

MICROSOFT CORP. v. AT&T: A WELCOME RETURN TO PATENT LAW'S TRADITION OF TERRITORIALITY

By Sean Fernandes

I. INTRODUCTION

United States patent law stops at U.S. borders—with one exception. That exception, the “extraterritorial” provision codified in 35 U.S.C. § 271(f), imposes liability on domestic suppliers who export components of domestically patented inventions for final assembly abroad.¹ The liability attaches if the manufacturer intends that the components be combined outside the United States, in a manner that would constitute patent infringement if performed within the country.²

In *Microsoft Corp. v. AT&T Corp. (AT&T III)*, 127 S. Ct. 1746 (2007), the Supreme Court overruled a series of Federal Circuit decisions that expansively interpreted § 271(f) by applying it to the export of computer software. While acknowledging that “plausible arguments” supported the Federal Circuit’s position, the Supreme Court used the traditional presumption against extraterritoriality in U.S. patent law to justify a narrower interpretation of the statute.³ The Court did not expand on the history or reasoning behind this presumption, or explicitly consider the underlying policy arguments that may have motivated its decision. Hence, a surface reading of the opinion does not reveal whether the rationales underlying the principle of territoriality apply to the facts of this case, or whether the Court reached the result dictated by good public policy.

This Note attempts to answer these questions by analyzing the Court’s holding in *AT&T III* in light of the history of territoriality in U.S. law. Part II traces the development of the doctrine of territoriality. It explains why the pressures of globalization might favor extraterritorial application of U.S. law and reviews the history of territoriality in patent law. Part III details the rise and fall of extraterritoriality since the passage of § 271(f). It first examines the series of Federal Circuit decisions that broadly construed § 271(f) to expand the extraterritorial reach of U.S. patent law, and then examines the *AT&T III* decision partially reversing those decisions.

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1. 35 U.S.C. § 271(f) (2000).

2. *Id.*

3. *See id.* at 1758.

Part IV analyzes the arguments presented in *AT&T III*, and the implications of the decision. It reviews the underlying policy considerations to argue the Court reached the correct result. Finally, Part V concludes that *AT&T III* is a welcome return to patent law's tradition of territoriality. Although the decision may not apply territorial principles to the maximum extent possible, it limits expansive readings of §271(f) by the lower courts.

II. TERRITORIALITY IN U.S. PATENT LAW

A. Why Extraterritorial Application Can Be Attractive

Over the past quarter century, intellectual property assets have become a valuable source of competitive advantage and revenue generation for many U.S. businesses. With the decline of U.S. manufacturing prowess, intellectual property assets have displaced physical assets to become major components of corporate balance sheets.⁴ Profits in industries such as motion-picture entertainment or software development derive largely from the protection afforded by intellectual property rights, and violations of these rights can be costly. For example, one industry group estimates that software piracy costs U.S. software makers \$6.89 billion in revenue in 2005.⁵ Private firms and trade organizations have attempted to protect these valuable assets using informational campaigns, public education, litigation, and lobbying.⁶

At the same time, foreign markets have become increasingly important to U.S. corporations. The overseas operations of American multinational corporations are now responsible for a significant percentage of overall U.S. corporate profits.⁷ As a result, American businesses now have a major stake in effective foreign enforcement of intellectual property rights. However, developing countries often have few incentives to enforce these

4. See, e.g., KAMAL IDRIS, INTELLECTUAL PROPERTY — A POWER TOOL FOR ECONOMIC GROWTH 54 (World Intellectual Property Organization 2003) (claiming that between 1982 and 2000, physical assets decreased from 62% to 30% of overall U.S. corporate assets).

5. BUSINESS SOFTWARE ALLIANCE AND INTERNATIONAL DATA CORPORATION, THIRD ANNUAL BSA AND IDC GLOBAL SOFTWARE PIRACY STUDY 8 (2006), available at <http://www.bsa.org/globalstudy/upload/2005%20Piracy%20Study%20-%20Official%20Version.pdf>.

6. *Id.* at 10-11.

7. See, e.g., *Gross Domestic Product & Corporate Profits, 3rd Quarter 2007 Preliminary*, NEWS RELEASE (Bureau of Economic Analysis, U.S. Dep't of Commerce), Nov. 29, 2007, at t.12, <http://www.bea.gov/newsreleases/national/gdp/2007/pdf/gdp307p.pdf> (stating profits from foreign operations in 2006 were \$257.3 billion or 16.56% of overall U.S. corporate profits).

rights.⁸ For example, in the case of computer software, the benefits of strengthened protections accrue to the rights-holders, often U.S. corporations.⁹ Meanwhile, enforcement raises costs for the segment of the developing country's population that rely on access to cheap software and can impose substantial costs on the state.¹⁰

Trade groups have lobbied the U.S. government to take action against countries, such as China, that do not provide the desired level of protection.¹¹ In turn, the U.S. government has sought to strengthen foreign recognition and enforcement of intellectual property rights.¹² The government has pursued this goal through multiple channels, including the negotiation of trade agreements, the undertaking of diplomatic efforts, and WTO dispute settlement processes.¹³

B. The Principle of Territoriality

As an alternative to inducing foreign governments to change their laws or increase enforcement efforts, the United States could enforce its laws abroad.¹⁴ For example, the government could create domestic liability for the foreign infringement of U.S. patents.¹⁵ This option might initially appear attractive. U.S. law is already familiar to the many multinational corporations that originated in America or have a presence in the large U.S. domestic market. In addition, U.S. patent laws are often more protective of

8. See, e.g., Kenneth Shadlen et al., *The Political Economy of Intellectual Property Protection: The Case of Software*, 49 (1) INT'L STUD. Q. 45 (2005).

