foreign trade secret theft.

In sum, while there is a substantial body of federal statutory law related to trade secrecy, its coverage is incomplete and is focused primarily on criminal, rather than civil, remedies. As a result, state law remains the primary authority for civil trade secret claims. But this may soon change, as described in the following Part.

II. PROPOSALS TO FEDERALIZE TRADE SECRECY

The idea of a civil cause of action for trade secret misappropriation under federal law is not new.¹³⁴ But the increased importance of trade secrets to the U.S. economy and allegations of widespread trade secret theft, particularly by foreign actors, have renewed calls for federal action. This Part summarizes the growing concerns regarding trade secret misappropriation and analyzes several recent proposals to address it.

Tech. L. Rev. 41, 44 (2013) (contending that after *TianRui*, "savvy companies have sought to use [the ITC] to protect their domestic U.S. market" and that "the ITC provides the threat of real litigation backed up by a powerful remedy and broad jurisdiction").

¹³³ 19 U.S.C. § 1337(a)(1)(A)(i)–(iii) (2012).

¹³⁴ See, e.g., 142 Cong. Rec. 27111–12 (1996) (statement of Sen. Arlen Specter) (contending that "available civil remedies may not be adequate to the task" of combating trade secret theft and asserting that "a Federal civil cause of action is needed"); Margaret M. Blair & Steven M.H. Wallman, Unseen Wealth: Report of the Brookings Task Force on Intangibles 81 (2001) ("The [Brookings Task Force on Intangibles] recommends that Congress enact a 'Federal Trade Secret Act' (FTSA), by virtue of its authority under the Commerce Clause."); Sandeen, The Evolution of Trade Secret Law, supra note 44, at 505–07 (discussing proposed federal legislation in the 1950s and 1960s to create a statutory cause of action for those injured as a result of unfair competition, such as trade secret theft); Comment, Theft of Trade Secrets: The Need for a Statutory Solution, 120 U. Pa. L. Rev. 378, 396–401 (1971) (calling for federal legislation with civil and criminal remedies for trade secret misappropriation).

A. The Growing Threat of Trade Secret Theft and Calls for Federal Action

Several recent government reports have highlighted the mounting problem of trade secret misappropriation. In February 2013, a White House task force on IP enforcement found that "the pace of economic espionage and trade secret theft against U.S. corporations is accelerating." It identified information and communications technology, military technology, and fast-growing sectors like pharmaceuticals and clean energy as targets of foreign espionage. In addition, it explained that technological developments like digitization of business records, widespread use of portable devices, and cloud computing (that is, storage of information on remote servers) have made U.S. businesses more vulnerable to electronic means of trade secret misappropriation. The task force concluded by calling for the review of "existing Federal laws to determine if legislative changes are needed to enhance enforcement against trade secret theft."

Similarly, in its annual report on the global state of IP rights and enforcement for 2013, the U.S. Trade Representative ("USTR") called attention to the issue of trade secret misappropriation by foreign entities. The report raised concerns regarding "the apparent growth of trade secret theft," explaining that misappropriation causes "significant costs to U.S. companies and threatens the economic security of the United States." The USTR expressed particular concern over trade secret misappropriation from China, including the "systematic[] infiltrat[ion of] the computer systems of a significant number of U.S. companies" by actors affiliated with the Chinese military and government, resulting in the theft of "hundreds of terabytes of data."

Several key organizations representing IP owners and attorneys have expressed support for a private federal cause of action for trade secret

¹³⁵ Office of Mgmt. & Budget, supra note 4, at 1.

¹³⁶ Id. at 8 (citing ONCIX Report, supra note 1, at 8–9).

¹³⁷ Id.; see also Eric Holder, U.S. Att'y Gen., Remarks at the Administration Trade Secret Strategy Rollout (Feb. 20, 2013), available at http://www.justice.gov/iso/opa/ag/speeches/2013/ag-speech-1302201.html ("[C]ontinuing technological expansion and accelerating globalization will lead to a dramatic increase in the threat posed by trade secret theft in the years ahead.").

¹³⁸ Office of Mgmt. & Budget, supra note 4, at 11–12.

¹³⁹ Office of the U.S. Trade Rep., supra note 2, at 13–15.

¹⁴⁰ Id. at 13.

¹⁴¹ Id. at 13, 32.

misappropriation. ¹⁴² The American Intellectual Property Law Association ("AIPLA"), a national bar association of IP lawyers, has suggested creating a "private civil action for the theft of trade secrets by international misappropriation utilizing the existing framework of the [EEA]." ¹⁴³ Similarly, the Intellectual Property Owners Association ("IPO") has advocated adding "a civil cause of action to the EEA." ¹⁴⁴ Former U.S. Patent and Trademark Office ("USPTO") Director David Kappos has also called for a federal civil cause of action against trade secret misappropriation. ¹⁴⁵

Finally, a number of scholars and practitioners have called for the adoption of a federal trade secret act. In a widely cited law review article, Professor Marina Lao proposed a federal trade secret act resembling the UTSA. Likewise, IP attorney R. Mark Halligan has argued that "we are long overdue for the enactment of a federal trade secrets statute," and IP attorney David Almeling asserted that federalization "is the next logical step in the evolution of trade secret law." 148

B. Proposed Legislation

Several proposals for a federal civil cause of action for trade secret misappropriation have recently been introduced in Congress. These proposals are: (1) the Defend Trade Secrets Act of 2014 ("DTSA");¹⁴⁹ (2)

¹⁴² See, e.g., Comm'n on the Theft of Am. Intellectual Prop., supra note 1, at 73 (recommending to "[a]mend the Economic Espionage Act to provide a private right of action for those who hold trade secrets").

¹⁴³ Letter from Jeffrey I.D. Lewis, President, Am. Intellectual Prop. Law Ass'n, to the Honorable Victoria A. Espinel, U.S. Intellectual Prop. Enforcement Coordinator, Office of Mgmt. & Budget, Exec. Office of the President 2 (Apr. 22, 2013), available at http://www.aipla.org/advocacy/executive/Documents/AIPLA%20Letter%20to%20IPEC%20on%20Trade%20Secrets%20-%204.22.13.pdf.

¹⁴⁴ Letter from Richard F. Phillips, President, Intellectual Prop. Owners Ass'n, to the Honorable Victoria A. Espinel, U.S. Intellectual Prop. Enforcement Coordinator, Office of Mgmt. & Budget, Exec. Office of the President 1 (Apr. 22, 2013), available at http://www.regulations.gov/#!documentDetail;D=OMB-2013-0002-0008.

¹⁴⁵ David Kappos, Trade Secrets: Promise of Federal Protection Brings New Hope for Critical IP Law, The Hill (June 30, 2014, 3:00 PM), http://thehill.com/blogs/congress-blog/technology/210848-trade-secrets-promise-of-federal-protection-brings-new-hope.

blog/technology/210848-trade-secrets-promise-of-federal-protection-brings-new-hope. 146 Lao, supra note 53, at 1694–95 ("The case for federalizing trade secrets law . . . is compelling.").

¹⁴⁷ Halligan, supra note 88, at 671.

¹⁴⁸ Almeling, supra note 8. For another article proposing the adoption of a federal trade secret act, see generally Pace, supra note 51.

¹⁴⁹ S. 2267, 113th Cong. (2014).

the Trade Secrets Protection Act of 2014 ("TSPA"); ¹⁵⁰ (3) the Private Right of Action Against Theft of Trade Secrets Act of 2013 ("PRATSA"); ¹⁵¹ and (4) the Future of American Innovation and Research Act of 2013 ("FAIR Act"). ¹⁵² Each bill's key provisions are analyzed below. ¹⁵³

1. Defend Trade Secrets Act of 2014

On April 29, 2014, Senator Chris Coons (D-DE) and Senator Orrin Hatch (R-UT) introduced the DTSA. ¹⁵⁴ This bill is a sequel to a proposal previously co-sponsored by Senator Coons and two other senators in the previous Congress. ¹⁵⁵

The DTSA would create a private civil cause of action for violations of Sections 1831(a) and 1832(a) of the EEA, as well as for "misappropriation of a trade secret that is related to a product or service used in, or intended for use in, interstate or foreign commerce." "Misappropriation" is defined substantively identically to how it is defined in the UTSA. The bill also clarifies that "reverse engineering" and "independent derivation" are not improper means. 158

The remedial provisions of the DTSA are at least as broad as those currently existing under state law. Like the UTSA, the bill would authorize injunctive relief for actual or threatened misappropriation, as well as monetary damages for the actual loss caused by the misappropriation and any unjust enrichment not included in calculating actual loss. ¹⁵⁹ It also would permit a plaintiff to seek "a reasonable royalty for a misappropriator's unauthorized disclosure or use of a trade secret" in lieu of other damages. ¹⁶⁰ In addition, exemplary damages of up to triple the

¹⁵⁰ H.R. 5233, 113th Cong. (2014).

¹⁵¹ H.R. 2466, 113th Cong. (2013).

¹⁵² S. 1770, 113th Cong. (2013).

¹⁵³ The information on the legislation described below is current as of Feb. 22, 2015.

¹⁵⁴ S. 2267.

¹⁵⁵ See Protecting American Trade Secrets and Innovation Act of 2012, S. 3389, 112th Cong. (2012).

¹⁵⁶ S. 2267 § 2(a) (proposed for codification at 18 U.S.C. § 1836(a)(1)).

¹⁵⁷ Compare id. § 2(b)(3) (proposed for codification at 18 U.S.C. § 1839(5)) (defining "misappropriation"), with UTSA, supra note 17, § 1(2) (defining "misappropriation"). See also H.R. Rep. No. 113-657, at 5 (2014) ("The bill . . . models its definition of 'misappropriation' on the [UTSA].").

¹⁵⁸ S. 2267 § 2(b)(3) (proposed for codification at 18 U.S.C. § 1839(6)(B)).

¹⁵⁹ Id. § 2(a) (proposed for codification at 18 U.S.C. § 1836(a)(3)(A), (a)(3)(B)(i)–(ii)).

¹⁶⁰ Id. (proposed for codification at 18 U.S.C. § 1836(a)(3)(B)(iii)).

amount of compensatory damages and attorney's fees may be awarded for a trade secret that has been "willfully or maliciously misappropriated." ¹⁶¹

One of the more controversial parts of the DTSA is the provision authorizing *ex parte* applications for the seizure of any property (including electronic data) that was allegedly "used, in any manner or part, to commit or facilitate" misappropriation or "for the preservation of evidence in a civil action" under the bill, if the seizure "is necessary to prevent irreparable harm. ¹⁶² In a letter to Congress, thirty-one law professors expressed concern about potential misuse of the *ex parte* seizure provision, arguing that it could be improperly used as a "weapon of anticompetition." Other commentators also have highlighted the *ex parte* seizure provision as granting significant leverage to trade secret plaintiffs in litigation. ¹⁶⁴

The DTSA would impose a five-year statute of limitations period, ¹⁶⁵ which is longer than most state trade secret laws. ¹⁶⁶ In addition, it would not preempt other state or federal laws. ¹⁶⁷ Original jurisdiction for misappropriation claims would lie in the district courts. ¹⁶⁸

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¹⁶¹ Id. (proposed for codification at 18 U.S.C. § 1836(a)(3)(C)–(D)).

¹⁶² Id. (proposed for codification at 18 U.S.C. § 1836(a)(2)(A)).

¹⁶³ David S. Levine & Sharon K. Sandeen, Professors' Letter in Opposition to the "Defend Trade Secrets Act of 2014" (S. 2267) and the "Trade Secrets Protection Act of 2014" (H.R. 5233) 4–5 (Aug. 26, 2014), available at http://cyberlaw.stanford.edu/blog/2014/08/professors %E2%80%99-letter-opposition-%E2%80%9Cdefend-trade-secrets-act-2014%E2%80%9D-s-2267-and-%E2%80%9Ctrade-secrets. The author of this article was a signatory of the professors' letter.

¹⁶⁴ See Business Litigation Update: The Defend Trade Secrets Act: Consequences for Trade Secret Litigation, Thompson Hine LLP, July 21, 2014, at 2, http://www.thompsonhine.com/publications/the-defend-trade-secrets-act-consequences-for-trade-secret-litigation ("[P]erhaps most significantly, the [DTSA's] provision authorizing *ex parte* orders to seize electronic and other evidence . . . will likely increase the use of such orders and create a powerful weapon for plaintiffs in trade secret litigation."); Eric Goldman, Congress is Considering a New Federal Trade Secret Law. Why?, Forbes, (Sept. 16, 2014, 12:14 PM), http://www.forbes.com/sites/ericgoldman/2014/09/16/congress-is-considering-a-new-federal-trade-secret-law-why/ (contending that the *ex parte* seizure provision "effectively could let trade secret owners take competitors out of the marketplace for a period of time").

¹⁶⁵ S. 2267 § 2(a) (proposed for codification at 18 U.S.C. § 1836(c)).

¹⁶⁶ See infra Appendix B (showing that forty-seven of fifty states have statute of limitations periods of less than five years).

¹⁶⁷ S. 2267 § 2(e) ("Nothing in the amendments made by this section shall be construed... to preempt any other provision of law.").

¹⁶⁸ Id. §2(a) (proposed for codification at 18 U.S.C. § 1836(b)).

The DTSA has attracted considerable support from large industrial and business organizations and high-technology firms, including the National Association of Manufacturers, the U.S. Chamber of Commerce, 3M, Caterpillar, DuPont, GE, Eli Lilly, Microsoft, Monsanto, Philips, Procter and Gamble, and United Technologies. Many of these firms also have engaged in lobbying efforts in support of federal trade secret legislation under the moniker "Protect Trade Secrets Coalition," retaining the prominent law firm of Covington & Burling LLP and expending \$500,000 for lobbying in 2014, according to the Center for Responsive Politics. 170

At a Senate Judiciary subcommittee hearing in May 2014, witnesses from the private and public sectors expressed support for the bill, arguing that existing federal criminal statutes and state laws were insufficient to protect trade secrets. ¹⁷¹ One witness claimed that "a consistent, predictable and harmonized legal system" that "provide[s] effective remedies when a trade secret theft has occurred" was needed. ¹⁷² Several witnesses also argued that trade secret holders needed access to federal courts to effectively combat trade secret theft. ¹⁷³

¹⁶⁹ News Release, Office of Sen. Christopher Coons, Senators Coons, Hatch Introduce Bill to Combat Theft of Trade Secrets and Protect Jobs (Apr. 29, 2014), available at http://www.coons.senate.gov/newsroom/releases/release/senators-coons-hatch-introduce-bill-to-combat-theft-of-trade-secrets-and-protect-jobs.

¹⁷⁰ See Defend Trade Secrets Act Introduced in Senate (Covington & Burling LLP) (Apr. 29, 2014), at 1, http://www.cov.com/files/Publication/e0460daa-3911-47c8-8764-7e40c9c4346d/Presentation/PublicationAttachment/ffb7dcde-bed1-499b-b7b5-840823b1ba45/Defend_Trade_Secrets_Act_Introduced_in_Senate.pdf ("Covington and Burling LLP represents the Protect Trade Secrets Coalition, a cross-industry group advocating a federal civil remedy for trade secret misappropriation."); Center for Responsive Politics, Protect Trade Secrets Coalition, OpenSecrets.Org, https://www.opensecrets.org/lobby/clientsum.php?id=F45883&year=2014 (last visited Jan. 23, 2015) (showing \$500,000 in lobbying expenses for the Protect Trade Secrets Coalition).

¹⁷¹ See Economic Espionage and Trade Secret Theft: Are Our Laws Adequate for Today's Threats?: Hearing Before the Subcomm. on Crime & Terrorism of the S. Comm. on the Judiciary, 113th Cong. 5 (2014) [hereinafter Hearing on Economic Espionage and Trade Secret Theft] (testimony of Drew Greenblatt, President and Owner, Marlin Steel Wire Products) ("State civil trade secret laws alone often are not sufficient to deter and remedy interstate theft."), available at <a href="http://www.judiciary.senate.gov/meetings/economic-espionage-and-trade-secret-theft-are-our-laws-adequate-for-todays-threats; id. at 3 (statement of Douglas K. Norman, Vice President and General Patent Counsel, Eli Lilly and Company) ("The current legal tools available to prevent trade secret theft are antiquated and inconsistent with the robust protection available in other areas of intellectual property law.").

¹⁷² Id. at 3 (testimony of Pamela Passman, President and CEO, CREATe.org).

¹⁷³ See id. at 4 (statement of Douglas K. Norman); id. at 5–6 (testimony of Drew Greenblatt).

The DTSA expired at the conclusion of the 113th Congress in January 2015. However, the bill's sponsors have indicated their intent to reintroduce the legislation early in the 114th Congress.¹⁷⁴

2. Trade Secrets Protection Act of 2014

The TSPA was introduced on July 29, 2014, by a bipartisan group of members of the House Judiciary Committee. This bill was introduced following a House Judiciary subcommittee hearing on June 24, 2014, where committee members expressed bipartisan support for a federal civil remedy for trade secret misappropriation. The

Like the DTSA, the TSPA would authorize a civil action for "misappropriation of a trade secret that is related to a product or service used in, or intended for use in, interstate or foreign commerce."¹⁷⁷ It also defines "misappropriation" as substantively identical to the UTSA's definition. ¹⁷⁸ Further, the TSPA would exempt "reverse engineering" and "independent derivation" from being considered "improper means."¹⁷⁹ In addition, it would authorize similar injunctive relief and damages to the DTSA. ¹⁸⁰ Finally, it would permit an award of exemplary damages and

¹⁷⁴ See Anne L. Kim, Expect to See Trade Secret Legislation Re-Introduced Next Congress, Roll Call (Nov. 18, 2014, 5:01 PM), http://blogs.rollcall.com/technocrat/expect-to-see-trade-secret-legislation-re-introduced-next-congress ("Sen. Chris Coons... said he hoped and intended that he and current co-sponsor Sen. Orrin G. Hatch, R-Utah, would reintroduce [trade secret legislation] in January and move it towards what he was 'optimistic' would be its speedy passage.").

¹⁷⁵ See H. P. 5223, 113th Cong. (2014). The hills-

¹⁷⁵ See H.R. 5233, 113th Cong. (2014). The bill's sponsor is Representative George Holding (R-NC); the original co-sponsors are Representatives Steve Chabot (R-OH), Howard Coble (R-NC), John Conyers (D-MI), Suzan DelBene (D-WA), Hakeem Jeffries (D-NY), Jerrold Nadler (D-NY), and Cedric Richmond (D-LA).

¹⁷⁶ See Trade Secrets: Promoting and Protecting American Innovation, Competitiveness and Market Access in Foreign Markets: Hearing Before the Subcomm. on Courts, Intellectual Prop., & the Internet of the H. Comm. on the Judiciary, 113th Cong. 6 (2014) (statement of Rep. Jerrold Nadler, Member, S. Subcomm. on Courts, Intellectual Prop., & the Internet), available at http://judiciary.house.gov/_cache/files/5311b6c1-9a4f-49e5-a477-451a3ee228bf/113-97-88436.pdf ("I believe that we have an opportunity to work quickly and in a broadly bipartisan basis to ensure that our trade secrets law more robustly protects America's innovators and businesses.").

¹⁷⁷ H.R. 5233 § 2(a) (proposed for codification at 18 U.S.C. § 1836(b)(1)).

¹⁷⁸ Compare id. § 2(b)(3) (proposed for codification at 18 U.S.C. § 1839(5)) (defining misappropriation), with UTSA, supra note 17, § 1(2) (defining misappropriation).

¹⁷⁹ H.R. 5233 § 2(b)(3) (proposed for codification at 18 U.S.C. § 1839(6)(B)).

¹⁸⁰ Compare id. § 2(a) (proposed for codification at 18 U.S.C. § 1836(b)(3)(A)–(B)) (authorizing injunction for actual or threatened misappropriation and awarding damages for ac-

reasonable attorney's fees for "willfully and maliciously misappropriated" trade secrets. 181

The TSPA also contains an ex parte seizure provision, but it includes additional protections against potential misuse. 182 For example, a plaintiff requesting a seizure must demonstrate that an "immediate and irreparable injury will occur if [a] seizure is not ordered" and that "the harm to the applicant of denying the [seizure] outweighs the harm to the legitimate interests of the person against whom seizure would be ordered." ¹⁸³ It also requires that the plaintiff be likely to succeed in ultimately establishing that the party subject to the seizure order misappropriated and possesses the trade secret, and that such party "would destroy, move, hide, or otherwise make such matter inaccessible to the court" if it had notice of the proposed seizure. 184 It also requires that the court conduct a hearing within seven days after the order's entry and authorizes an award of damages in the event of a wrongful or excessive seizure. 185

Similar to the DTSA, the TSPA would have a five-year statute of limitations. 186 It also would grant district courts original jurisdiction over misappropriation claims and would not preempt any other law. 187

The TSPA was favorably reported out of the House Judiciary Committee on September 17, 2014, on a voice vote. 188 However, the bill expired at the conclusion of the 113th Congress in January 2015.

tual loss and unjust enrichment), with S. 2267, 113th Cong. § 2(a) (2014) (proposed for codification at 18 U.S.C. § 1836(b)(3)(A)–(B)) (same).

¹⁸¹ H.R. 5233 § 2(a) (proposed for codification at 18 U.S.C. § 1836(b)(3)(C)–(D)). In contrast to the DTSA, S. 2267 § 2(a) (proposed for codification at 18 U.S.C. § 1836(b)(3)(C)), which uses the disjunctive "or" ("willfully or maliciously misappropriated") in its exemplary damages provision, the TSPA, H.R. 5233 § 2(a), uses the conjunctive "and" ("willfully and maliciously misappropriated").

¹⁸² H.R. 5233 § 2(a) (proposed for codification at 18 U.S.C. § 1836(b)(2)).

¹⁸³ Id. (proposed for codification at 18 U.S.C. § 1836(b)(2)(A)(ii)(II)–(III)) (emphasis add-

Id. (proposed for codification at 18 U.S.C. § 1836(b)(2)(A)(ii)(IV), (VI)).

¹⁸⁵ Id. (proposed for codification at 18 U.S.C. § 1836(b)(2)(B)(iv), (b)(2)(F)).
186 Id. (proposed for codification at 18 U.S.C. § 1836(d)); S. 2267 § 2(a) (proposed for codification at 18 U.S.C. § 1836(c)).

¹⁸⁷ H.R. 5233 § 2(a) (proposed for codification at 18 U.S.C. § 1836(c)); id. § 2(f).

¹⁸⁸ See H.R. 5233—Trade Secrets Protection Act of 2014: All Actions, Congress.gov, https://www.congress.gov/bill/113th-congress/house-bill/5233/all-actions (last visited Dec. 1, 2014).

3. Private Right of Action Against Theft of Trade Secrets Act of 2013

PRATSA was introduced in the House of Representatives in June 2013 by Representative Zoe Lofgren (D-CA), ¹⁸⁹ a member of the House Judiciary Committee and an influential legislator on IP issues. In contrast to the other proposals, PRATSA proposes a more modest approach to federalizing trade secrecy. Specifically, PRATSA would add two subsections to the "theft of trade secrets" provision of the EEA. The first subsection would authorize "[a]ny person who suffers injury [from] a violation of [18 U.S.C. § 1832 to] maintain a civil action against the violator." ¹⁹⁰ A successful plaintiff could recover "appropriate compensatory damages" as well as "injunctive relief or other equitable relief." ¹⁹¹ PRATSA also would impose a two-year statute of limitations, shorter than the UTSA's three-year limitations period. ¹⁹² The second subsection would provide that independent derivation and reverse engineering are not misappropriation under the EEA. ¹⁹³

PRATSA was referred to the House Judiciary Committee, which then referred the bill to two subcommittees. PRATSA expired at the end of the 113th Congress in January 2015.

4. Future of American Innovation and Research Act of 2013

The FAIR Act was introduced in the Senate in November 2013 by Senator Jeff Flake (R-AZ). Senator Flake explained that the FAIR Act was intended to "fill a gap in current law and extend the jurisdiction of U.S. federal courts to overseas perpetrators of trade-secret theft" by al-

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¹⁸⁹ H.R. 2466, 113th Cong. (2013).

¹⁹⁰ Id. § 2 (proposed for codification at 18 U.S.C. § 1832(c)).

¹⁹¹ Id.

¹⁹² Id

¹⁹³ See id. (proposed for codification at 18 U.S.C. § 1832(d)) ("For purposes of [18 U.S.C. § 1832], the term 'without authorization' shall not mean independent derivation or working backwards from a lawfully obtained known product or service to divine the process which aided its development or manufacture.").

¹⁹⁴ See H.R. ²466—Private Right of Action Against Theft of Trade Secrets Act of 2013: All Actions, Congress.gov, https://www.congress.gov/bill/113th-congress/house-bill/2466/all-actions (last visited Dec. 1, 2014) (referring PRATSA to the House Subcommittee on Courts, Intellectual Property, and the Internet, and the House Subcommittee on Crime, Terrorism, Homeland Security, and Investigations).

¹⁹⁵ S. 1770, 113th Cong. (2013). Senator Jeff Merkley (D-OR) was added as a cosponsor in February 2014. See S. 1770—FAIR Act: Cosponsors, Congress.gov, https://www.congress.gov/bill/113th-congress/senate-bill/1770/cosponsors (last visited Dec. 1, 2014).

lowing "a person or company whose trade secret has been disclosed to bring a civil suit . . . if the [perpetrating] entity is overseas." ¹⁹⁶

The FAIR Act is substantively identical to the UTSA regarding the definitions of "trade secret" and "misappropriat[ion]." ¹⁹⁷ In addition, like the UTSA, the FAIR Act provides that "reverse engineering" and "independent derivation" are not improper means of discovering a trade secret. ¹⁹⁸ Furthermore, its remedial provisions are similar to the UTSA. ¹⁹⁹ Finally, like the DTSA and the TSPA, the FAIR Act authorizes temporary *ex parte* seizures of property used to commit or facilitate misappropriation. ²⁰⁰

One major difference compared to the other proposals is that the FAIR Act is directed solely at trade secret misappropriation by foreign entities and actors. It requires that the trade secret holder establish that the defendant committed, threatened, or conspired to commit misappropriation while outside of the United States or acted "on behalf of, or for the benefit of, a person located outside . . . the United States." As another limitation, the misappropriation also must cause, or be reasonably anticipated to cause, injury within the United States or to a U.S. person. Federal courts would have exclusive jurisdiction over claims under the FAIR Act²⁰³ and could grant an anti-suit injunction prohibiting the parties from pursuing litigation in another jurisdiction regarding the same conduct. ²⁰⁴

¹⁹⁶ Press Release, Office of Sen. Jeff Flake, Sen. Flake Introduces Bill to Help Protect U.S. Innovations From Theft (Nov. 22, 2013), http://www.flake.senate.gov/public/index.cfm/2013/11/sen-flake-introduces-bill-to-help-protect-u-s-innovations-from-theft.

¹⁹⁷ Compare S. 1770 § 2(3), (5) (defining "misappropriate" and "trade secret"), with UTSA, supra note 17, § 1(2), (4) (defining "misappropriation" and "trade secret" in substantively the same way).

¹⁹⁸Compare S. 1770 § 2(2)(B) (excluding "reverse engineering" and "independent derivation" from the definition of "improper means"), with UTSA, supra note 17, § 1 cmt. (noting that "[d]iscovery by independent invention" and "[d]iscovery by 'reverse engineering'" are "[p]roper means").

²Compare S. 1770 § 4 (authorizing injunctions, payment of royalties for ongoing disclosures of covered trade secrets, and actual loss and unjust enrichment damages), with UTSA, supra note 17, §§ 2–4 (same).

²⁰⁰ S. 1770 § 6(a). The FAIR Act also provides that a party injured by a seizure that prevails on the misappropriation claim may bring a civil action against the seizing party for reasonable costs and attorney's fees and, if the order was sought in bad faith, lost profits and punitive damages. Id. § 6(f).

²⁰¹ Id. § 3(a).

²⁰² Id. § 3(c).

²⁰³ Id. § 3(b).

²⁰⁴ Id. § 5(c).

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The FAIR Act was referred to the Senate Judiciary Committee upon its introduction. 205 Like the other proposed but un-enacted legislation, the FAIR Act expired at the end of the 113th Congress in January 2015.

III. CONGRESSIONAL POWER TO FEDERALIZE TRADE SECRECY

This Part evaluates whether Congress possesses the constitutional authority to enact a civil trade secret law.

The most likely source of authority for federalizing trade secrecy is the Commerce Clause, which permits Congress to "regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes."²⁰⁶ The Supreme Court has read this clause (in conjunction with the Necessary and Proper Clause²⁰⁷) to mean that Congress may regulate three things: (1) "the channels of interstate commerce," (2) "persons or things in interstate commerce," and (3) "those activities that substantially affect interstate commerce." Congress's Commerce Clause power "can be expansive"; 209 for example, it encompasses even local (intrastate) activity when it "exerts a substantial economic effect on interstate commerce."210

However, this power is not unlimited, and the Supreme Court has cautioned that the Commerce Clause "must be read carefully to avoid creating a general federal authority akin to the [states'] police power."²¹¹ For instance, it has struck down federal legislation prohibiting posses-

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²⁰⁵ 159 Cong. Rec. S8457 (daily ed. Nov. 21, 2013) (introduction of S. 1770 by Sen. Jeff Flake). 206 U.S. Const. art. I, § 8, cl. 3.

²⁰⁷ Id. art. I, § 8, cl. 18 (stating that Congress shall have the power "[t]o make all Laws which shall be necessary and proper for carrying into Execution the foregoing Powers, and all other Powers vested by this Constitution in the Government of the United States, or in any Department or Officer thereof").

²⁰⁸ United States v. Morrison, 529 U.S. 598, 608–09 (2000) (quoting United States v. Lopez, 514 U.S. 549, 558-59 (1995)).

Nat'l Fed'n of Indep. Bus. v. Sebelius, 132 S. Ct. 2566, 2578 (2012).

²¹⁰ Wickard v. Filburn, 317 U.S. 111, 125 (1942); see also Gonzales v. Raich, 545 U.S. 1, 21-22 (2005) (rejecting a challenge to the constitutionality of the Controlled Substances Act as it was applied to respondents' intrastate manufacture and possession of medical marijuana; the Court rejected the challenge because "Congress had a rational basis for believing that failure to regulate the intrastate manufacture and possession of marijuana" would "substantially affect the larger interstate marijuana market").

Sebelius, 132 S. Ct. at 2578; see also Lopez, 514 U.S. at 553 ("[L]imitations on the commerce power are inherent in the very language of the Commerce Clause."); Maryland v. Wirtz, 392 U.S. 183, 196 (1968) ("[T]he power to regulate commerce, though broad indeed, has limits.").

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sion of a firearm in a school zone²¹² and the creation of a federal civil remedy for victims of gender-motivated violence²¹³ because neither law regulated economic activity. More recently, in National Federation of Independent Business v. Sebelius, a 5-4 majority of the Court held that the individual mandate of the Patient Protection and Affordable Care Act exceeded Congress's Commerce Clause power because it would "compel[] individuals to become active in commerce by purchasing a product"—insurance coverage from a private firm. 214

Congress has relied on its Commerce Clause power repeatedly to pass legislation protecting intangible IP rights, most notably trademarks. After the Supreme Court struck down the first federal trademark law²¹⁵ in The Trade-Mark Cases of 1879 as exceeding Congress's authority under the Patent and Copyright Clause, ²¹⁶ Congress enacted a new trademark law under the Commerce Clause. 217 This law contained an express jurisdictional limitation, granting the Commissioner of Patents the authority to register only trademarks used in commerce with foreign nations or Native American tribes. 218 As the scale of economic activity vastly expanded during the twentieth century, Congress subsequently expanded the scope of federal trademark protection to encompass trademarks used in interstate commerce, ²¹⁹ unregistered marks, ²²⁰ marks with a bona fide intent to be used in commerce, ²²¹ and diluted famous marks. ²²²

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²¹² Lopez, 513 U.S. at 551, 561 (holding the Gun-Free School Zones Act of 1990 unconsti-

tutional).

213 Morrison, 529 U.S. at 601–02, 610–11 (holding § 922(q) of the Violence Against Women Act of 1994 unconstitutional).

²¹⁴ 132 S. Ct. at 2587 (emphasis omitted). However, the Court (in another 5-4 split) held that the individual mandate was constitutional under Congress's power to tax and spend. Id. at 2593-601.

Act of July 8, 1870, 16 Stat. 198, invalidated by The Trade-Mark Cases, 100 U.S. 82

²¹⁶ The *Trade-Mark Cases*, 100 U.S. at 93–97.

²¹⁷ Act of March 3, 1881, 21 Stat. 502.

²¹⁸ Id. § 3; see 1 J. Thomas McCarthy, McCarthy on Trademarks and Unfair Competition § 5:3 (4th ed. 2009).

Act of Feb. 20, 1905, 33 Stat. 724.

²²⁰ Lanham Act, Pub. L. No. 79-489, § 6, 60 Stat. 427, 429–30 (1946) (codified as amended at 15 U.S.C. § 1056 (2012)).

²²¹ Trademark Law Revision Act of 1988, Pub. L. No. 100-667, § 103(9), 102 Stat. 3935, 3935-36 (codified at 15 U.S.C. § 1051(b) (2012)).

²²² Federal Trademark Dilution Act of 1995, Pub. L. No. 104-98, § 3(a), 109 Stat. 985, 985-86 (codified at 15 U.S.C. § 1125(c) (2012)).

In the realm of trade secrecy, Congress enacted the EEA in 1996²²³ under its Commerce Clause power.²²⁴ As originally enacted, Section 1832 of the EEA contained an express jurisdictional hook limiting its application to misappropriation of a trade secret "related to or included in a product that is produced for or placed in interstate or foreign commerce."225 But as the Second Circuit explained in *United States v*. Aleynikov, this language did not invoke the full extent of Congress's regulatory power under the Commerce Clause. 226 Notably, the EEA was limited to products "produced for" or "placed in" interstate commerce, and thus did not encompass information—specifically, computer source code used to conduct high-frequency stock trading—that was not used to create a tangible good and that the trade secret's owner had no intention of selling or licensing.²²⁷ In response, Congress amended Section 1832 to include "service[s] used in or intended for use in interstate or foreign commerce" as well. 228 Even this amended language, however, falls short of the constitutional limit because it does not extend to trade secret information related to products and services in intrastate commerce that, like the defendant in Wickard v. Filburn's growing of wheat for private consumption, on aggregate substantially affect *inter*state commerce. ²²⁹

All recently proposed legislation to federalize trade secrecy appears facially constitutional under the Commerce Clause. The DTSA and the TSPA both contain an express jurisdictional limitation that would prohibit "misappropriation . . . related to a product or service used in, or intended for use in, interstate or foreign commerce." This language

²²³ See supra Subsection I.B.2.

²²⁴ See S. Rep. No. 104-359, at 4 (1996) (explaining that "[t]he basis for the protection of proprietary economic information is rooted in...the power '[t]o regulate Commerce * * * among the several States'" (second alteration in original) (quoting U.S. Const. art. 1, § 8, cl. 3)).

²²⁵ Pub. L. No. 104-294, § 101(a), 110 Stat. 3489 (1996) (codified as amended at 18 U.S.C. § 1832 (2012)).

²²⁶ 676 F.3d 71, 81–82 (2d Cir. 2012).

²²⁷ Id. at 82 ("Because the [high-frequency trading] system was not designed to enter or pass in commerce, or to make something that does, [defendant's] theft of source code relating to that system was not an offense under the EEA.").

²²⁸ See supra note 101.

²²⁹ See Wickard v. Filburn, 317 U.S. 111, 125, 128–29 (1942).

²³⁰ See supra notes 156, 178 and accompanying text.

is substantively identical to the jurisdictional scope of the EEA.²³¹ PRATSA, which would create a private cause of action for violations of Section 1832 of the EEA, is similarly limited.²³² Finally, the FAIR Act applies only to acts of trade secret theft occurring overseas or domestically at the behest of a foreign entity or government, thus assuming a substantial connection with foreign commerce.²³³

However, there may be two situations in which a trade secret claim is potentially vulnerable to a constitutional challenge alleging that Congress exceeded its Commerce Clause power. The first would involve trade secret information owned by a purely intrastate business with no substantial connection to interstate commerce. For instance, the customer lists of a neighborhood restaurant or local cleaning service are unlikely to be of interest to anyone other than a nearby competitor and thus probably do not substantially affect interstate commerce even if misappropriated. The second would involve a type of "inactivity" that may run afoul of the Court's recent decision in Sebelius—specifically, misappropriation of so-called "negative knowhow," or information about what avenues of research and development have proven unfruitful. 234 This information could be valuable to competitors because it suggests what types of research should be avoided in future. 235 Thus, information about what not to do could be considered "inaction [in] commerce" 236 that cannot be regulated under the Commerce Clause.

In sum, Congress almost certainly has the authority to enact a federal civil cause of action for trade secret misappropriation.²³⁷ The next Part addresses whether such a law is normatively desirable.

²³¹ See supra note 102 and accompanying text (stating that trade secret theft under section 1832 of the EEA must involve a trade secret "related to a product or service used in or intended for use in interstate or foreign commerce"); supra note 191 (explaining that PRATSA would create a private civil cause of action for violations of section 1832 of the EEA).

²³² See supra notes 190–92, 228 and accompanying text.

²³³ See supra note 201 and accompanying text.

²³⁴ See infra note 460 and accompanying text; see also Charles Tait Graves, The Law of Negative Knowledge: A Critique, 15 Tex. Intell. Prop. L.J. 387, 391–94 (2007) (explaining the issue of negative knowledge in general and in the trade secret context).

²³⁵ See Graves, supra note 234, at 391 ("Broadly speaking, negative knowledge is information about perceived mistakes and shortcomings that one avoids in order to create something new, or that one modifies into something different and improved.").

²³⁶ Sebelius, 132 S. Ct. at 2587.

²³⁷ See Almeling, supra note 8, at 792–93 ("[T]rade secrets have a substantial effect on interstate commerce and would thus easily qualify under the Commerce Clause." (footnote

IV. EVALUATING THE ARGUMENTS FOR FEDERALIZING TRADE SECRECY

This Part critically evaluates the arguments in favor of a private civil cause of action for trade secret misappropriation under federal law. Specifically, it addresses proponents' claims that federal legislation is required to achieve four objectives: (1) to achieve uniformity in trade secret law; (2) to create a federal forum for important trade secret litigation; (3) to comply with the United States's obligations under international law; and (4) to promote innovation by creating a national IP regime.

A. Uniformity

One argument advanced in support of a federal trade secret law is that it would create substantive uniformity. Numerous commentators have bemoaned an alleged lack of consistency among states' trade secret laws. In particular, they assert that significant variations exist between the two main sources of authority governing trade secrecy at the state level: the Restatement and the UTSA. This lack of uniformity has a number of negative consequences, they argue, including uncertainty regarding which state's laws will govern a trade secret claim; increased and inefficient costs associated with investigating and complying with different states' requirements for achieving trade secret protection; and ultimately less investment in innovation.

omitted)); Lao, supra note 53, at 1686 ("[T]he Commerce Clause, which allows Congress to regulate interstate and foreign commerce, is probably the strongest constitutional basis for federal action." (footnote omitted)).