9. See *id.* at 46 (noting that approximately 75% of packaged software is produced in the United States).

10. One reason is that many countries classify software piracy as a criminal offense, thus requiring expensive state involvement in law enforcement. See *id.*; J. Michael Finger & Philip Schuler, *Implementation of Uruguay Round Commitments: The Development Challenge* (World Bank Trade Group, Working Paper No. 2215, 1999) (claiming that for many developing countries increased intellectual property protections result in net fiscal losses).

11. See, e.g., National Association of Manufacturers, *National Association of Manufacturers' Recommendations on Special 301 Out-of-Cycle Review of China* (2005), http://www.nam.org/s_nam/doc1.asp?CID=164&DID=233159 (recommending that in the absence of a pronounced decrease in counterfeiting in China, the U.S. government should file a dispute settlement case before the World Trade Organization).

12. See generally NAT'L INTEL. PROP. LAW ENFORCEMENT COORDINATION COUNCIL, REPORT TO THE PRESIDENT AND CONGRESS ON COORDINATION OF INTELLECTUAL PROPERTY ENFORCEMENT AND PROTECTION (2006), available at http://www.commerce.gov/opa/press/Secretary_Gutierrez/2006_Releases/September/2006%20IP%20report.pdf.

13. See *id.* at 31-39.

14. Curtis Bradley, *Territorial Intellectual Property Rights in an Age of Globalism*, 37 VA. J. INT'L L. 505, 506 (1997).

15. *Id.*

patentee rights than those of other countries.¹⁶ U.S. law favors the plaintiff, entertains broad discovery, and allows for significant damages upon a finding of infringement.¹⁷

However, enforcement of laws abroad through domestic liability is not widely practiced. The major objection is the principle of territoriality: to avoid clashes between the laws of nations, the law of the territory where protection is sought should govern the conditions of that protection. This principle is found in U.S. law as a canon of statutory interpretation, as a presumption against extraterritoriality.¹⁸ The canon instructs courts to construe ambiguous statutes to have as little extraterritorial effect as possible. Although the Supreme Court has determined that the Constitution gives Congress the power to legislate extraterritorially,¹⁹ the Court has stated that in the absence of clear evidence of contrary legislative intent, courts should construe “legislation of Congress . . . to apply only within the territorial jurisdiction of the United States.”²⁰

Although the boundaries of the doctrine have changed over time, U.S. courts have long applied the principle of territoriality.²¹ Two cases that illustrate the evolution of the doctrine are *United States v. Palmer*²² and *American Banana Co. v. United Fruit Co.*²³ *Palmer*, an opinion by Chief Justice John Marshall, exemplifies the Supreme Court’s reluctance to provide statutes with extraterritorial effect since 1818. The issue in *Palmer* was whether a federal anti-piracy statute applied to a robbery committed by foreign citizens, on a foreign ship sailing in international waters.²⁴ The Court asserted that Article I of the Constitution clearly gives Congress au-

16. *Id.* at 506-07.

17. *See id.* at 507 n.3; *see generally* Geoffrey C. Hazard, Jr., *Discovery and the Role of the Judge in Civil Law Jurisdictions*, 73 NOTRE DAME L. REV. 1017 (1998) [hereinafter Hazard, *Discovery*]; Geoffrey C. Hazard, Jr., *From Whom No Secrets are Hid*, 76 TEX. L. REV. 1665 (1998) [hereinafter Hazard, *Secrets*].

18. *See* *Foley Bros., Inc. v. Filardo*, 336 U.S. 281, 285 (1949) (explaining that the presumption is a valid canon of statutory construction); *McCulloch v. Sociedad Nacional de Marineros de Honduras*, 372 U.S. 10, 20-22 (1963) (explaining that the presumption is intended to prevent unintended clashes with the laws of other nations that could lead to international discord).

19. *See* *Foley Bros.*, 336 U.S. at 284 (citing *Blackmer v. United States*, 284 U.S. 421 (1932)).

20. *EEOC v. Arabian Am. Oil Co.*, 499 U.S. 244, 248 (1991) (quoting *Foley Bros.*, 336 U.S. at 285).

21. *See generally* Bradley, *supra* note 14, at 510-17 (tracing the historical development of the doctrine and analyzing common justifications for territoriality).

22. 16 U.S. (3 Wheat.) 610 (1818).

23. 213 U.S. 347 (1909).