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²³⁸ See Almeling, supra note 8, at 776 (asserting that "the most obvious benefit of [a Federal Trade Secrets Act] is that it will instantly accomplish . . . uniformity"); Pace, supra note 51, at 442 ("The best reason for enacting federal legislation to displace state law on trade secret misappropriation is the need for national uniformity in this area of law.").

²³⁹ See Almeling, supra note 8, at 776 ("The dominant failure of a state-based trade secret regime is that trade secret law differs from state to state."); Lao, supra note 53, at 1635–36; Pace, supra note 51, at 446; Mark A. Klapow, The Latest Attempt to Federalize Trade Secret Law, Law360, Crowell & Moring (Aug. 1, 2012, 1:57 PM), http://www.crowell.com/files/The-Latest-Attempt-To-Federalize-Trade-Secret-Law.pdf ("Lack of uniformity... is the primary criticism of the current [trade secret] regime.").

²⁴⁰ See Lao, supra note 53, at 1653–56 (listing differences between the Restatement and the UTSA); Pace, supra note 51, at 432–35 (noting many of the same differences between the Restatement and the UTSA).

²⁴¹ Almeling, supra note 8, at 777; Lao, supra note 53, at 1636.

²⁴² Almeling, supra note 8, at 776–78; Lao, supra note 53, at 1673–74; Pace, supra note 51, at 447.

They also contend that the lack of uniformity creates significant choice-of-law problems in trade secret litigation.²⁴⁴ However, as described below, this justification ultimately is not persuasive because there is already a high degree of uniformity in state laws governing trade secrets and the adoption of a federal act would not necessarily solve the identified problems.

1. Widespread Adoption of the UTSA Has Promoted Uniformity

As an initial matter, the UTSA's widespread adoption has helped harmonize the substantive law governing trade secrecy. The UTSA effectively serves as a de facto national standard, having been adopted by forty-seven states. 245 Texas, a longtime common law jurisdiction, was the most recent state to enact the UTSA, doing so in May 2013. 246 The remaining holdouts are Massachusetts, New York, and North Carolina. 247 There is pending legislation in Massachusetts 248 to enact the UTSA and supersede its existing hybrid statutory and common law regime. 249 Thus, the remaining "holdout" jurisdictions may eventually follow the national trend and adopt the UTSA as well.

²⁴³ Almeling, supra note 8, at 778.

²⁴⁴ Id. at 781–82; Lao, supra note 53, at 1671–72; Pace, supra note 51, at 446.

²⁴⁵ See infra Appendix A; see also supra note 68 and accompanying text.

²⁴⁶ Texas Uniform Trade Secrets Act, S.B. 953 (enacted May 3, 2013) (codified at Tex. Civ. Prac. & Rem. Code Ann. § 134A.001–.008 (West 2013)).

²⁴⁷ See infra Appendix A. There is some dispute regarding whether North Carolina should be considered a UTSA jurisdiction. Compare Lao, supra note 53, at 1657 (asserting North Carolina's statute "deviate[s] so radically from the UTSA that [it is] hardly recognizable as [an] adoption[] of the uniform act"), and Linda B. Samuels & Bryan K. Johnson, The Uniform Trade Secrets Act: The States' Response, 24 Creighton L. Rev. 49, 52 (1990) (contending that the North Carolina Trade Secrets Protection Act, N.C. Gen. Stat. § 66-152 to -157 (1985), contains "major departures from the [UTSA]"), with David P. Hathaway, Comment, Is the North Carolina Trade Secrets Protection Act Itself a Secret, and Is the Act Worth Protecting?, 77 N.C. L. Rev. 2149, 2165–66 (1999) ("Despite some minor variations, the [North Carolina Trade Secrets Protection Act] is not fundamentally different from the UTSA and other states' trade secret acts." (footnote omitted)). Because the Uniform Law Commission does not include North Carolina in its list of states that have adopted the UTSA, it has been excluded from this Article's tally of UTSA jurisdictions. See supra note 68.

²⁴⁸ H.B. 4082, 188th Gen. Court (Mass. 2014); H.B. 27, 188th Gen. Court. (Mass. 2013).

²⁴⁹ See Massachusetts Trade Secret Protection Act, Mass. Gen. Laws ch. 93, § 42–42A (2012); Jet Spray Cooler, Inc. v. Crampton, 385 N.E.2d 1349, 1354 (Mass. 1979) (discussing Massachusetts trade secret common law); see also Sutra, Inc. v. Iceland Exp., No. 04-11360-DPW, 2008 WL 2705580, *2 (D. Mass. July 10, 2008) (explaining that "[e]xcept for the provision of double damages and injunctive relief, the [Massachusetts Trade Secret Protection Act] essentially represent[s] a codification of the common law of trade secrets").

Judicial opinions in trade secret cases provide additional evidence that the UTSA's adoption has helped harmonize trade secret law. In an empirical study of trade secret litigation in state courts, attorney David Almeling and his co-authors found that over two-thirds (68%) of state court decisions on trade secret claims from 1995–2009 applied state trade secret statutes, primarily the UTSA, rather than common law or criminal law. 250 A similar study by the same authors found that 70% of federal courts decisions in 2008 applied state statutory law, again primarily the UTSA, to decide trade secret claims. 251 In contrast, few courts applied state common law—less than a quarter (24%) of state courts and only 7% of federal courts during the same respective time periods. 252

Furthermore, critics of the existing state law system argue that the UTSA is not truly "uniform" because a number of states have modified the UTSA's provisions when adopting it as statutory law. 253 However, most jurisdictions follow the UTSA's substance on the main points²⁵⁴ and depart only on less frequently encountered issues, such as the availability and amount of exemplary (punitive) damages.²⁵⁵ For instance, one claimed divergence among UTSA jurisdictions is the stat-

²⁵⁰ David S. Almeling et al., A Statistical Analysis of Trade Secret Litigation in State Courts, 46 Gonz. L. Rev. 57, 76 tbl.5 (2010-11).

²⁵¹ David S. Almeling et al., A Statistical Analysis of Trade Secret Litigation in Federal Courts, 45 Gonz. L. Rev. 291, 306 tbl.4 (2009-10); see also Michael Risch, An Empirical Look at Trade Secret Law's Shift from Common to Statutory Law, in Intellectual Property and the Common Law 151, 173-74 (Shyamkrishna Balganesh ed., 2013) (finding that courts "rely on UTSA principles much of the time," citing to "the statute alone, and . . . to the statute and UTSA-based cases," but also sometimes citing "to the statute and non-UTSA cases without any citation to UTSA cases" or to "only common law cases with no mention of the UTSA at all").

²⁵² Almeling et al., supra note 250; Almeling et al., supra note 251, at 311 tbl.8.

²⁵³ See, e.g., Almeling, supra note 8, at 773 ("[E]ven among the . . . states that have enacted [the UTSA], differences remain because legislatures in those states have modified the UTSA...."); Lao, supra note 53, at 1661 ("Even among states that have adopted the UTSA, variations exist to the extent that each state's statutory scheme modifies the uniform law.").

²⁵⁴ See Samuels & Johnson, supra note 247, at 94 ("Though there are significant variations . . . most states, thus far, have followed the thrust of the Uniform Trade Secret[s] Act."); see also Steve Borgman, The Adoption of the Uniform Trade Secrets Act: How Uniform is Uniform?, 27 IDEA 73, 118 (1986) (concluding that "the substance of the [UTSA] remains uniform throughout the [first twelve] adopting states" (emphasis omitted)).

²⁵⁵ Lao, supra note 53, at 1664; Samuels & Johnson, supra note 247, at 81–83.

ute of limitations period to bring misappropriation claims.²⁵⁶ But in fact, the vast majority of UTSA jurisdictions (thirty-nine out of forty-seven) have adopted the three-year statute of limitations suggested in the UTSA.²⁵⁷ Moreover, the two states with the largest number of trade secret cases—California and Texas—currently have a three-year statute of limitations, suggesting that forum shopping for longer time periods is not a major problem.²⁵⁸

In sum, while the UTSA has not brought about complete harmonization, even advocates of federalization concede that its adoption has "provided greater consistency in the application of trade secret law and in the laws themselves" ²⁵⁹ and helped create a "coherent and consistent body of trade secrets law." ²⁶⁰

2. The Restatement and the UTSA Are Highly Similar

Furthermore, in states like New York that continue to adhere to the original Restatement, the law governing trade secrecy is generally consistent with the UTSA. For example, both the Restatement and the UTSA permit a broad amount of business-related information—including products and processes that are patent-eligible ²⁶²—to be potentially protectable as a trade secret. And both agree on the core requirements for establishing a trade secret: (1) the protected information

²⁵⁶ See Lao, supra note 53, at 1665; David S. Almeling, A Practical Case for Federalizing Trade Secret Law, Law360 (June 16, 2009, 12:00 AM), http://www.law360.com/articles/106724/a-practical-case-for-federalizing-trade-secret-law.

²⁵⁷ See infra Appendix B (listing the statute of limitations for trade secret misappropriation claims in each state). The remaining states have limitations periods ranging from two to five years. See infra Appendix B.

²⁵⁸ See infra Appendix B; Almeling et al., supra note 250, at 74 tbl.4.

²⁵⁹ David S. Almeling, Seven Reasons Why Trade Secrets Are Increasingly Important, 27 Berkeley Tech. L.J. 1091, 1106 (2012).

²⁶⁰ Halligan, supra note 88, at 670.

²⁶¹ See UTSA, supra note 17, at prefatory note (explaining that the UTSA was intended to "codif[y]the basic principles of common law trade secret protection").

²⁶² Compare Restatement (First) of Torts § 757 cmt. b (1939) ("A trade secret may be a device or process which is patentable; but it need not be that."), with UTSA, supra note 17, at prefatory note (noting that trade secret protection of "patentable or unpatentable information" is not preempted by the Patent Clause of the Constitution).

²⁶³ Compare Restatement (First) of Torts § 757 cmt. b (1939) ("A trade secret may consist of any formula, pattern, device or compilation of information..."), with UTSA, supra note 17, § 1(4) (""Trade secret' means information, including a formula, pattern, compilation, program, device, method, technique, or process...").

has value because it is not generally known or used by competitors, ²⁶⁴ and (2) the holder must take steps to keep it secret from others. ²⁶⁵

The concept of "improper means" is central to determining misappropriation under both regimes. ²⁶⁶ The Restatement and the UTSA both prohibit a party from acquiring another's trade secret through "improper means" and then disclosing or using it. ²⁶⁷ And both impose liability on third parties who use or disclose another's trade secret if they know or have reason to know it was originally obtained through improper means. ²⁶⁸

There is also agreement about a broad range of conduct that constitutes "improper means" under both the Restatement and the UTSA. Criminal conduct, such as theft, bribery, and fraud, certainly qualifies as improper means, ²⁶⁹ as does eavesdropping, electronic espionage, and

²⁶⁴ Compare Restatement (First) of Torts § 757 cmt. b (1939) (stating that a trade secret "gives [the owner] an opportunity to obtain an advantage over competitors who do not know or use it"), with UTSA, supra note 17, § 1(4)(i) (stating that a trade secret "derives independent economic value, actual or potential, from not being generally known to . . . other persons who can obtain economic value from its disclosure or use").

²⁶⁵ Compare Restatement (First) of Torts § 757 cmt. b (1939) ("[A] substantial element of secrecy must exist, so that, except by the use of improper means, there would be difficulty in acquiring the information."), with UTSA, supra note 17, § 1(4)(ii) (stating that a trade secret "is the subject of efforts that are reasonable under the circumstances to maintain its secrecy").

²⁶⁶ See William E. Hilton, What Sort of Improper Conduct Constitutes Misappropriation of a Trade Secret, 30 IDEA 287, 289 (1990) ("It is well-settled that conduct which results in obtaining trade secret information by improper means constitutes misappropriation." (footnote omitted)); see also Klitzke, supra note 40, at 293 ("The term 'improper means' is a basic building block upon which the framework of the [UTSA] depends.").

²⁶⁷ Compare Restatement (First) of Torts § 757 (1939) ("One who discloses or uses another's trade secret . . . is liable . . . if . . . he discovered the secret by improper means"), with UTSA, supra note 17, § 1(2) ("'Misappropriation' means . . . disclosure or use of a trade secret of another . . . by a person who . . . used improper means to acquire knowledge of the trade secret").

²⁶⁸ Compare Restatement (First) of Torts § 757 (1939) ("One who discloses or uses another's trade secret ... is liable ... if ... he learned the secret from a third person ... and [knew] that the third person discovered [the trade secret] by improper means"), with UTSA, supra note 17, § 1(2) ("Misappropriation' means ... disclosure or use of a trade secret ... by a person who ... at the time of disclosure or use, knew or had reason to know that his knowledge of the trade secret was ... derived from or through a person who had utilized improper means to acquire it"). There is, however, a conflict between the Restatement and the UTSA regarding whether a third party is liable, under certain circumstances, if it innocently acquires trade secret information from another party and subsequently uses or discloses it after receiving notice of its status. Lao, supra note 53, at 1660 & n.160.

²⁶⁹ See UTSA, supra note 17, § 1(1) (stating that improper means includes "theft" and "bribery"); Restatement (First) of Torts § 757 cmt. f (1939) (stating that improper means includes "physical force" and "break[ing] into another's office"); see also Hilton, supra note

computer hacking.²⁷⁰ Acquiring a trade secret through fraudulent misrepresentation also constitutes improper means,²⁷¹ as does breaching or inducing a breach of a confidential relationship or a contractual duty.²⁷² Finally, the Restatement and the UTSA also agree on two key types of conduct that do *not* qualify as improper means: reverse engineering and independent invention.²⁷³

The remedial provisions of the Restatement are also highly similar to those of the UTSA, although not identical. Both authorize injunctive relief to prevent continuing or future harm from misappropriation.²⁷⁴ In addition, both systems allow the trade secret owner to recover damages for the actual loss caused by the misappropriation,²⁷⁵ as well as for the

266, at 294 ("A person who acquires another's trade secret by theft, fraud, breaking and entering a building, committing a trespass, bribing, swindling, or committing any illegal activity in obtaining another's trade secret, will be found to have procured the trade secret through improper means." (footnotes omitted)).

²⁷⁰ See UTSA, supra note 17, § 1(1) (stating that improper means includes "espionage through electronic or other means"); Restatement (First) of Torts § 757 cmt. f (1939) (stating that improper means includes "tapping of telephone wires, eavesdropping or other espionage"); see also Physicians Interactive v. Lathian Sys. Inc., No. CA 03-1193-A, 2003 WL 23018270, at *8 (E.D. Va. Dec. 5, 2003) ("There can be no doubt that the use of a computer software robot to hack into a computer system and to take or copy proprietary information is an improper means to obtain a trade secret").

²⁷¹ See UTSA, supra note 17, § 1(1) (stating that improper means includes "misrepresentation"); Restatement (First) of Torts § 757 cmt. f (1939) (stating that improper means includes "fraudulent misrepresentations to induce disclosure").

²⁷² See UTSA, supra note 17, § 1(1) (stating that improper means includes "breach or inducement of a breach of a duty to maintain secrecy"); Restatement (First) of Torts § 757 cmt. j (1939) (stating that improper means includes "breach of the confidence . . . in disclosing the secret"); see also Hilton, supra note 266, at 294–95 ("[I]f the alleged misappropriator breaches a contract in . . . obtaining the trade secret, then the alleged misappropriator's conduct will be deemed improper resulting in a finding of misappropriation.").

²⁷³ See UTSA, supra note 17, § 1 cmt. ("Proper means include . . . [d]iscovery by independent invention [and] [d]iscovery by 'reverse engineering "); Restatement (First) of Torts § 757 cmt. a (1939) ("One who discovers another's trade secret properly, as, for example, by inspection or analysis of the commercial product embodying the secret, or by independent invention . . . is free to disclose it or use it in his own business without liability to the owner.").

²⁷⁴ Compare Restatement (First) of Torts § 757 cmt. e (1939) (stating that a trade secret owner may be "granted an injunction against future harm by disclosure or adverse use"), with UTSA, supra note 17, § 2(a) ("Actual or threatened misappropriation may be enjoined.").

²⁷⁵ Compare Restatement (First) of Torts § 757 cmt. e (1939) (stating that a trade secret owner "may recover damages for past harm"), with UTSA, supra note 17, § 3(a) (stating that a trade secret owner "is entitled to recover damages for misappropriation . . . includ[ing] . . . the actual loss caused by misappropriation").

value of the misappropriator's unjust enrichment.²⁷⁶ Punitive damages can be awarded for egregious violations,²⁷⁷ although the UTSA caps punitive damages at twice compensatory damages, while the Restatement contains no such ceiling.²⁷⁸

Another oft-cited difference between the Restatement and the UTSA—whether a trade secret must be continuously used in the owner's business²⁷⁹—appears to have had a modest impact, at best, in trade secret litigation. The official Restatement comments provide that a trade secret is "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."280 This differs from the UTSA, which does not require the owner to actually use a trade secret. ²⁸¹ But as IP attorney Melvin Jager's treatise explains, this difference is more illusory than real because "[m]ost decisions in the jurisdictions following the common law have overlooked or specifically rejected the Restatement comment requiring 'continuous use' by the owner." For example, the Seventh Circuit, applying Illinois common law before that state's adoption of the UTSA, held that "[a]ctual use is unnecessary" for a trade secret. 283 Similarly, the Texas Supreme Court, applying Texas common law, found a trade secret existed even if the product containing the trade secret was never mass

²⁷⁶ Compare Restatement (First) of Torts § 757 cmt. e (1939) (stating that the trade secret owner may "be granted an accounting of the wrongdoer's profits"), with UTSA, supra note 17, § 3(a) (stating that the trade secret owner "is entitled to recover damages for misappropriation . . . includ[ing] . . . the unjust enrichment caused by misappropriation that is not taken into account in computing actual loss").

²⁷⁷ Compare Restatement (First) of Torts § 908(1) (1939) (authorizing punitive damages to "punish [the tortfeasor] for his outrageous conduct"), with UTSA, supra note 17, § 3(b) (authorizing exemplary damages for "willful and malicious misappropriation").

²⁷⁸ Compare Restatement (First) of Torts § 908(2) (1939) ("Where punitive damages are permissible, their allowance and amount are within the discretion of the trier of fact."), with UTSA, supra note 17, § 3(b) (authorizing exemplary damages "in an amount not exceeding twice any award" of compensatory damages).

²⁷⁹ See Lao, supra note 53, at 1654 & n.120, 1658–59; Almeling, supra note 256.

Restatement (First) of Torts § 757 cmt. b (1939).

²⁸¹ See UTSA, supra note 17, § 1 cmt. ("The definition of 'trade secret' contains a reasonable departure from the Restatement of Torts (First) definition which required that a trade secret be 'continuously used in one's business.' The broader definition in the [UTSA] extends protection to a plaintiff who has not yet had an opportunity or acquired the means to put a trade secret to use.").

²⁸² 1 Jager, supra note 31, § 5:7, at 5–29.

²⁸³ Syntex Ophthalmics, Inc. v. Tsuetaki, 701 F.2d 677, 683 (7th Cir. 1983).

manufactured or sold commercially, thus implicitly rejecting a "continuous use" requirement. 284

The remaining differences between the Restatement and UTSA, such as liability for mere acquisition of a trade secret, ²⁸⁵ appear relatively minor in comparison to state-by-state variations in other areas of law. ²⁸⁶ Ultimately, as the Federal Circuit has recognized, "trade secret law varies little from state to state."

3. Federalization Will Not Necessarily Create Uniformity

Even if federal trade secret legislation were enacted, it would not necessarily result in substantive uniformity, for the reasons described below.

a. Lack of Federal Preemption

One important issue is whether federal trade secret legislation would preempt state trade secret law. Under the Supremacy Clause, ²⁸⁸ any state law that conflicts with federal law is preempted and thus is "without effect." The Supreme Court recognizes two types of preemption: express and implied. ²⁹⁰ Express preemption occurs when a federal statute

²⁸⁴ Hyde Corp. v. Huffines, 314 S.W.2d 763, 776–77 (Tex. 1958); see also Sikes v. McGraw-Edison Co., 671 F.2d 150, 151 (5th Cir. 1982) (discussing the *Huffines* case). A recent Fifth Circuit decision applying Texas law, *CQ*, *Inc.* v. *TXU Mining Co.*, 565 F.3d 268, 274–75 (5th Cir. 2009), which has been cited in support of a "continuous use" requirement, see Almeling, supra note 256, is no longer good law, having been superseded by Texas's adoption of the UTSA. See supra note 246 and accompanying text.

²⁸⁵ See Lao, supra note 53, at 1654, 1659–60. Compare Restatement (First) of Torts § 757 (1939) ("One who *discloses* or *uses* another's trade secret... is liable to the other...." (emphases added)), with UTSA, supra note 17, § 1(2)(i)–(ii) ("Misappropriation' means... acquisition of a trade secret... by improper means; or... disclosure or use of a trade secret of another...." (emphases added)).

²⁸⁶ For example, not all states have recognized the widely-adopted theory of strict liability for defective products. See Harris v. T.I., Inc., 413 S.E.2d 605, 609–10 (Va. 1992) (rejecting strict liability in a products liability action); Smith v. Fiber Controls Corp., 268 S.E.2d 504, 509–10 (N.C. 1980) (same).

²⁸⁷ TianRui Grp. Co. v. Int'l Trade Comm'n, 661 F.3d 1322, 1327 (Fed. Cir. 2011).

²⁸⁸ See U.S. Const. art. VI, cl. 2 ("This Constitution, and the Laws of the United States which shall be made in Pursuance thereof; . . . shall be the supreme Law of the Land; . . . any Thing in the Constitution or Laws of any State to the Contrary notwithstanding.").

²⁸⁹ Maryland v. Louisiana, 451 U.S. 725, 746 (1981) (citing McCulloch v. Maryland, 17 U.S. (4 Wheat.) 316, 427 (1819)).

²⁹⁰ Gade v. Nat'l Solid Wastes Mgmt. Ass'n, 505 U.S. 88, 98 (1992).

expressly declares Congress's intent to preempt state law. ²⁹¹ Implied preemption, in contrast, exists when Congress's intent to preempt state legislation is not explicit but "implicitly contained in [the federal law's] structure and purpose."292

Currently, none of the proposed legislation would preempt state trade secret law, expressly or implicitly, thus permitting a federal civil cause of action to coexist with state law. Both the DTSA and the TSPA expressly disclaim any intent to "preempt any other provision of law." 293 PRATSA, which would create a private cause of action under Section 1832 of the EEA, itself is silent regarding preemption.²⁹⁴ However, the EEA expressly disclaims any intent to preempt state law governing trade secrecy. ²⁹⁵ Finally, the FAIR Act, which is silent regarding preemption, likely would not preempt state law because of its limited focus on extraterritorial misappropriation, ²⁹⁶ leaving domestic trade secret claims untouched.

Federal legislation that does not preempt state law ultimately will undermine harmonization, rather than promote it, by creating a federal regime that exists in parallel with state trade secret law. ²⁹⁷ In particular, if a private cause of action is authorized for EEA violations—as proposed

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²⁹¹ See Cipollone v. Liggett Grp., 505 U.S. 504, 517 (1992) (explaining that express preemption exists "[w]hen Congress has considered the issue of pre-emption and has included in the enacted legislation a provision explicitly addressing that issue, and when that provision provides a 'reliable indicium of congressional intent with respect to state authority" (quoting Malone v. White Motor Corp., 435 U.S. 497, 505 (1978))).

⁹² Jones v. Rath Packing Co., 430 U.S. 519, 525 (1977).

²⁹³ S. 2267, 113th Cong. § 2(e) (2014); H.R. 5233, 113th Cong. § 2(f) (2014).

²⁹⁴ H.R. 2466, 113th Cong. (2013).

²⁹⁵ See 18 U.S.C. § 1838 (2012) ("This chapter shall not be construed to preempt or displace any other remedies, whether civil or criminal, provided by . . . State, commonwealth, possession, or territory law for the misappropriation of a trade secret "). Clear statutory language disclaiming federal preemption generally will be given effect. See, e.g., Cipollone, 505 U.S. at 517 ("When Congress has considered the issue of pre-emption and has included in the enacted legislation a provision explicitly addressing that issue, and when that provision provides a reliable indicium of congressional intent with respect to state authority, there is no need to infer congressional intent to pre-empt state laws from the substantive provisions of the legislation." (citations omitted) (internal quotation marks omitted)).

296 See supra note 201 and accompanying text.

A parallel can be drawn to the Federal Rules of Civil Procedure, which were adopted with the goal of promoting uniformity by encouraging states to adopt them as the model for their own courts' procedures. Ultimately, however, "only a minority of states have embraced the system and philosophy of the Federal Rules [of Civil Procedure]." John B. Oakley & Arthur F. Coon, The Federal Rules in State Courts: A Survey of State Court Systems of Civil Procedure, 61 Wash. L. Rev. 1367, 1369 (1986).

by both the DTSA and PRATSA—the differences between the EEA and state trade secret law would actually make trade secret law *less* uniform in several key ways. First, the EEA's definition of a trade secret differs significantly from the UTSA. ²⁹⁸ The EEA contains a more extensive list of information that is potentially protectable as a trade secret compared to the UTSA, suggesting that the EEA's definition may be interpreted more broadly. ²⁹⁹ Second, the EEA and UTSA diverge regarding the relevant audience for the requirement that a trade secret derive value "from not being generally known" and "not being readily ascertainable through proper means." ³⁰⁰ The UTSA's audience is "other persons who can obtain economic value from [the trade secret's] disclosure or use" ³⁰¹—in other words, the "relevant competitors in the field." ³⁰² In contrast, the EEA provides that "the public" is the relevant audience. ³⁰³ Because "[t]he general public usually will not know, nor be able to readily ascer-

²⁹⁸ Compare 18 U.S.C. § 1839(3) (2012) (defining a trade secret as "all forms and types of financial, business, scientific, technical, economic, or engineering information, including patterns, plans, compilations, program devices, formulas, designs, prototypes, methods, techniques, processes, procedures, programs, or codes"), with UTSA, supra note 17, § 1(4) (defining a trade secret as "information, including a formula, pattern, compilation, program, device, method, technique, or process").

²⁹⁹ United States v. Hsu, 155 F.3d 189, 196 (3d Cir. 1998) ("Trade secrets are no longer restricted to formulas, patterns, and compilations, but now include programs and codes, whether tangible or intangible, and whether or how stored." (internal quotation marks omitted)); Rochelle Cooper Dreyfuss, Trade Secrets: How Well Should We Be Allowed to Hide Them? The Economic Espionage Act of 1996, 9 Fordham Intell. Prop. Media & Ent. L.J. 1, 10 (1998) (explaining the EEA's longer list of items potentially protectable as trade secrets "should lead courts to interpret the provision broadly—to include such 'information' as marketing strategy and customer lists, which have sometimes raised questions in state cases"). But see Pooley, Lemley & Toren, supra note 82, at 189 ("Because of the expansive interpretation already given to the UTSA definition, the EEA will probably apply to the same types of information which qualify as trade secrets under the current civil standard." (footnote omitted)).

³⁰⁰ Compare 18 U.S.C. § 1839(3)(B) (requiring that a trade secret "derive[] independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable through proper means by, the public"), with UTSA, supra note 17, § 1(4)(i) (requiring that a trade secret "derive[] 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").

³⁰¹ UTSA, supra note 17, § 1(4)(i).

³⁰² Robin J. Effron, Note, Secrets and Spies: Extraterritorial Application of the Economic Espionage Act and the TRIPS Agreement, 78 N.Y.U. L. Rev. 1475, 1488 (2003); see UTSA, supra note 17, § 1 cmt. (explaining that a trade secret does not exist if it is "unknown to the general public but readily known within the [relevant] industry").

³⁰³ 18 U.S.C. § 1839(3)(B); see also Effron, supra note 302, at 1488 ("Under the EEA, information is secret if it is not known by the 'public.'").

tain, information about a manufacturing process or business procedure," the EEA definition is potentially broader regarding what can be held as a trade secret. 304

Other differences between the EEA and the UTSA also undermine uniformity. Section 1832 of the EEA contains several mens rea requirements that are absent from the UTSA (and the Restatement as well), most notably that the defendant intends to convert the trade secret to economically benefit himself or another, intending or knowing that his conduct would "injure" the trade secret owner. Furthermore, the EEA does not expressly permit reverse engineering, while the UTSA does. Finally, the EEA—which relies on the general federal criminal statute of limitations period, presently has a five-year limitations period, which is longer than the majority of states.

b. Conflicting Statutory Interpretations

An additional source of potential divergence is conflicting statutory interpretations regarding a federal trade secret act.³¹¹ Conflicts in statutory interpretations are inherent in numerous areas governed by federal law.³¹² These differences can only be resolved in the final instance by the Supreme Court—a time-consuming process, if it can be accom-

³⁰⁴ Moohr, supra note 58, at 878. There is currently a circuit split regarding the interpretation of "the public" as used in the EEA. Compare United States v. Lange, 312 F.3d 263, 267 (7th Cir. 2002) (interpreting "the public" in the EEA as not necessarily meaning the "general public," but "the *economically relevant* public"), with United States. v. Hsu, 155 F.3d 189, 196 (3d Cir. 1998) (holding that "the EEA alters the relevant party from whom proprietary information must be kept confidential").

³⁰⁵ See supra notes 99–101 and accompanying text.

³⁰⁶ See Pamela Samuelson & Suzanne Scotchmer, The Law and Economics of Reverse Engineering, 111 Yale L.J. 1575, 1577–78 (2002) (noting the EEA's "lack of a reverse engineering defense").

³⁰⁷ See supra note 58 and accompanying text. As previously mentioned, however, PRATSA would expressly authorize reverse engineering under § 1831, thus removing this inconsistency. See supra note 193 and accompanying text.

³⁰⁸ 18 U.S.C. § 3282(a) (2012).

³⁰⁹ See United States v. Case, 309 F. App'x 883, 884–86 (5th Cir. 2009) (noting the five-year limitations period under EEA).

³¹⁰ See supra text accompanying note 64; see also infra Appendix B.

³¹¹ See Michael E. Solimine, Rethinking Exclusive Federal Jurisdiction, 52 U. Pitt. L. Rev. 383, 407 (1991) ("[E]ven under a regime of exclusive federal jurisdiction, there will be frequent conflicts in the interpretation of federal law between the twelve circuit courts of appeals.").

For examples of current circuit splits in federal statutory interpretation, see Seton Hall Circuit Review, available at http://scholarship.shu.edu/circuit_review.

plished at all³¹³—or through legislative action by Congress.³¹⁴ For one illustration related to trade secrecy, there is currently an unresolved circuit split regarding whether a so-called "faithless employee" is liable under the CFAA for misusing proprietary business information that he or she is otherwise lawfully permitted to access.³¹⁵ Thus, even "under a federal trade secret statute, trade secret owners would likely be faced with geographic differences in the case law interpreting that statute."³¹⁶

c. Fact-Specific Decision Making

Furthermore, uniformity is likely unachievable even under a federal regime due to the highly factual and contextual nature of many key issues in trade secret litigation. For instance, whether a trade secret is "generally known" or "readily ascertainable through proper means" is inherently fact-dependent. In addition, what facts satisfy these requirements may change over time due to technological developments, such as the ability to locate once-obscure information due to the Internet and sophisticated search engines and the increasing use of sophisticat-

³¹³ See Amanda Frost, Overvaluing Uniformity, 94 Va. L. Rev. 1567, 1572 (2008) (contending that "standardizing federal law is no longer possible as a practical matter" due to the Supreme Court's relatively small docket and exponential growth in the number of federal statutes).

³¹⁴ See Stefanie A. Lindquist & David A. Yalof, Congressional Responses to Federal Circuit Court Decisions, 85 Judicature 61, 66–67 (2001) ("Congress adopts some role in ensuring that its statutes are applied uniformly throughout the country, although [it] is not nearly as active as the Supreme Court in this area." (footnote omitted)).

³¹⁵ Compare EF Cultural Travel BV v. Explorica, Inc., 274 F.3d 577, 581–84 (1st Cir. 2001) (holding that the terms "without authorization" and "exceeds authorized access" in the CFAA are broad enough to cover an employee who misuses an employer's information that he or she is permitted to access), and United States v. Rodriguez, 628 F.3d 1258, 1260, 1263 (11th Cir. 2010) (same), and United States v. John, 597 F.3d 263, 271 (5th Cir. 2010) (same), and Int'l Airport Ctrs., L.L.C. v. Citrin, 440 F.3d 418, 420–21 (7th Cir. 2006) (same), with WEC Carolina Energy Solutions, L.L.C. v. Miller, 687 F.3d 199, 204, 206 (4th Cir. 2012) (holding that the CFAA does not reach mere misuse of employer information to which the employee had authorized access or violations of company use policies), and United States v. Nosal, 676 F.3d 854, 863 (9th Cir. 2012) (en banc) (same).

³¹⁶ Am. Intellectual Prop. Law Ass'n, Report of the Trade Secrets Committee 3 (2007) (on file with the Virginia Law Review).

³¹⁷ See MicroStrategy, Inc. v. Bus. Objects, S.A., 331 F. Supp. 2d 396, 417 (E.D. Va. 2004) ("What constitutes *readily* ascertainable through proper means is heavily fact-dependent and simply boils down to assessing the ease with which a trade secret could have been independently discovered.").

³¹⁸ See United States v. Hsu, 40 F. Supp. 2d 623, 630 (E.D. Pa. 1999) ("[W]hat is 'generally known' and 'reasonably ascertainable' about ideas, concepts, and technology is constantly evolving in the modern age."); Elizabeth A. Rowe, Saving Trade Secret Disclosures on the

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ed encryption methods to protect valuable information stored electronically.³¹⁹

d. Embedded State Law Issues

Finally, federalization would not resolve the choice-of-law problems identified by its proponents³²⁰ because the resolution of trade secret claims often depends upon other areas of state law, including contract, employment, and tort. For example, "many [state] trade secret claims and allegations are closely intertwined with contracts, such as employment contracts and joint-venture agreements,"³²¹ that are governed by state law. Similarly, breach of a fiduciary duty imposed by state law can give rise to a misappropriation claim.³²² In addition, state law governs the scope and enforceability of restrictive covenants like non-disclosure agreements and non-compete clauses that are commonly used to protect trade secret information.³²³ As a result, even if trade secret protection were federalized, a federal court frequently would have to engage in a choice-of-law analysis regarding such "embedded" state law issues.³²⁴

Internet Through Sequential Preservation, 42 Wake Forest L. Rev. 1, 20 (2007) ("The very nature of the Internet—that it allows equal access to anyone with a computer, irrespective of certain traditional limitations to accessing information, like geography and cost—means that it makes information at least readily discoverable, if not ascertainable." (footnote omitted)).

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³¹⁹ See Hecny Transp., Inc. v. Chu, 430 F.3d 402, 404 (7th Cir. 2005) (noting the absence of encryption for customer information as supporting the district court's conclusion that a trade secret did not exist); see also Victoria A. Cundiff, Reasonable Measures to Protect Trade Secrets in a Digital Environment, 49 IDEA 359, 410 (2009) (concluding that trade secret holders should use digital tools to protect trade secrets).

³²⁰ See supra note 244 and accompanying text.

³²¹ Am. Intellectual Prop. Law Ass'n, supra note 316, at 3; see also Alan J. Tracey, The Contract in the Trade Secret Ballroom—A Forgotten Dance Partner?, 16 Tex. Intell. Prop. L.J. 47, 79 (2007) ("The fact patterns that lead a plaintiff to claim both breach of contract and misappropriation of trade secrets are legion, as the contract that can be used to meet the requirement of the trade secret owner using 'reasonable efforts' to protect its trade secrets can also provide the basis of a breach of contract claim.").

³²² See John T. Cross, UTSA Displacement of Other State Law Claims, 33 Hamline L. Rev. 445, 449–50 (2010).

³²³ See Elizabeth A. Rowe, When Trade Secrets Become Shackles: Fairness and the Inevitable Disclosure Doctrine, 7 Tul. J. Tech. & Intell. Prop. 167, 188–91 (2005).

³²⁴ Am. Intellectual Prop. Law Ass'n, supra note 316, at 3; see also Almeling, supra note 8, at 782 ("To be sure, there would continue to be choice-of-law issues that accompany trade secret litigation, such as if the complaint asserts theories under state employment or contract law.").

4. The Potential Benefits of Trade Secret Federalism

Finally, advocates of federalizing trade secrecy tend to overlook the potential benefits of a decentralized, state law approach that permits some limited variations in trade secret law. ³²⁵ Uniformity is "thought to be virtuous in almost every area of the law [because] it insures that like cases, and litigants, are treated alike." ³²⁶ Thus, uniformity is considered beneficial as "a means of ensuring the predictability of legal obligations." ³²⁷

However, there also are advantages to permitting at least some state-based variation and experimentation. One oft-cited benefit is that it "makes government more responsive by putting the States in competition for a mobile citizenry." Under this theory, "states will compete with each other for citizens and businesses through the enactment and enforcement of laws that produce a favorable environment." Thus, as Justice Brandeis explained in his famous dissent in *New State Ice Co. v. Liebmann*, federalism permits states to "serve as a laboratory[] and try novel social and economic experiments." Experimentation can produce alternatives to address the same issue or problem, "from which the best solution may ultimately emerge." 331

Under a state-law-based system of trade secrecy, states can determine what amount of legal protection is most likely to foster innovation and promote economic growth.³³² As an example from a related state law doctrine, legal and economic scholars have attempted to analyze the impact of differing rules governing the enforceability of post-

³²⁵ See Almeling, supra note 8, at 793 (calling "unpersuasive" the argument that "there are benefits to a state-based trade secret law that would be lost upon federalization"). But see Lao, supra note 53, at 1692–94 (analyzing arguments for federalism and concluding that the only significant one is the theory that states can serve as "laboratories" of experimentation).

³²⁶ Solimine, supra note 311, at 406.

³²⁷ Evan H. Caminker, Precedent and Prediction: The Forward-Looking Aspects of Inferior Court Decisionmaking, 73 Tex. L. Rev. 1, 38 (1994); see also id. at 38–39 ('[W]hile the uniform interpretation and application of legal rules in every legal dispute are not logical prerequisites for the predictability of such rules, in our system of multiple potential venues for dispute resolution, uniformity becomes a practical prerequisite to predictability." (footnote omitted)).

³²⁸ Gregory v. Ashcroft, 501 U.S. 452, 458 (1991).

³²⁹ Lao, supra note 53, at 1692.

³³⁰ 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting).

³³¹ Lao, supra note 53, at 1694.

³³² For an analogous argument on promoting policy innovation through experimentation in patent law, see Lisa Larrimore Ouellette, Patent Experimentalism, 101 Va. L. Rev. 65, 84-87 (2015).

employment restrictions, like non-competition agreements, on local economic development and skilled worker mobility. ³³³ To a limited extent, the same process of state-law-based experimentation can occur in trade secrecy.

For instance, one area where states' trade secret laws have diverged is the so-called "inevitable disclosure" doctrine. Under this rule, "a plaintiff may prove a claim of trade secret misappropriation by demonstrating that defendant's new employment will inevitably lead him to rely on the plaintiff's trade secrets." Inevitable disclosure is not a separate cause of action; rather, it is a means of proving misappropriation or irreparable harm for injunctive relief. Some UTSA jurisdictions (like Illinois) have recognized the inevitable disclosure doctrine, while others (like California) have rejected it. 335

There are competing policy considerations on both sides of the debate regarding inevitable disclosure. On one hand, the doctrine is useful for protecting an employer's highly sensitive trade secret information, such as manufacturing processes, marketing strategies, and customer information, from being improperly used against it if a high-ranking employee joins a competing firm. ³³⁶ At the same time, however, it can prevent employees from obtaining comparable employment in the same industry and reduce the mobility of a highly skilled work-

³³³ See generally Orly Lobel, Intellectual Property and Restrictive Covenants, *in* Encyclopedia of Law and Economics: Labor and Employment Law and Economics 517 (Kenneth G. Dau-Schmidt et al. eds., 2d ed. 2009) (providing an overview of restrictive labor covenants); Ronald J. Gilson, The Legal Infrastructure of High Technology Industrial Districts: Silicon Valley, Route 128, and Covenants Not to Compete, 74 N.Y.U. L. Rev. 575 (1999) (analyzing the effects of legal rules governing employee mobility on high technology industrial districts); Paul H. Rubin & Peter Shedd, Human Capital and Covenants Not to Compete, 10 J. Legal Stud. 93 (1981) (arguing that non-compete agreements are necessary for efficient investment in human capital).

³³⁴ PepsiCo, Inc. v. Redmond, 54 F.3d 1262, 1269 (7th Cir. 1995).

³³⁵ Compare Liebert Corp. v. Mazur, 827 N.E.2d 909, 927 (III. App. Ct. 2005) ("Under Illinois law, courts may also grant injunctive relief to prevent the inevitable use or disclosure of misappropriated trade secrets." (citations omitted)), with Whyte v. Schlage Lock Co., 125 Cal. Rptr. 2d 277, 291–94 (Ct. App. 2002) (rejecting "inevitable disclosure" under California law). See also Ryan M. Wiesner, Comment, A State-By-State Analysis of Inevitable Disclosure: A Need for Uniformity and a Workable Standard, 16 Marq. Intell. Prop. L. Rev. 211, 217–28 (2012) (summarizing every state's application of the inevitable disclosure doctrine).

³³⁶ See Rowe, supra note 323, at 183–84 (noting an employer's "strong interest in protecting its valuable trade secrets").

force. 337 Ultimately, this may hinder economic growth and innovation.³³⁸

If trade secrecy were federalized, state courts and legislatures would not be able to experiment by deciding whether to recognize the inevitable disclosure doctrine. As a result, firms that engage in innovation protected by trade secrecy would no longer be free to choose whether to conduct their research in states that follow (or do not follow) the inevitable disclosure doctrine.339 A uniform federal trade secret law would short-circuit attempts to assess the doctrine's impact on innovation. 340

Of course, there is an inherent tension between promoting uniformity and permitting local variation. However, the two are not irreconcilable. Consider the role of local rules in a uniform system of Federal Rules of Civil Procedure. Federal Rule of Civil Procedure 83 grants district courts authority to "adopt and amend rules governing its practice," so long as such rules are "consistent with . . . federal statutes and rules" adopted under the Rules Enabling Act. 341 District courts have used these local rules to engage in "procedural innovation" ³⁴² in order to serve the Federal Rules' objectives of "secur[ing] the just, speedy, and inexpensive determination of every action and proceeding."³⁴³ In sum, while uniformity has its benefits, there is also value in permitting

³³⁷ See id. at 183 ("The inevitable disclosure doctrine is controversial primarily because it has the potential to upset the balance that courts have traditionally tried to achieve in employment cases, and because, at its core, it appears to go against a fundamental tenet of employment law: the at-will doctrine.").

338 See On Amir & Orly Lobel, Driving Performance: A Growth Theory of Noncompete

Law, 16 Stan. Tech. L. Rev. 833, 837-38 (2013) ("[A] rising number of empirical studies . . . suggest that lesser constraints on employee mobility may increase economic growth and innovation.").

³³⁹ Cf. Camilla A. Hrdy, State Patents as a Solution to Underinvestment in Innovation, 62 U. Kan. L. Rev. 487, 498–99 (2013) (noting the local nature of innovation).

⁴⁰ For one recent effort to assess the inevitable disclosure doctrine's impact, see generally I.P.L. Png & Sampsa Samila, Trade Secrets Law and Engineer/Scientist Mobility: Evidence from "Inevitable Disclosure" (May 2013), available at http://www.law.northwestern.edu/ faculty/programs/searlecenter/events/entrepreneur/documents/Png Samila Inevitable Disclosure.pdf.

³⁴¹ Fed. R. Civ. P. 83(a)(1).

³⁴² See A. Leo Levin, Local Rules as Experiments: A Study in the Division of Power, 139 U. Pa. L. Rev. 1567, 1574, 1586 (1991) ("Absent a problem of inconsistency with the national rules, innovations at the district level, implemented by local rule, are not proscribed ").

³⁴³ Fed. R. Civ. P. 1.

some degree of experimentation by preserving a state-law-based regime of trade secret protection.

B. Availability of a Federal Forum

Another proffered justification for federalizing trade secrecy is that it would permit litigation of civil trade secret misappropriation claims in a federal forum. 344 Proponents of federalization have cited several advantages to litigating trade secret cases in federal court. One is the availability of nationwide service of process, 345 which allows trade secret plaintiffs to avoid cumbersome state court procedures to obtain relevant evidence from non-resident third parties. 346 Another advantage is federal courts' broader jurisdictional reach over foreign defendants through the "national contacts" standard in Federal Rule of Civil Procedure 4(k)(2). 347 A third is the more liberal discovery rules in federal court.³⁴⁸ Finally, proponents of a federal forum contend that litigants generally prefer federal courts because of their experience handling complex IP and commercial disputes.³⁴⁹

These claims carry some force. Federal courts offer a number of advantages to trade secret litigants that may not be available in state courts. 350 As a "forum of excellence," 351 federal trial courts offer litigants a "level of technical competence" that "generally will be superior

³⁴⁴ See Halligan, supra note 88, at 667–68.

³⁴⁵ Fed. R. Civ. P. 45(b)(2).

³⁴⁶ See Halligan, supra note 88, at 667–68 ("[A] skilled trade secrets practitioner looks for a way to bring the case in federal court so he can serve nationwide subpoenas and proceed with discovery anywhere in the country." (footnote omitted)); Letter from Richard F. Phillips to Victoria Espinel, supra note 144, at 2 ("By comparison to the federal courts, which can compel nationwide service of process, state courts are not able to provide for prompt nationwide service of process to join parties and to secure testimony and other evidence."); Klapow, supra note 239, at 3 (asserting that "nationwide service of process... should make third-party information more readily available at less expense").

See Touchcom, Inc. v. Bereskin, 574 F.3d 1403, 1414 (Fed. Cir. 2009); Mwani v. Bin Laden, 417 F.3d 1, 11-14 (D.C. Cir. 2005).

Am. Intellectual Prop. Law Ass'n, supra note 316, at 4.

³⁴⁹ See Almeling, supra note 8, at 795–96.

³⁵⁰ In addition to the reasons mentioned above, another advantage of litigating misappropriation claims in federal court is the availability of protective orders to prevent the disclosure of trade secrets during litigation. See Fed. R. Civ. P. 26(c)(1)(G) (permitting a protective order to be entered for "a trade secret or other confidential research, development, or commercial information").

³⁵¹ See Burt Neuborne, Parity Revisited: The Uses of a Judicial Forum of Excellence, 44 DePaul L. Rev. 797, 797 (1995).

to that of a given state trial forum,"352 particularly for complex legal issues like IP. In contrast, "[s]tate court judges are often ill-equipped and sometimes even unwilling to address trade secret cases involving technology."353

However, a civil cause of action for trade secret misappropriation under federal law is not necessary to receive the benefits of a federal forum in many cases. For example, state law claims can be heard in federal court under diversity jurisdiction. 354 This includes cases under alienage jurisdiction, where a U.S. citizen (including a corporation or unincorporated association) can bring a claim against a citizen of a foreign state, 355 which is particularly useful in cases involving trade secret misappropriation by foreign entities.³⁵⁶

In addition, supplemental jurisdiction is another route into federal court for state law trade secret claims. Under the supplemental jurisdiction statute, 357 a federal court may exercise jurisdiction over a state law claim that arises out of a "common nucleus of operative fact" with a

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³⁵² Burt Neuborne, The Myth of Parity, 90 Harv. L. Rev. 1105, 1120 (1977).

³⁵³ Charles Tait Graves, Trade Secrecy and Common Law Confidentiality: The Problem of Multiple Regimes, in The Law and Theory of Trade Secrecy: A Handbook of Contemporary Research 77, 102 (Rochelle C. Dreyfuss & Katherine J. Strandburg eds., 2011).

³⁵⁴ See 28 U.S.C. § 1332 (2012); see also Almeling et al., supra note 251, at 297 (noting that trade secret cases can be heard in federal court through diversity or supplemental jurisdiction); William Lynch Schaller, Secrets of the Trade: Tactical and Legal Considerations from the Trade Secret Plaintiff's Perspective, 29 Rev. Litig. 729, 775 (2010) ("[A] trade secret plaintiff seeking to proceed in federal court must first establish federal subject matter jurisdiction . . . such as . . . diversity jurisdiction."). For examples of recent federal cases using diversity jurisdiction to hear state law trade secret misappropriation claims, see Mac-Dermid, Inc. v. Deiter, 702 F.3d 725, 727 (2d Cir. 2012); ClearOne Communications, Inc. v. Biamp Systems, 653 F.3d 1163, 1169-70 (10th Cir. 2011); Reg Seneca, LLC v. Harden, 938 F. Supp. 2d 852, 857-58 (S.D. Iowa 2013); Success Systems, Inc. v. Lynn, No. 3:06-cv-1117 (RNC), 2013 WL 810540, at *1 (D. Conn. Mar. 5, 2013); Wyndham Vacation Resorts, Inc. v. Wesley Fin. Grp., LLC, No. 3:12-cv-559, 2013 WL 785938, at *1 (M.D. Tenn. Feb. 28, 2013); Avery Dennison Corp. v. Juhasz, 924 F. Supp. 2d 893, 897 (N.D. Ohio 2013); E.I. DuPont de Nemours & Co. v. Kolon Industries, Inc., 911 F. Supp. 2d 340, 356 (E.D. Va. 2012).
355 28 U.S.C. § 1332(a)(2)–(3).

³⁵⁶ For examples of federal cases involving alienage jurisdiction over state law trade secret misappropriation claims, see K-V Pharmaceutical. Co. v. J. Uriach & CIA, S.A., 648 F.3d 588, 591 (8th Cir. 2011); CYBERsitter, L.L.C. v. People's Republic of China, 805 F. Supp. 2d 958, 962-63 (C.D. Cal. 2011); Contour Design, Inc. v. Chance Mold Steel Co., No. 09-cv-451-JL, 2010 WL 174315, at *1 (D.N.H. Jan. 14, 2010); Sterling International, Inc. v. Virtools Canada, Inc., No. CV-06-0059-AAM, 2006 WL 2035515, at *1 (E.D. Wash. July 18, 2006).

357 28 U.S.C. § 1367 (2012).

federal cause of action. 358 One way to raise trade secret claims in federal court via supplemental jurisdiction is by coupling a claim of patent infringement with a state law claim for misappropriation of trade secret information involving know-how related to the patented invention.³⁵⁹ Other federal causes of action that have given rise to supplemental jurisdiction over trade secret claims include copyright infringement, 360 violations of federal antitrust law, 361 and violations of the CFAA. 362

The federal removal statute makes the election of a federal forum in trade secret litigation an option for both parties.³⁶³ If a plaintiff files a trade secret claim in state court, and federal jurisdiction would have been proper, then the defendant can exercise its option to immediately remove the case to federal court (unless the plaintiff sued in the defendant's home state). 364 This option can be invoked, for example, if an out-of-state defendant perceives that a local forum would be biased

³⁵⁸ United Mine Workers of Am. v. Gibbs, 383 U.S. 715, 725 (1966) (establishing the "common nucleus of operative fact" test). In addition, a separate jurisdictional provision, 28 U.S.C. § 1338(b) (2012), provides that federal district courts have jurisdiction over "any civil action asserting a claim of unfair competition when joined with a substantial and related claim under the copyright, patent . . . or trademark laws." Trade secret misappropriation can qualify as "unfair competition" under 28 U.S.C. § 1338(b). See, e.g., Rohm & Haas Co. v. Adco Chem. Co., 689 F.2d 424, 429 n.4 (3d Cir. 1982); ISC-Bunker Ramo Corp. v. Altech, Inc., 765 F. Supp. 1310, 1328–29 (N.D. Ill. 1990).

359 See, e.g., Roton Barrier, Inc. v. Stanley Works, 79 F.3d 1112, 1116 (Fed. Cir. 1996);

Rhone-Poulenc Specialites Chimiques v. SCM Corp., 769 F.2d 1569, 1571 (Fed. Cir. 1985); see also J. Jonas Anderson, Secret Inventions, 26 Berkeley Tech. L.J. 917, 944 (2011) (explaining that "patentees in certain industries can disclose enough information to obtain a patent yet retain certain trade secret know-how or show-how that is required to effectively practice the invention"); Karl F. Jorda, Patent and Trade Secret Complementariness: An Unsuspected Synergy, 48 Washburn L.J. 1, 28–31 (2008) (describing the relationship between patent and trade secret protection). However, district courts may decline to exercise supplemental jurisdiction if they conclude that the state law claim (such as trade secrecy) "substantially predominates over the claim or claims over which the district court has original jurisdiction" (such as patent infringement). 28 U.S.C. § 1367(c)(2) (2012).

³⁶⁰ See, e.g., S.O.S., Inc. v. Payday, Inc., 886 F.2d 1081, 1082 (9th Cir. 1989); Kupferberg, Goldberg & Niemark, L.L.C. v. Father & Son Pizza, Ltd., No. 95 C 3690, 1997 WL 158332, at *1–2 (N.D. Ill. Mar. 31, 1997).

361 See, e.g., Forest Labs., Inc. v. Pillsbury Co., 452 F.2d 621, 623, 629 (7th Cir. 1971).

³⁶² See, e.g., Creative Computing v. Getloaded.com, L.L.C., 386 F.3d 930, 932-33 (9th Cir. 2004); Unified Brands, Inc. v. Teders, 868 F. Supp. 2d 572, 576 n.1 (S.D. Miss. 2012). See generally Liccardi, supra note 106 (discussing how the CFAA can be used as a vehicle for litigating trade secrets in federal court).

³⁶³ See 28 U.S.C. § 1441 (2012); see also Scott R. Haiber, Removing the Bias Against Removal, 53 Cath. U. L. Rev. 609, 611 (2004) ("Removal . . . serves . . . to ensure that plaintiffs alone do not decide which cases federal courts hear." (footnote omitted)).

³⁶⁴ 28 U.S.C. § 1441(b)(2).

against it, ³⁶⁵ or if the defendant is a large corporation facing a plaintiff-friendly state court jury. ³⁶⁶

An empirical study by David Almeling and several co-authors confirms that a substantial number of state trade secret claims are currently heard in federal court. ³⁶⁷ Studying a randomly-selected sample of federal court decisions on trade secret misappropriation from 1950–2007, as well as all federal court decisions in 2008, they found "[t]he amount and importance of trade secret litigation [occurring in federal courts] is exploding." ³⁶⁸ In particular, they found "exponential growth" in federal trade secret cases, doubling between 1988 and 1995, and doubling again between 1995 and 2004. ³⁶⁹

However, the benefits of litigating trade secret cases in a federal forum are not unalloyed. One drawback is the expense associated with the liberal discovery provisions of the Federal Rules of Civil Procedure. The Discovery in trade secret litigation is not cheap; a recent survey of IP lawyers found that 2013 median litigation costs through the end of discovery ranged from \$250,000 in cases where less than \$1 million was at stake, to \$1.9 million in cases where over \$25 million was at risk.

Another disadvantage of exclusive federal jurisdiction over trade secret claims is that it may further burden an already-busy federal judiciary.³⁷² Many federal district courts in states with the highest number of

³⁶⁵ See Neal Miller, An Empirical Study of Forum Choices in Removal Cases Under Diversity and Federal Question Jurisdiction, 41 Am. U. L. Rev. 369, 409 (1992) (finding that a majority of randomly surveyed defense attorneys perceived that "bias against out-of-state litigants was present in their cases").

³⁶⁶ See id. at 412 (finding that approximately 45% of surveyed defense attorneys perceived

³⁶⁰ See id. at 412 (finding that approximately 45% of surveyed defense attorneys perceived a "[b]ias against business status"); see also Kevin M. Clermont & Theodore Eisenberg, Do Case Outcomes Really Reveal Anything About the Legal System? Win Rates and Removal Jurisdiction, 83 Cornell L. Rev. 581, 594 tbl.1 (1998) (finding that the win rate in original diversity cases is 71%, but in removed diversity cases it is only 34%).

³⁶⁷ Almeling et al., supra note 251, at 298–99, 301–02.

³⁶⁸ Id. at 301.

³⁶⁹ Id. at 293, 301.

³⁷⁰ See John H. Beisner, Discovering a Better Way: The Need for Effective Civil Litigation Reform, 60 Duke L.J. 547, 549 (2010) ("By some estimates, discovery costs now comprise between fifty and ninety percent of the total litigation costs in a case." (footnote omitted)).

³⁷¹ Am. Intellectual Prop. Law Ass'n, Report of the Economic Survey 2013, at 36, I-183, I-185 (2013). One limitation of this study is that it does not disaggregate between trade secret litigation in federal and state courts.

³⁷²But see Almeling, supra note 8, at 794 (contending that a federal trade secrets act "[w]ould [n]ot [o]verburden the [f]ederal [j]udiciary").

trade secret cases—California, New York, Ohio, and Texas³⁷³—have longer-than-median pending time for disposing of civil cases.³⁷⁴ In many of these courts, the median time to trial for civil cases exceeded two years.³⁷⁵ This is particularly important because speed often is of the essence in trade secret cases, as delay can result in irreparable harm if the misappropriated information is publicly disclosed or used by a competi-

C. International Treaty Obligations

A third argument advanced for federalizing trade secrecy is that federal legislation is required to comply with the United States's obligations under international trade law.³⁷⁷ Specifically, some proponents of federalization contend that certain state trade secret laws do not satisfy the requirements of two multilateral trade agreements, the North American Free Trade Agreement ("NAFTA")³⁷⁸ and the Agreement on Trade-Related Aspects of Intellectual Property Rights ("TRIPS").³⁷⁹

NAFTA and TRIPS both contain minimum substantive standards for trade secret protection.³⁸⁰ The standard for establishing a trade secret in both agreements is similar, requiring member states to protect infor-

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³⁷³ Almeling et al., supra note 250, at 74 & tbl.4.

³⁷⁴ See Admin. Office of the U.S. Courts, Federal Judicial Caseload Statistics 2014, at tbl.C-5 (2014), available at http://www.uscourts.gov/Viewer.aspx?doc=/uscourts/Statistics/FederalJudicialCaseloadStatistics/2014/tables/C05Mar14.pdf (Last visited Mar. 16, 2015) (showing the median interval from filing to disposition of civil cases in all federal district courts was 8.6 months, compared to 8.8 months in the Eastern District of California; 11.0 months in the Northern District of New York; 8.6 months in the Eastern District of New York; 9.4 months in the Western District of New York; 9.6 months in the Southern District of Ohio; and 9.1 months in the Eastern District of Texas).

³⁷⁵ See id. (stating the median time to trial is 28.4 months in the Northern District of California, 31.5 in the Eastern District of California, 27.0 months in the Southern District of California, 34.5 months in the Northern District of New York, 34.7 months in the Eastern District of New York, 30.9 months in the Southern District of New York, 31.5 months in the Western District of New York, 29.4 months in the Southern District of Ohio, and 26.1 months in the Eastern District of Texas).

³⁷⁶ See Elizabeth A. Rowe, Introducing a Takedown for Trade Secrets on the Internet, 2007 Wis. L. Rev. 1041, 1043 ("Given that secrecy is vital to preserving trade-secret status, time is of the essence to trade-secret owners").

³⁷⁷ Lao, supra note 53, at 1674–79; Pace, supra note 51, at 449–56.

³⁷⁸ North American Free Trade Agreement, U.S.-Can.-Mex., Dec. 17, 1992, 107 Stat. 2057, 32 I.L.M. 289 (1993) [hereinafter NAFTA].

³⁷⁹ Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, 33 I.L.M 1197 [hereinafter TRIPS].

³⁸⁰ Halligan, supra note 88, at 671; Lao, supra note 53, at 1675–76.

mation that (1) is not "generally known among or readily accessible to persons that normally deal with the kind of information in question," 381 (2) has "commercial value because it is secret," 382 and (3) was subject to "reasonable steps under the circumstances to keep it secret." NAFTA and TRIPS also require member states to provide legal means to prevent unauthorized disclosure, acquisition, or use of a trade secret. These standards are consistent with the UTSA, which was the model for both provisions. 385

However, advocates of federalization have argued that "the Restatement provisions on trade secrets are less protective" and thus "states that continue to abide by Restatement rules may fall short of the minimum standards established in NAFTA and TRIPS."³⁸⁶ In particular, they point to the Restatement's "continuous use" requirement as inconsistent with

³⁸¹ Compare TRIPS, supra note 379, art. 39(2)(a) (requiring protection of information not "generally known among or readily accessible to persons within the circles that normally deal with the kind of information in question"), with NAFTA, supra note 378, art. 1711 § 1(a) (requiring protection of information not "generally known among or readily accessible to persons that normally deal with the kind of information in question").

³⁸² Compare TRIPS, supra note 379, art. 39(2)(b) (requiring protection of information with "commercial value because it is secret"), with NAFTA, supra note 378, art. 1711 § 1(b) (requiring protection of information with "actual or potential commercial value because it is secret").

³⁸³ Compare TRIPS, supra note 379, art. 39(2)(c) (requiring that the protected information "has been subject to reasonable steps under the circumstances . . . to keep it secret"), with NAFTA, supra note 378, art. 1711 § 1(c) (requiring that the trade secret owner has "taken reasonable steps under the circumstances to keep it secret"). One additional requirement in NAFTA is that the trade secret must be in tangible form. See NAFTA, supra note 378, art. 1711 § 2 ("A Party may require that to qualify for protection a trade secret must be evidenced in documents, electronic or magnetic means, optical discs, microfilms, films or other similar instruments."); Lao, supra note 53, at 1677 n.248.

³⁸⁴ Compare TRIPS, supra note 379, art. 39(2) ("[P]ersons shall have the possibility of preventing information lawfully within their control from being [unlawfully] disclosed to, acquired by, or used by others"), with NAFTA, supra note 378, art. 1711 § 1 ("Each Party shall provide the legal means for any person to prevent trade secrets from being [unlawfully] disclosed to, acquired by, or used by others").

³⁸⁵ See Lao, supra note 53, at 1677 ("[S]tates that have adopted the UTSA without restrictive modifications are generally in compliance with the international accords."); see also Sharon K. Sandeen, The Limits of Trade Secret Law: Article 39 of the TRIPS Agreement and the Uniform Trade Secrets Act on Which It Is Based, *in* The Law and Theory of Trade Secrecy: A Handbook of Contemporary Research, supra note 353, at 537, 538 ("Subsections (a) through (c) of Article 39(2) [of TRIPS] are modeled after the definition of 'trade secret' that is contained in the [UTSA]...").

³⁸⁶ Lao, supra note 53, at 1677.

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NAFTA and TRIPS. 387 In addition, they argue that some states' modifications to the UTSA potentially conflict with these treaties.³⁸⁸

These claims are unpersuasive. As previously discussed, the "continuous use" requirement is largely disregarded in modern trade secret jurisprudence. 389 More importantly, proponents of federalization are unable to point to any actual controversy arising from the United States's alleged noncompliance with NAFTA or TRIPS. For instance, there has been no criticism by the United States's major trading partners regarding the level of protection provided under state trade secret laws. ³⁹⁰ Thus, as the USPTO has explained, the United States effectively "fulfills its obligation[s] by offering trade secret protection under state laws."³⁹¹

D. A National Regime for IP Rights

Finally, proponents of federalizing trade secrecy claim that it would "achieve better innovation policy because it would consolidate in one entity...all major categories of IP."392 In an information-based economy, they argue, trade secrets play an increasingly important role.³⁹³ Thus, they contend that a national system governing all major forms of IP protection, including trade secrecy, would be better suited to incentivize innovation than would fifty separate legal systems.³⁹⁴

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³⁸⁷ Id. at 1677–78; see also Pace, supra note 51, at 452–53 (noting that the definition of trade secret in NAFTA and TRIPS is broader than the Restatement definition).

³⁸⁸ See Lao, supra note 53, at 1678 (arguing, in particular, that Iowa's limitation of third party liability to instances where the third party had actual knowledge of the improper acquisition is inconsistent with NAFTA and TRIPS); Pace, supra note 51, at 453 (same).

³⁸⁹ See supra text accompanying notes 282–85.

³⁹⁰ See Am. Intellectual Prop. Law Ass'n, supra note 316, at 4 (stating that the AIPLA Trade Secret Committee "has not been able to identify any criticism of the trade secret protection provided within the United States by any of the United States' trading partners").

³⁹¹ Office of Policy & External Affairs: Patent Trade Secrets, U.S. Patent & Trademark Office, http://www.uspto.gov/ip/global/patents/ir_pat_tradesecret.jsp (last visited Dec. 1, 2014). 392 Almeling, supra note 8, at 789–90.

See Almeling, supra note 259, at 1104 ("Trade secrets matter more than ever because trade secrets . . . play an expanding role in the American economy."); Pace, supra note 51, at 448 ("As the United States economy becomes increasingly information-driven . . . the types of trade secrets . . . are likely to increase exponentially.").

³⁹⁴ See Almeling, supra note 8, at 791; Lao, supra note 53, at 1635; Pace, supra note 51, at 448; cf. Anderson, supra note 359, at 921 (contending that "trade secrets and patents should be viewed not as opposing systems of invention protection, but rather as complementary tools for policy makers").

But federalization may in fact harm innovation by indirectly undermining a key objective of patent law: the disclosure of inventions.³⁹⁵ As the remainder of this Section explains, the strengthening of trade secret protection via federalization likely will cause more inventors to opt out of the patent system in favor of trade secret protection, ultimately reducing the amount of available information about patentable inventions.

1. Choosing Between Trade Secrecy and Patenting

Innovators who develop a potentially patentable invention face the dilemma of deciding whether to seek protection for it under either trade secret or patent law. 396 The two forms of protection are mutually exclusive because the public disclosure required to obtain a patent eliminates any claim to secrecy on the same information.³⁹⁷ Thus, if an innovator

³⁹⁵ See Lemley, supra note 9, at 333 (explaining that "dissemination... of new information is one of the goals of the patent system"). There is currently a robust debate among IP scholars regarding the value and efficacy of patent law's disclosure requirement. Compare Jeanne C. Fromer, Patent Disclosure, 94 Iowa L. Rev. 539, 541-43 (2009) (arguing that "[p]atent disclosure is essential" and suggesting improvements "to strengthen patent disclosure"), and Jason Rantanen, Peripheral Disclosure, 74 U. Pitt. L. Rev. 1, 1 (2012) (rejecting "the idea that patents serve little to no disclosure function . . . by pointing to other disclosures of information that would not occur in the absence of a patent system"), and Sean B. Seymore, The Teaching Function of Patents, 85 Notre Dame L. Rev. 621, 627 (2010) (considering "teaching as an important function of the patent system"), with Timothy R. Holbrook, Possession in Patent Law, 59 SMU L. Rev. 123, 125-26 (2006) (contending that the assumed "benefit[s] of disclosure . . . in the quid pro quo view of patents . . . may not be warranted" and that "the enabling disclosures in patents do not serve a teaching function particularly well"), and Mark A. Lemley, Ignoring Patents, 2008 Mich. St. L. Rev. 19, 21-22 (stating that companies generally ignore patents in all stages of product development), and Lisa Larrimore Ouellette, Do Patents Disclose Useful Information?, 25 Harv. J.L. & Tech. 531, 534 & n.11 (2012) (finding that a minority of nanotechnology researchers surveyed reported obtaining useful technical information from a patent). See generally Note, The Disclosure Function of the Patent System (or Lack Thereof), 118 Harv. L. Rev. 2007, 2007 (2005) (examining "the potential value of the patent system's disclosure function and stud[ying] the reasons why the U.S. patent system appears to be failing in its ascribed role of disseminating information"). A comprehensive evaluation of this issue is outside the scope of this Article.

³⁹⁶ See Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 487–88 (1974) (discussing the choice between patenting or trade secrecy); Anderson, supra note 359, at 922-27 (same); Andrew A. Schwartz, The Corporate Preference for Trade Secret, 74 Ohio St. L.J. 623, 636 (2013) ("[T]here is a substantial realm of overlap where either trade secrecy or a patent could work to protect an owner's exclusive use of valuable information, and a decision between these alternative forms of IP protection must be made." (footnote omitted)).

³⁹⁷ See BondPro Corp. v. Siemens Power Generation, Inc., 463 F.3d 702, 706–07 (7th Cir. 2006) ("Publication in a patent destroys the trade secret because patents are intended to be widely disclosed " (internal citation omitted)); Restatement (Third) of Unfair Competi-

develops a patent-eligible invention, he or she must determine on a caseby-case basis which regime would "provide[] the best protection." ³⁹⁸

Currently, trade secrecy is a broad but fragile form of protection for IP. It is broad because it potentially covers any business-related information that has at least some value from not being widely known or easily learned. However, trade secret protection also is fragile because it can be easily lost—for instance, through intentional or accidental disclosure of the secret by the owner or others entrusted to maintain its secrecy, or through the acts of unrelated third parties, such as independent discovery or reverse engineering. If a trade secret exists and misappropriation occurs, however, the owner can invoke a powerful arsenal of remedies, including injunctive relief, compensatory damages, exemplary damages, and attorney's fees. Moreover, trade secrecy is "theoretically unlimited in duration, lasting as long as the information remains a trade secret."

tion § 39 cmt. f (1995) ("[I]nformation that is disclosed in a patent . . . does not qualify for protection [as a trade secret]."); see also Brian J. Love & Christopher B. Seaman, Best Mode Trade Secrets, 15 Yale J.L. & Tech. 1, 3 (2012) ("Traditionally, trade secrecy and patent rights have been considered mutually exclusive." (footnote omitted)). There is a limited exception to this rule: An invention may be held as a trade secret during the time between the filing of a patent application and its subsequent publication or issuance as a patent by the USPTO. See Anderson, supra note 359, at 923 n.19 (citing 35 U.S.C. § 122(a)–(b)(1)(A) (2006)).

³⁹⁸ Anderson, supra note 359, at 923.

³⁹⁹ See UTSA, supra note 17, § 1(4); see also Eric E. Johnson, Trade Secret Subject Matter, 33 Hamline L. Rev. 545, 546 (2010) ("Naked statements of blackletter doctrine seem to indicate that trade secret subject matter is very broad."); Rowe, supra note 376, at 1050 ("Part of the appeal of choosing trade-secret protection . . . is the broad scope of protectable information and the relative ease with which a business can claim such protection." (footnote omitted)).

⁴⁰⁰ See *Kewanee Oil Co.*, 416 U.S. at 490–91; see also Richard A. Epstein, The Constitutional Protection of Trade Secrets Under the Takings Clause, 71 U. Chi. L. Rev. 57, 57–58 (2004) (explaining the vulnerability of trade secrets to disclosure, independent discovery, and reverse engineering).

⁴⁰¹ See Oren Bar-Gill & Gideon Parchomovsky, Law and the Boundaries of Technology-Intensive Firms, 157 U. Pa. L. Rev. 1649, 1676 (2009) ("[I]f misappropriation of a trade secret can be proven, a variety of remedies become[] available to the holder, including injunctive relief and damages."); see also supra text accompanying notes 59–67 (describing remedies available under the UTSA).

⁴⁰² Nova Chems., Inc. v. Sekisui Plastics Co., 579 F.3d 319, 327 (3d Cir. 2009); see also Schwartz, supra note 396, at 630 ("[W]hile a patent offers protection for a specified term of years, a trade secret has no built-in expiration date." (footnote omitted)).

In contrast, patent law is usually "viewed as conferring a more robust form of protection." ⁴⁰³ If the statutory requirements of novelty, utility, and nonobviousness are satisfied, ⁴⁰⁴ then a patent's exclusive rights "operate[] against the world, forbidding any use of the invention" during its lifetime ⁴⁰⁵—currently, twenty years from the filing date of the relevant patent application. ⁴⁰⁶ Furthermore, unlike in trade secrecy, reverse engineering and independent invention are not defenses to patent infringement. ⁴⁰⁷

In exchange for these more robust rights, the inventor must disclose sufficient information to teach others skilled in the relevant field of technology how to practice the invention. In other words, public disclosure is "part of the *quid pro quo* of the patent bargain." As the Supreme Court explained in *Kewanee Oil Co. v. Bicron Corp.*:

In return for the right of exclusion—this "reward for inventions"—the patent laws impose upon the inventor a requirement of disclosure. To insure adequate and full disclosure . . . the patent laws require that the patent application shall include a full

⁴⁰³ Roger D. Blair & Thomas F. Cotter, An Economic Analysis of Damages Rules in Intellectual Property Law, 39 Wm. & Mary L. Rev. 1585, 1593 (1998).

⁴⁰⁴ See 35 U.S.C. § 101 (2012) (defining patentable subject matter as "any new and useful process, machine, manufacture, or composition of matter"); id. § 103 (requiring a patented invention be nonobvious).

⁴⁰⁵ Kewanee Oil Co., 416 U.S. at 490 (internal quotation marks omitted).

⁴⁰⁶ 35 U.S.C. § 154(a)(2) (2012). However, this duration can be terminated earlier by the patent owner's failure to pay maintenance fees at four-, eight-, and twelve-year intervals after the patent's issuance. Id. § 41(b)(1)–(2). Only about half of patentees pay all three maintenance fees. Dennis Crouch, USPTO Maintenance Fees, PatentlyO.com (Feb. 12, 2012), http://patentlyo.com/patent/2012/02/uspto-maintenance-fees.html.

⁴⁰⁷ See, e.g., Samuelson & Scotchmer, supra note 306, at 1584 ("No reverse engineering right, as such, exists in patent law." (footnote omitted)); Samson Vermont, Independent Invention as a Defense to Patent Infringement, 105 Mich. L. Rev. 475, 475 (2006) ("Under current law, independent invention is no defense to patent infringement."). The Leahy-Smith America Invents Act created a limited exception to this rule, permitting an individual or entity that commercially used a process, including an independently invented process, as a trade secret to continue its use even after issuance of a patent on the same invention, or public disclosure of a patent application that was subsequently filed. See infra note 419 and accompanying text.

⁴⁰⁸ See 35 U.S.C. § 112(a) (2012) ("The specification shall contain a written description of the invention... in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains... to make and use the same, and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention.").

⁴⁰⁹ AK Steel Corp. v. Sollac, 344 F.3d 1234, 1244 (Fed. Cir. 2003); see also Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 736 (2002) ("[E]xclusive patent rights are given in exchange for disclosing the invention to the public.").

and clear description of the invention and "of the manner and process of making and using it" so that any person skilled in the art may make and use the invention....[S]uch additions to the general store of knowledge are of such importance to the public weal that the Federal Government is willing to pay the high price of 17 years of exclusive use for its disclosure. ⁴¹⁰

Disclosure permits the public to use the information in the patent to practice the invention after the patent term has expired. 411 And even before the patent's expiration, "scientists can learn from the patent disclosure and use that information to improve on the invention or to design around it." 412 Furthermore, patent law can facilitate what Professor Jason Rantanen calls "peripheral disclosure"—the dissemination of information outside the four corners of the patent, such as scientific publications, due to the availability of patent protection. 413

Facing these alternatives, there are a number of reasons why an inventor might forego patent protection in favor of trade secrecy. Some reasons why innovators might favor trade secrecy over patenting include the cost, delay, and uncertainty associated with prosecuting a patent application;⁴¹⁴ the even greater cost of enforcing an issued patent in litigation;⁴¹⁵ the risk of losing exclusivity if the patent is found invalid;⁴¹⁶ and

⁴¹⁰ 416 U.S. at 480–81 (footnote and internal citations omitted). The present term of a patent has since been amended and is currently 20 years from the filing date of the patent application. 35 U.S.C. § 154(a)(2).

⁴¹¹ Lemley, supra note 9, at 332. But see Alan Devlin, The Misunderstood Function of Disclosure in Patent Law, 23 Harv. J.L. & Tech. 401, 410 (2010) (arguing that "the information-revealing function of the patent system is largely illusory").

⁴¹² Lemley, supra note 9, at 332.

⁴¹³ Rantanen, supra note 395, at 21–37.

⁴¹⁴ See Anderson, supra note 359, at 925; Ted Sichelman & Stuart J.H. Graham, Patenting by Entrepreneurs: An Empirical Study, 17 Mich. Telecomm. & Tech. L. Rev. 111, 115, 166–67 & fig.5 (2010) (indicating that the cost of acquiring a patent was a significant deterrent to seeking patent protection, according to a survey of startup companies); Data Visualization Center: Patents Dashboard, U.S. Patent & Trademark Office, http://www.uspto.gov/dashboards/patents/main.dashxml (stating that as of January 2015, the average total pendency of patent applications is 26.8 months).

⁴¹⁵ See Lemley, supra note 9, at 331 ("[P]atent litigation is as much as three times as ex-

⁴¹⁵ See Lemley, supra note 9, at 331 ("[P]atent litigation is as much as three times as expensive as trade secret litigation."); Sichelman & Graham, supra note 414, at 166–67 & fig.5 (finding that a top reason for innovators to forgo patenting was "the cost of enforcing the patent").

⁴¹⁶ See John R. Allison & Mark A. Lemley, Empirical Evidence on the Validity of Litigated Patents, 26 AIPLA Q.J. 185, 194, 205 & fig.1 (1998) (finding that in a study of reported patent validity decisions over an eight-year period, 46% of litigated patents were held invalid). But cf. Robert Smyth, White Paper Report: United States Patent Invalidity Study 2012

the absence of any formal registration mechanism or requirement for a trade secret. 417

Notably, the recently-enacted Leahy-Smith America Invents Act ("AIA")⁴¹⁸ included several changes that make trade secrecy more attractive vis-à-vis patent protection. The AIA expanded prior user rights by creating a defense against patent infringement for any entity that commercially used an invention at least one year before the patent's filing date or public disclosure, including information used in secret to produce a commercial product.⁴¹⁹ It also effectively abolished the best mode requirement,⁴²⁰ meaning that some inventors may be able to pursue patent protection while simultaneously preserving information about the perceived best method of implementing the invention as a trade secret.⁴²¹

2. Strengthening Trade Secrecy via Federalization

Adopting a federal civil cause of action for trade secret misappropriation would likely further strengthen trade secret protection. First, it would put trade secrecy on par with patent law regarding the availability of a federal forum. A federal statute would allow trade secret holders to invoke federal subject matter jurisdiction for misappropriation claims

(Sept. 2012), https://www.morganlewis.com/pubs/Smyth_USPatentInvalidity_Sept12.pdf (finding that 86% of asserted patents were held invalid in federal district court cases from 2007–11).

⁴¹⁷ Anderson, supra note 359, at 925.

⁴¹⁸ Pub. L. No. 112-29, 125 Stat. 284 (2011) (codified as amended in scattered sections of 35 U.S.C.).

⁴¹⁹ 35 Ú.S.C. § 273(a) (2012); see also Dmitry Karshtedt, Did Learned Hand Get It Wrong?: The Questionable Patent Forfeiture Rule of *Metallizing Engineering*, 57 Vill. L. Rev. 261, 333–34 (2012) (contending the AIA's prior user rights "appear to encourage trade secrecy" in lieu of patenting because "while the owner of a trade secret may still end up facing the patenting of the same invention by a subsequent inventor, he or she now has a new defense against infringement of the patent").

⁴²⁰ See 35 U.S.C. § 282(b)(3)(A) (2012) (providing that "failure to disclose the best mode shall not be a basis on which any claim of a patent may be canceled or held invalid or otherwise unenforceable").

⁴²¹ Love & Seaman, supra note 397, at 3–4.

⁴²² See Zoe Argento, Killing the Golden Goose: The Dangers of Strengthening Domestic Trade Secret Rights in Response to Cyber-Misappropriation, 16 Yale J.L. & Tech. 172, 206 (2014) ("[D]ue to Congress's one-sided concern with protecting trade secrets, any federal civil trade secret law enacted now is likely to grant much stronger rights to trade secret holders than existing state law.").

falling within the statute's scope and thus receive the benefits of litigating in federal court. 423

Second, federalization would likely provide stronger remedies. Preliminary injunctive relief is "quite common in trade secret cases." The misappropriation of a trade secret often creates irreparable injury, the misappropriation of a trade secret often creates irreparable injury, which is "the single most important prerequisite for the issuance of a preliminary injunction." As the Supreme Court has explained, "the right to exclude others is central" to trade secrecy because "[o]nce the data that constitute a trade secret are disclosed to others, or others are allowed to use those data, the holder of the trade secret has lost his property interest." In contrast, obtaining injunctive relief has become more difficult in patent cases after the Court's 2006 decision in *eBay Inc. v. MercExchange, L.L.C.*, which eliminated the "general rule" that a permanent injunction should issue after a final judgment in favor of the patentee. In addition, pending legislation would create a powerful preliminary remedy for trade secret holders by authorizing *ex parte* seizures of evidence related to misappropriation claims.

Third, federalizing trade secrecy would create more robust rights against extraterritorial conduct compared to patent law. There is a "general rule under United States patent law that no infringement occurs when a patented product is made and sold in another country." A limited exception to this rule is found in Section 271(f) of the Patent Act,

⁴²³ See supra notes 344–353 and accompanying text. But see supra notes 354–70 and accompanying text.

⁴²⁴ Mork A. Lomlov & Eugene Volckb. Encodern of Second and Indian Control of the Control of Second and Indian Con

 ⁴²⁴ Mark A. Lemley & Eugene Volokh, Freedom of Speech and Injunctions in Intellectual
 Property Cases, 48 Duke L.J. 147, 229 (1998).
 425 See, e.g., FMC Corp. v. Taiwan Tainan Giant Indus. Co., 730 F.2d 61, 63 (2d Cir.

⁴²⁵ See, e.g., FMC Corp. v. Taiwan Tainan Giant Indus. Co., 730 F.2d 61, 63 (2d Cir. 1984) (holding that "the loss of trade secrets cannot be measured in money damages"); Verizon Commc'ns Inc. v. Pizzirani, 462 F. Supp. 2d 648, 658 (E.D. Pa. 2006) ("It is well established that irreparable harm is presumed where a trade secret has been misappropriated." (citation omitted)); 1 Jager, supra note 31, § 7:5 ("[I]f the information in suit rises to the level of a protectable trade secret, the requisite irreparable harm is established for a preliminary injunction.").

^{426 1} Jager, supra note 31, § 7:5.

⁴²⁷ Ruckelshaus v. Monsanto Co., 467 U.S. 986, 1011 (1984).

⁴²⁸ 547 U.S. 388, 393–94 (2006).

⁴²⁹ See supra notes 162, 182–86 and accompanying text.

⁴³⁰ Microsoft Corp. v. AT&T Corp., 550 U.S. 437, 441 (2007). For instance, § 271(a) of the Patent Act contains an express territorial restriction prohibiting an infringer from making, using, offering to sell, or selling "any patented invention, *within the United States* or import[ing] *into the United States* any patented invention." 35 U.S.C. § 271(a) (2012) (emphases added).

which imposes liability for supplying "any component of a patented invention that is especially made or especially adapted for use in the invention" with knowledge that "such component will be combined outside of the United States in a manner that would infringe the patent if such combination occurred within the United States." However, the Supreme Court has interpreted Section 271(f) narrowly by continuing to apply the presumption against extraterritoriality in patent law. 432

In contrast, pending legislation to federalize trade secrecy would expressly authorize its application outside the United States's borders. The DTSA would create a civil cause of action for violations of the EEA, 433 which expressly applies "to conduct occurring outside the United States" when (1) "the offender is a natural person who is a [U.S.] citizen" or lawful permanent resident, or an organization organized under U.S. law or any state law, or when (2) some "act in furtherance of the offense was committed in the United States." 434 Similarly, the FAIR Act would apply "outside the territorial jurisdiction of the United States" when unlawful conduct, "either by itself or in combination with conduct within the territorial jurisdiction of the United States, causes or is reasonably anticipated to cause an injury" either "(1) within the territorial jurisdiction of the United States; or (2) to a United States person."435 Ultimately, "broadening the scope of trade secret misappropriation to . . . extraterritorial actions" will create "additional incentive[s] to inventors to keep their innovation secret," thus "den[ying] society the benefits of disclosure stemming from the patent system."⁴³⁶

⁴³¹ 35 U.S.C. § 271(f)(2). This section also imposes liability for inducement of infringement abroad where "all or a substantial portion of the components of a patented invention" are "supplied in or from the United States." Id. § 271(f)(1).

⁴³² See *Microsoft Corp.*, 550 U.S. at 442 ("Recognizing that § 271(f) is an exception to the general rule that our patent law does not apply extraterritorially, we resist giving the language in which Congress cast § 271(f) an expansive interpretation."); see also Timothy R. Holbrook, Extraterritoriality in U.S. Patent Law, 49 Wm. & Mary L. Rev. 2119, 2130–36 (2008) (describing how "the Supreme Court has twice emphasized the presumption against the extraterritorial application of U.S. patents").

⁴³³ See supra note 156 and accompanying text.

⁴³⁴ 18 U.S.C. § 1837 (2012).

⁴³⁵ S. 1770, 113th Cong. § 3(c) (2013).

⁴³⁶ TianRui Grp. Co. v. Int'l Trade Comm'n, 661 F.3d 1322, 1343 (Fed. Cir. 2011) (Moore, J., dissenting).

Furthermore, if trade secrecy is federalized, Congress may enact additional changes that further strengthen the rights of trade secret owners. 437 Recent history demonstrates that when Congress has principal authority over an IP regime, it tends to strengthen IP owners' rights, often at the expense of end users. For instance, the Sonny Bono Copyright Term Extension Act 438 granted copyright holders an additional twenty years of protection for all works, both new and existing, 439 despite scant evidence that this extension would incentivize the creation of new works. 440

The most salient example of strengthening an IP regime through federalization is trademark law, which—like trade secrecy—was originally governed by state law. State common law regarding trademarks and unfair competition predated the adoption of the first federal trademark statute in 1870, which was struck down by the Supreme Court less than a decade later. Congress then passed more limited legislation permitting federal registration of "technical" trademarks (meaning, inherently distinctive marks) used in interstate commerce. Hut even when a party obtained a federally-registered trademark, "its rights were substantively determined by the common law" because pre-Lanham Act federal laws "did not create trademark rights," but rather merely authorized "means for enforcing [common law] rights through a federal cause of action."

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⁴³⁷ See Graves, supra note 353, at 106 (contending that "[a] federal solution [to trade secret law] might . . . be worse than the currently-existing problems" because "lobbying efforts by self-described industry groups might distort a federal bill in directions opposed to promoting innovation").

⁴³⁸ Pub. L. No. 105-298, 112 Stat. 2827 (1998) (codified in scattered sections of 17 U.S.C.).

⁴³⁹ Id. § 102(b)–(d) (codified at 17 U.S.C. §§ 302–04 (2012)).

⁴⁴⁰ See Eldred v. Ashcroft, 537 U.S. 186, 254–57, app. at 267–69 (2003) (Breyer, J., dissenting).

⁴⁴¹ Mark P. McKenna, The Normative Foundations of Trademark Law, 82 Notre Dame L. Rev. 1839, 1859 n.82 (2007).

⁴⁴² Act of July 8, 1870, ch. 230, 16 Stat. 198, invalidated by The Trade-Mark Cases, 100 U.S. 82 (1879).

⁴⁴³ The Trade-Mark Cases, 100 U.S. at 99.

⁴⁴⁴ Act of Feb. 20, 1905, ch. 592, 33 Stat. 724, 724, 726; see also Mary LaFrance, Understanding Trademark Law § 1.04 (2d ed. 2009) ("The 1905 Act permitted registration only of 'technical' trademarks—that is, marks that were inherently distinctive—thus excluding descriptive marks and most types of trade dress regardless of their degree of acquired distinctiveness.").

⁴⁴⁵ Mark P. McKenna, Trademark Law's Faux Federalism, *in* Intellectual Property and the Common Law, supra note 251, at 288, 291.

Under this state-law-based regime, "the common law of trademark and unfair competition was substantially uniform across jurisdictions." Despite this—and in a clear parallel to the present debate regarding trade secrecy—advocates for federalization argued that "uniform national trademark laws were needed" because of the possibility of differing state law protection. The resulting federal legislation, the Lanham Act, created broad protection under federal law for both registered and unregistered trademarks. However, the Lanham Act generally does not preempt parallel state law, thus permitting both federal and state law remedies. However, the Lanham Act generally does not preempt parallel state law, thus permitting both federal and state law remedies.

Trademark law's federalization ultimately resulted in strengthened trademark rights. As Professor Mark McKenna has explained, the incomplete federalization of trademark law by the Lanham Act resulted in a "one-way ratchet"—states remain free to "grant[] broader rights than are available under federal law," but due to conflict preemption, they cannot limit federally granted rights. The most famous example of this one-way ratchet is the creation of a federal cause of action for dilution of so-called "famous marks." Trademark dilution claims were first recognized under state law shortly after the Lanham Act's passage. By the mid-1990s, approximately half of the states had adopted some level of protection against trademark dilution. This patch-quilt system of protection spurred Congress to adopt a federal cause of action against

⁴⁴⁶ Id. at 296.

⁴⁴⁷ Id. at 306–07; see also H. Peter Nesvold & Lisa M. Pollard, Essay, Half a Century of Federal Trademark Protection: The Lanham Act Turns Fifty, 7 Fordham Intell. Prop. Media & Ent. L.J. 49, 50 n.4 (1996) ("The Lanham Act sought to remedy the problems arising from . . . the lack of a uniform federal trademark law which resulted in, among other things, business persons having differing trademark rights in the varying states." (citation omitted)).

⁴⁴⁸ Pub. L. No. 79-489, 60 Stat. 427 (1946) (codified as amended at 15 U.S.C. §§ 1051–

Pub. L. No. 79-489, 60 Stat. 427 (1946) (codified as amended at 15 U.S.C. §§ 105) 1127 (2012)).

⁴⁴⁹ See JCW Invs., Inc. v. Novelty, Inc., 482 F.3d 910, 919 (7th Cir. 2007) ("In the area of trademark law, preemption is the exception rather than the rule."); see also John T. Cross, The Role of the States in United States Trademark Law, 49 U. Louisville L. Rev. 485, 486 (2011) ("[T]he Lanham Act... has very little preemptive scope.").

⁴⁵⁰ McKenna, supra note 445, at 305.

⁴⁵¹ The first trademark dilution law was enacted by Massachusetts in 1947. LaFrance, supra note 444, § 3.06 (citing Act of May 2, 1947, ch. 307, 1947 Mass. Acts 300 (codified as amended at Mass. Gen. Laws Ann. ch. 110H, § 13 (West 2012))).

⁴⁵² See H.R. Rep. No. 104-374, at 3–4 (1995), reprinted in 1995 U.S.C.C.A.N. 1029, 1030–31.

trademark dilution, ⁴⁵³ ostensibly for the purpose of "bring[ing] uniformity and consistency to the protection of famous marks." Federal dilution claims were further strengthened in 2006 when Congress eliminated the requirement that a trademark owner must establish actual confusion by consumers. ⁴⁵⁵

Ultimately, the proposed, albeit incomplete, federalization of trade secret law through legislation like the DTSA would create a federal "floor" for the level of trade secret protection. And similar to trademark law, over time this would likely result in stronger rights and remedies for trade secret owners.

3. Federalization's Impact on Disclosure of Patentable Inventions

Stronger protection for trade secrets via federalization will likely negatively impact innovation by reducing the amount of disclosure of patent-eligible inventions. As Professor Mark Lemley has explained, the existence of trade secret law actually facilitates disclosure by serving "as a substitute for the physical and contractual restrictions [trade secret owners] would otherwise impose in an effort to prevent competitors from acquiring their information." If no legal protection existed for trade secrets, firms would be less willing to share trade secret information even when it would be advantageous to do so, such as when contracting out manufacturing or other functions to more efficient third parties or sharing information as part of a joint venture with another firm.

⁴⁵³ Federal Trademark Dilution Act of 1995, Pub. L. No. 104-98, 109 Stat. 985 (1996) (codified as amended at 15 U.S.C. §§ 1051, 1125, 1127 (2012)).

⁴⁵⁴ H.R. Rep. No. 104-374, at 3, reprinted in 1995 U.S.C.C.A.N. 1029, 1030.

⁴⁵⁵ Trademark Dilution Revision Act of 2006, Pub. L. No. 109-312, 120 Stat. 1730 (codified at 15 U.S.C. §§ 1051, 1125, 1127).

⁴⁵⁶ Cf. Argento, supra note 422, at 213 (contending that "broadly strengthening trade secret laws will likely harm innovation and the economy with little compensating benefit").

⁴⁵⁷ Lemley, supra note 9, at 313. Professor Lemley's argument echoes the majority opinion in *Kewanee Oil Co.*, which explains that "if state trade secret protection were precluded," a "holder of a trade secret would not likely share his secret" with others due to the absence of a "binding legal obligation to pay a license fee or to protect the secret. The result would be to hoard rather than disseminate knowledge." Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 486 (1974). But see Robert G. Bone, The (Still) Shaky Foundations of Trade Secret Law, 92 Tex. L. Rev. 1803, 1817–19 (2014) (critiquing Lemley's argument that trade secrecy enhances disclosure).

⁴⁵⁸ See *Kewanee Oil Co.*, 416 U.S. at 486–87 (contending that without trade secrecy, "the trade secret holder would tend either to limit [its] utilization of the invention, thereby depriving the public of the maximum benefit of its use, or engage in the time-consuming and eco-

Some information will always be disclosed through patenting, regardless of the level of trade secret protection. For example, inventors usually will protect "inherently self-disclosing inventions"—such as inventions that can be reverse engineered with little or no effort—through patenting because trade secrecy would provide no meaningful protection. And, even under a federal regime that provides strong protection for trade secrets, disclosure would not be reduced regarding non-patentable knowledge that is kept secret, such as client lists, mailing lists, and "negative know-how," because patent protection is not available for this information.

Too much trade secret protection, however, also may reduce disclosure regarding patentable inventions. If the alternative of robust trade secret rights causes a substantial number of inventors to rely on trade secrecy instead of patenting, then the aggregate amount of information available to the public will decrease. 461 Thus, the strength of trade secret protection has a bell curve-like effect on disclosure. Nonexistent or weak protection for trade secrets will result in less disclosure regarding patentable innovations, but so will overly strong trade secret protection.

In sum, there is significant reason to be concerned that the federalization of trade secrecy would decrease the level of disclosure about patentable inventions, ultimately harming innovation.

V. An Alternative to Federalization: Expanding Federal Courts' Jurisdiction Over State Law Trade Secret Claims

In lieu of federalization, this Article proposes an alternative approach to enhance protection against trade secret theft: a limited expansion of federal jurisdiction over trade secret litigation. This Part discusses sever-

nomically wasteful enterprise of constructing duplicative manufacturing and marketing mechanisms for the exploitation of the invention").

⁴⁶⁰ See Anderson, supra note 359, at 945 (describing "business survey information, customer data, and laboratory data" as "secret information" that is "outside of patentable subject matter"); see also Note, Patent Preemption of Trade Secret Protection of Inventions Meeting Judicial Standards of Patentability, 87 Harv. L. Rev. 807, 820 (1974) ("[T]rade secret protection of unpatentable inventions cannot be said to damage the general federal patent policy of encouraging innovation.").

⁴⁵⁹ Lemley, supra note 9, at 338–39.

⁴⁶¹ Cf. Kewanee Oil Co., 416 U.S. at 494 (Marshall, J., concurring) ("[T]he existence of trade secret protection provides in some instances a substantial disincentive to entrance into the patent system, and thus deprives society of the benefits of public disclosure of the invention which it is the policy of the patent laws to encourage").

al approaches that would at least modestly expand the jurisdiction of district courts over state law trade secret misappropriation claims.

A. Subject Matter Jurisdiction

One limitation of the existing state-law-based system of trade secrecy is that litigants cannot rely on federal question jurisdiction⁴⁶² to have their disputes decided in federal court. Instead, they must rely on other sources of authority, such as diversity jurisdiction or supplemental jurisdiction.⁴⁶³ While federal subject matter jurisdiction exists for a significant number of trade secret disputes,⁴⁶⁴ others miss out on the numerous benefits to litigating trade secret claims in federal court⁴⁶⁵ because they are governed by state rather than federal law.⁴⁶⁶

One way to expand the pool of litigants who can avail themselves of the "forum of excellence" of a federal court without adopting a federal cause of action is to alter the requirements for hearing trade secret claims under federal courts' diversity jurisdiction. Like most claims arising under state law, there must be complete diversity between all plaintiffs and all defendants under the diversity jurisdiction statute. He complete diversity is not constitutionally required. Under Article III of the Constitution, federal jurisdiction is permissible in cases where parties that are citizens of the same state are on both sides of the dispute, so long as there is at least one party who has a different citizenship from all other adverse parties. He for a federal court without adopting a federal cause of the dispute, so long as there is at least one party who has a different citizenship from all other adverse parties. He for a federal court without adopting a federal cause of the dispute, so long as there is at least one party who has a different citizenship from all other adverse parties.

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^{462 28} U.S.C. § 1331 (2012).

⁴⁶³ See supra text accompanying notes 354–63.

⁴⁶⁴ See supra text accompanying notes 367–70.

⁴⁶⁵ See supra text accompanying notes 344–54.

⁴⁶⁶ See Almeling et al., supra note 250, at 62–65 (finding over 358 trade secrets cases in state appellate courts between 1995–2009); see also Schaller, supra note 354, at 775 ("As in any other case, a trade secret plaintiff seeking to proceed in federal court must first establish federal subject matter jurisdiction.").

⁴⁶⁷ 28 U.S.C. § 1332(a) (2012); Strawbridge v. Curtiss, 7 U.S. (3 Cranch) 267, 267–68 (1806).

⁴⁶⁸ See State Farm Fire & Cas. Co. v. Tashire, 386 U.S. 523, 530–31 (1967) ("In *Strawbridge v. Curtiss*, this Court held that the diversity of citizenship statute required 'complete diversity' But Chief Justice Marshall there purported to construe only 'The words of the act of congress,' not the Constitution itself." (footnote and internal citation omitted)).

⁴⁶⁹ See id. at 531 ("Article III poses no obstacle to the legislative extension of federal jurisdiction, founded on diversity, so long as any two adverse parties are not co-citizens." (footnote omitted)).

is constitutionally sufficient for diversity jurisdiction. 470 Congress has enacted a variety of statutes that authorize federal jurisdiction based on minimal diversity.⁴⁷¹

Adopting a minimal diversity standard can expand federal subject matter jurisdiction for trade secret misappropriation involving multiple plaintiffs or defendants, at least in some circumstances. Consider the common situation where several employees who have learned their employer's trade secret information depart and start a new firm that competes with their old employer. 472 If the new firm is a citizen of the same state as the former employer—for example, because both are incorporated under Delaware law⁴⁷³—then diversity jurisdiction would be absent. But if at least one of the former employees is a citizen of a different state than his or her previous employer, then the former employee could be named as a defendant to create minimal diversity.

B. Personal Jurisdiction

In addition, in trade secret litigation, personal jurisdiction issues can arise regarding foreign defendants who have allegedly committed an act of misappropriation. 474 Under the Due Process Clause, 475 a court must have personal jurisdiction over a nonresident defendant in order to ren-

⁴⁷¹ See, e.g., Class Action Fairness Act of 2005, Pub. L. No. 109-2, § 4(a)(2), 119 Stat. 4, 9 (codified at 28 U.S.C. § 1332(d) (2012)); 28 U.S.C. § 1335 (2012) (statutory interpleader); Multiparty, Multiforum Trial Jurisdiction Act of 2002, Pub. L. No. 107-273, § 11020, 116 Stat. 1758, 1826 (codified at 28 U.S.C. § 1369 (2012)); see also C. Douglas Floyd, The Limits of Minimal Diversity, 55 Hastings L.J. 613, 616-31 (2004) (discussing recent legislation regarding adoption of a minimal diversity standard in mass tort and class action litigation).

⁴⁷² See Almeling et al., supra note 251, at 302 tbl.2 (finding that from 1950–2008 over half of trade secret misappropriation litigation involved an employee or former employee of the trade secret holder).

⁴⁷³ See 28 U.S.C. § 1332(c)(1) ("[A] corporation shall be deemed to be a citizen of every State . . . by which it has been incorporated "); see also Forest Labs., Inc. v. Pillsbury Co., 452 F.2d 621, 629 (7th Cir. 1971) (finding that diversity jurisdiction did not exist between two Delaware corporations for a trade secret misappropriation claim, but holding that pendent jurisdiction existed over the claim).

⁴ See, e.g., BP Chems., Ltd. v. Formosa Chem. & Fibre Corp., 229 F.3d 254, 259–62 (3d Cir. 2000) (holding that the district court lacked personal jurisdiction over a Taiwanese corporation that allegedly misappropriated the plaintiff's secret process for making acetic acid by copying a plant design that plaintiff had previously licensed to a Chinese firm); B.E.E. Int'l, Ltd. v. Hawes, 267 F. Supp. 2d 477, 486 (M.D.N.C. 2003) (dismissing trade secret misappropriation and related federal and state law claims against a Belgian corporation, due to a lack of personal jurisdiction).

⁴⁷⁵ U.S. Const. amend. XIV, § 1.

der a valid judgment in the action. 476 Unless there is general jurisdiction based on the defendant's residence or "continuous and systematic" contacts with the forum that render the defendant "essentially at home in the forum," specific jurisdiction must exist over the nonresident defendant. This requires that the defendant commit "some act by which [it] purposefully avails itself of the privilege of conducting activities within the forum . . . thus invoking the benefits and protections of its laws." In state court, the relevant "forum" for the now-familiar "minimum contacts" analysis under *International Shoe Co. v. Washington* and its progeny is the state where the trial court sits. 481

One possibility for expanding access to a federal forum is adoption of a "national contacts" approach for determining personal jurisdiction over foreign defendants in trade secret cases. Currently, the Federal Rules of Civil Procedure generally limit the territorial jurisdiction of federal district courts in diversity cases to that of the state courts of general jurisdiction where the federal court sits. This means personal jurisdiction depends on the defendant's contacts with the particular state where the federal court is located. However, "[t]his limitation is a voluntary rather than obligatory restriction, given district courts' status as courts of the national sovereign." For instance, in federal question cases, Federal Rule of Civil Procedure 4(k)(2) authorizes personal jurisdiction based on the defendant's minimum contacts with the entire United States when the defendant is not subject to personal jurisdiction in any individual state.

⁴⁷⁶ See, e.g., World-Wide Volkswagen Corp. v. Woodson, 444 U.S. 286, 291 (1980) (citing Kulko v. Cal. Superior Court, 436 U.S. 84, 91 (1978)).

⁴⁷⁷ Goodyear Dunlop Tires Operations, S.A. v. Brown, 131 S. Ct. 2846, 2851 (2011).

⁴⁷⁸ J. McIntyre Mach., Ltd. v. Nicastro, 131 S. Ct. 2780, 2787–88 (2011).

⁴⁷⁹ Id. at 2787 (quoting Hanson v. Denckla, 357 U.S. 235, 253 (1958)).

⁴⁸⁰ 326 U.S. 310, 319 (1945).

⁴⁸¹ See *J. McIntyre Mach.*, 131 S. Ct. at 2789 (explaining that "personal jurisdiction requires a forum-by-forum, or sovereign-by-sovereign, analysis," and thus "a defendant may in principle be subject to the jurisdiction of the courts of the United States but not of any particular State").

⁴⁸² Fed. R. Civ. P. 4(k)(1)(A).

⁴⁸³ See Burger King Corp. v. Rudzewicz, 471 U.S. 462, 472 (1985); *Int'l Shoe Co.*, 326 U.S. at 320.

⁴⁸⁴ A. Benjamin Spencer, Nationwide Personal Jurisdiction for Our Federal Courts, 87 Denv. U. L. Rev. 325, 325 (2010).

⁴⁸⁵ See, e.g., Synthes (U.S.A.) v. G.M. Dos Reis Jr. Ind. Com. de Equip. Medico, 563 F.3d 1285, 1296 (Fed. Cir. 2009) ("Rule 4(k)(2)...allows a district court to exercise personal

A "national contacts" standard could be adopted for claims of trade secret theft, which would allow plaintiffs to rely upon the misappropriator's contacts with the entire United States, rather than just the forum state, to support the exercise of personal jurisdiction. 486 For example, a "national contacts" standard could be useful in trade secret cases involving computer hacking originating from foreign countries, or when the misappropriator's unlawful conduct involves servers and computers located in multiple jurisdictions. 487 One of the most notorious examples of this type of electronic intrusion is cyber-espionage using "bots," which are computers compromised by malicious software installed without their owners' knowledge. 488 A misappropriator with sufficient technical skill can create and use a "botnet"—an informal network of hundreds or thousands of bots controlled by the misappropriator⁴⁸⁹—to test weaknesses in a secured network, to install malware that can transmit information stored on the network, and to conduct denial-of-service attacks to slow down or cripple a server. 490 Under a "national contacts" standard, the misappropriator's exploitation of compromised bots in different states could be aggregated to help establish personal jurisdiction.

jurisdiction over a foreign defendant whose contacts with the United States, but not with the forum state, satisfy due process.").

⁴⁸⁶ See Spencer, supra note 484, at 329–30 (making a similar proposal for diversity cases generally).

generally).

487 See Jeffrey R. Armstrong, Guaranteed Jurisdiction: The Emerging Role of Fed. R. Civ. P. 4(k)(2) in the Acquisition of Personal Jurisdiction of Foreign Nationals in Internet Intellectual Property Disputes, 5 Minn. Intell. Prop. Rev. 63, 80 (2003).

⁴⁸⁸ See Microsoft Safety & Security Center, What Is a Botnet?, http://www.microsoft.com/security/resources/botnet-whatis.aspx (last visited Dec. 1, 2014) ("Criminals distribute malicious software (also known as malware) that can turn your computer into a bot (also known as a zombie). When this occurs, your computer can perform automated tasks over the Internet, without you knowing it.").

⁴⁸⁹ See Clay Wilson, Cong. Research Serv., RL32114, Botnets, Cybercrime, and Cyberterrorism: Vulnerabilities and Policy Issues for Congress 5 (2008), available at https://www.fas.org/sgp/crs/terror/RL32114.pdf ("Botnets... are made up of vast numbers of compromised computers that have been infected with malicious code, and can be remotely-controlled through commands sent via the Internet."); see also Jay P. Kesan & Carol M. Hayes, Mitigative Counterstriking: Self-Defense and Deterrence in Cyberspace, 25 Harv. J.L. & Tech. 429, 442 (2012) ("[C]ontrol of botnets consisting of thousands of computers can be purchased for just a few hundred dollars." (footnote omitted)).

⁴⁹⁰ Kesan & Hayes, supra note 489, at 443. In addition, the botnet's use of compromised computers can help a misappropriator evade detection by obfuscating the origin of the attack. See id. ("Botnets offer attackers many advantages, such as helping them to evade detection and enabling them to do more harm by controlling a large number of computers." (footnote omitted)).

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There are particularly compelling reasons to adopt a "national contacts" standard for trade secret misappropriation claims, as the misappropriation of a firm's trade secrets may have negative consequences that spread well beyond the boundaries of the forum state. ⁴⁹¹ For instance, if a foreign automobile manufacturer misappropriates information about a domestic firm's hybrid engine technology, it could adversely impact the domestic firm's operations and employees in all states where it has manufacturing, distribution, or sales facilities, as well as those of the firms in its supply chain. ⁴⁹² In circumstances where the harm caused by trade secret misappropriation foreseeably affects multiple states, it does not seem logical to limit an assessment of the misappropriator's contacts to a single state.

CONCLUSION

Trade secret misappropriation is a real threat to American businesses, entrepreneurs, and the national economy. But the federalization of trade secret law is not a panacea to this problem. Some proffered justifications for federalization, such as the uniformity of trade secret law and the availability of a federal forum, already exist to a large degree. Moreover, there are significant potential drawbacks to federalization, including precluding state experimentation regarding trade secret protection and undermining the disclosure function of the patent system. In lieu of outright federalization, a modest expansion of federal courts' jurisdiction over state law trade secret claims can help address trade secret theft.

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⁴⁹¹ See Almeling, supra note 8, at 782.

⁴⁹² For an example of a similar theft, see Matthew Dolan, Ex-Ford Engineer Pleads Guilty in Trade-Secrets Case, Wall St. J., Nov. 17, 2010, available at http://www.wsj.com/articles/SB10001424052748704648604575621111922168030.

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APPENDIX A: ADOPTION OF THE UNIFORM TRADE SECRETS ACT

State	Year Enacted	Citation
AL	1987	Ala. Code §§ 8-27-1 to -6 (LexisNexis 2002 & Supp. 2013)
AK	1988	Alaska Stat. §§ 45.50.910 to .945 (2012)
AZ	1990	Ariz. Rev. Stat. Ann. §§ 44-401 to -407 (2013)
AR	1981	Ark. Code Ann. §§ 4-75-601 to -607 (2011)
CA	1984	Cal. Civ. Code §§ 3426.1 to 3426.11 (Deering 2005)
СО	1986	Colo. Rev. Stat. §§ 7-74-101 to -110 (2014)
CT	1983	Conn. Gen. Stat. §§ 35-50 to -58 (2013)
DE	1982	Del. Code Ann. tit. 6, §§ 2001-2009 (2013)
DC	1989	D.C. Code §§ 36-401 to -410 (LexisNexis 2001 & Supp. 2014)
FL	1988	Fla. Stat. §§ 688.001 to .009 (2013)
GA	1990	Ga. Code Ann. §§ 10-1-760 to -767 (2009)
HI	1989	Haw. Rev. Stat. Ann. §§ 482B-1 to -9 (LexisNexis 2012)
ID	1981	Idaho Code Ann. §§ 48-801 to -807 (2014)
IL	1987	765 Ill. Comp. Stat. §§ 1065/1 to /9 (2012)
IN	1982	Ind. Code Ann. §§ 24-2-3-1 to -8 (LexisNexis 2013)
IA	1990	Iowa Code §§ 550.1 to .8 (2013)
KS	1981	Kan. Stat. Ann. §§ 60-3320 to -3330 (2005)
KY	1990	Ky. Rev. Stat. Ann. §§ 365.880 to .900 (LexisNexis 2008)
LA	1981	La. Rev. Stat. Ann. §§ 51:1431 to 1439 (2012)
ME	1987	Me. Rev. Stat. tit. 10, §§ 1541-1548 (2013)
MD	1989	Md. Code Ann., Com. Law §§ 11-1201 to -1209 (LexisNexis 2013)
MA	n/a	n/a
MI	1998	Mich. Comp. Laws Ann. §§ 445.1901 to .1910 (West 2002)
MN	1980	Minn. Stat. §§ 325C.01 to .08 (2012)
MS	1990	Miss. Code Ann. §§ 75-26-1 to -19 (2009)
МО	1995	Mo. Rev. Stat. §§ 417.450 to .467 (2000)
MT	1985	Mont. Code Ann. §§ 30-14-401 to -409 (2013)
NE	1988	Neb. Rev. Stat. §§ 87-501 to -507 (2008)
NV	1987	Nev. Rev. Stat. §§ 600A.010 to .100 (LexisNexis 2010)

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State	Year Enacted	Citation
NH	1989	N.H. Rev. Stat. Ann. §§ 350-B:1 to -B:9 (LexisNexis 2008)
NJ	2012	N.J. Stat. Ann. §§ 56:15-1 to -9 (West 2012)
NM	1989	N.M. Stat. Ann. §§ 57-3A-1 to -7 (West 2003)
NY	n/a	n/a
NC	n/a*	n/a
ND	1983	N.D. Cent. Code §§ 47-25.1-01 to -08 (2014)
ОН	1994	Ohio Rev. Code Ann. §§ 1333.61 to .69 (LexisNexis 2012)
OK	1986	Okla. Stat. tit. 78, §§ 85-94 (2011)
OR	1987	Or. Rev. Stat. Ann. §§ 646.461 to .475 (West 2011)
PA	2004	12 Pa. Cons. Stat. Ann. §§ 5301-5308 (West Supp. 2014)
RI	1986	R.I. Gen. Laws §§ 6-41-1 to -11 (2001)
SC	1997	S.C. Code Ann. §§ 39-8-10 to -130 (Supp. 2013)
SD	1988	S.D. Codified Laws §§ 37-29-1 to-11 (2004)
TN	2000	Tenn. Code Ann. §§ 47-25-1701 to -1709 (2013)
TX	2013	2013 Tex. Gen. Laws 12–14
UT	1989	Utah Code Ann. §§ 13-24-1 to -9 (LexisNexis 2013)
VT	1995	Vt. Stat. Ann. tit. 9, §§ 4601-4609 (2006); id. tit. 12, § 523 (2002)
VA	1986	Va. Code Ann. §§ 59.1-336 to -343 (West 2011)
WA	1981	Wash. Rev. Code §§ 19.108.010 to .940 (2012)
WV	1986	W. Va. Code Ann. §§ 47-22-1 to -10 (LexisNexis 2006)
WI	1985	Wis. Stat. § 134.90 (2011–12)
WY	2006	Wyo. Stat. Ann. §§ 40-24-101 to -110 (2013)

^{*} See supra text note 247 and accompanying text.

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Appendix B: State Statutes of Limitation for Trade Secret Mis appropriation

State	Statute of Limitations	Citation
AL	2 years	Ala. Code § 8-27-5 (LexisNexis 2002)
AK	3 years	Alaska Stat. § 45.50.925 (2012)
AZ	3 years	Ariz. Rev. Stat. Ann. § 44-406 (2013)
AR	3 years	Ark. Code Ann. § 4-75-603 (2011)
CA	3 years	Cal. Civ. Code § 3426.6 (Deering 2005)
СО	3 years	Colo. Rev. Stat. § 7-74-107 (2014)
CT	3 years	Conn. Gen. Stat. § 35-56 (2013)
DE	3 years	Del. Code Ann. tit. 6, § 2006 (2013)
DC	3 years	D.C. Code § 36-406 (LexisNexis 2001 & Supp. 2014)
FL	3 years	Fla. Stat. § 688.007 (2013)
GA	5 years	Ga. Code Ann. § 10-1-766 (2009)
HI	3 years	Haw. Rev. Stat. Ann. § 482B-7 (LexisNexis 2012)
ID	3 years	Idaho Code Ann. § 48-805 (2014)
IL	5 years	765 Ill. Comp. Stat. § 1067/7 (2012)
IN	3 years	Ind. Code Ann. § 24-2-3-7 (LexisNexis 2013)
IA	3 years	Iowa Code § 550.8 (2013)
KS	3 years	Kan. Stat. Ann. § 60-3325 (2005)
KY	3 years	Ky. Rev. Stat. Ann. § 365.890 (LexisNexis 2008)
LA	3 years	La. Rev. Stat. Ann. § 51:1436 (2012)
ME	4 years	Me. Rev. Stat. tit. 10, § 1547 (2013)
MD	3 years	Md. Code Ann., Com. Law § 11-1206 (LexisNexis 2013)
MA	3 years	Mass. Eye & Ear Infirmary v. QLT Phototherapeutics, Inc., 412 F.3d 215, 238–39 (1st Cir. 2005)
MI	3 years	Mich. Comp. Laws Ann. § 445.1907 (West 2002)
MN	3 years	Minn. Stat. § 325C.06 (2012)
MS	3 years	Miss. Code Ann. § 75-26-13 (2009)
MO	5 years	Mo. Rev. Stat. § 417.461 (2000)
MT	3 years	Mont. Code Ann. § 30-14-407 (2013)

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State	Statute of Limitations	Citation
NE	4 years	Neb. Rev. Stat. § 87-506 (2008)
NV	3 years	Nev. Rev. Stat. § 600A.080 (LexisNexis 2010)
NH	3 years	N.H. Rev. Stat. Ann. § 350-B:6 (LexisNexis 2008)
NJ	3 years	N.J. Stat. Ann. § 56:15-8 (West 2012)
NM	3 years	N.M. Stat. Ann. § 57-3A-7 (West 2003)
NY	3 years	N.Y. C.P.L.R. 214(4) (Consol. 1999)
NC	3 years	N.C. Gen. Stat. § 66-157 (2013)
ND	3 years	N.D. Cent. Code § 47-25.1-06 (2014)
ОН	4 years	Ohio Rev. Code Ann. § 1333.66 (LexisNexis 2012)
OK	3 years	Okla. Stat. tit. 78, § 91 (2011)
OR	3 years	Or. Rev. Stat. Ann. § 646.471 (West 2011)
PA	3 years	12 Pa. Cons. Stat. Ann. § 5307 (West Supp. 2014)
RI	3 years	R.I. Gen. Laws § 6-41-6 (2001)
SC	3 years	S.C. Code Ann. § 39-8-70 (Supp. 2013)
SD	3 years	S.D. Codified Laws § 37-29-6 (2004)
TN	3 years	Tenn. Code Ann. § 47-25-1707 (2013)
TX	3 years	Tex. Civ. Prac. & Rem. Code Ann. § 16.010 (West 2002)
UT	3 years	Utah Code Ann. § 13-24-7 (LexisNexis 2013)
VT	3 years	Vt. Stat. Ann. tit. 12, § 523 (2002)
VA	3 years	Va. Code Ann. § 59.1-340 (West 2011)
WA	3 years	Wash. Rev. Code § 19.108.060 (2012)
WV	3 years	W. Va. Code Ann. § 47-22-6 (LexisNexis 2006)
WI	3 years	Wis. Stat. § 893.51(2) (2011–12)
WY	4 years	Wyo. Stat. Ann. § 40-24-106 (2013)

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