24. *United States v. Palmer*, 16 U.S. (3 Wheat.) 610, 626-27 (1818).

thority to regulate such conduct.²⁵ Hence, the case turned on a question of statutory interpretation: whether Congress had intended the anti-piracy statute to apply in those circumstances.

The plain language of the statute favored a broad interpretation: it did not contain territorial limitations and applied to “any person or persons.”²⁶ However, the Chief Justice interpreted the statute so as not to apply to the conduct in question. He reasoned that Congress might not have intended the statute to reach actions of foreign citizens committed outside U.S. borders because such conduct would already be punishable under the laws of a foreign nation.²⁷ Hence, without explicit direction, the Court could not presume that Congress intended the statute to apply extraterritorially.²⁸ Rather, “no general words of a [federal] statute ought to be construed” to have extraterritorial application over the conduct of foreigners.²⁹

If the principle of territoriality extended only to the acts of foreigners, its application in American courts would be very circumscribed. However, nearly a century after *Palmer, American Banana* expanded the principle of territoriality to encompass the foreign acts of American citizens. There, the Supreme Court held the Sherman Act inapplicable to the acts of American companies in foreign markets because the statute did not explicitly provide for extraterritorial application.³⁰ The Court declared that, “in case of doubt,” courts should confine a statute’s operational effect “to the territorial limits over which the lawmaker has general and legitimate power.”³¹ Consequently, courts should construe statutes to apply only within U.S. territorial borders, even those containing universal provisions such as “every person.”³²

The Court justified this reasoning on two grounds: practicality and comity. First, American courts do not have territorial jurisdiction by default in foreign countries. No power of enforcement is available and the law cannot depend on voluntary submission to jurisdiction.³³ Second, under the then-prevailing choice of law theory for torts, *lex loci delicti*, the classification of any conduct as wrongful must be “determined wholly by

25. *See id.* at 630; U.S. CONST. art. I, § 8, cl. 10 (“Congress shall have Power . . . to define and punish Piracies . . . committed on the high Seas . . .”).

26. *Palmer*, 16 U.S. (3 Wheat.) at 626.

27. *See id.* at 632.

28. *See id.* at 631-32.

29. *Id.* at 632-33.

30. *Am. Banana Co. v. United Fruit Co.*, 213 U.S. 347, 357 (1909).

31. *Id.*

32. *Id.*

33. *See id.* at 356-57.

the law of the country where the act is done.”³⁴ Violating this rule would be tantamount to interference with the authority of another sovereign, and would be contrary to the “comity of nations.”³⁵

Although almost a century has passed since this decision, the underlying rationales for territoriality offered by the *American Banana* court still prevail. International law continues to limit the ability of nations to impose domestic law beyond their own borders.³⁶ Moreover, while *lex loci delicti* is no longer the conflict-of-law rule in most American states,³⁷ comity still advises respect for the sovereignty of other nations and their freedom to create and enforce their own laws. In addition, commentators have pointed out a third rationale that the *American Banana* Court did not make explicit: self-interest.³⁸ After all, no country wishes to discriminate against its own citizens by restricting their behavior abroad.³⁹ The continuing relevance of these rationales may be one reason why the Supreme Court reaffirmed, in its 1991 *Aramco* decision, the presumption against extraterritoriality as a canon of statutory interpretation.⁴⁰

In recent years, commentators have attacked territoriality on the basis that it is no longer relevant in an age of globalization.⁴¹ However, the tradition of applying the principle as a canon of statutory interpretation has survived for two centuries since *Palmer*. Furthermore, *Aramco* and *AT&T III* indicate that the Supreme Court does not agree with critics of territoriality. The doctrine retains its bite.

34. *Id.* at 356.

35. *Id.*

36. See Bradley, *supra* note 14, at 514 nn.39-40.

37. See Symeon C. Symeonides, *Choice of Law in the American Courts in 2006: Twentieth Annual Survey*, 54 AM. J. COMP. L. 697, 712 tbl.1 (2006) (finding only ten states that continue to use *lex loci delicti* as the governing conflict-of-law rule in tort claims).

38. See James Farrand, *Territoriality and Incentives under the Patent Laws: Over-reaching Harms U.S. Economic and Technological Interests*, 21 BERKELEY TECH. L.J. 1215, 1217-18 (2006).

39. See *id.*

40. *EEOC v. Arabian Am. Oil Co.*, 499 U.S. 244, 248 (1991).

41. See generally Gary B. Born, *A Reappraisal of the Extraterritorial Reach of U.S. Law*, 24 LAW & POL'Y INT'L BUS. 1 (1992); Jonathan Turley, “When in Rome”: *Multinational Misconduct and the Presumption Against Extraterritoriality*, 84 NW. U. L. REV. 598 (1990) (arguing that courts should reverse the presumption when constructing statutes). *But see* Bradley, *supra* note 14, at 550-66 (arguing that the presumption is justified on separation-of-powers grounds).

C. Territoriality in Patent Law

The *AT&T III* Court declared that the principle of territoriality applies with particular force to patent law.⁴² Patent law embodies a nation's policy judgments about incentives to spur innovation within its borders.⁴³ Such judgments differ from nation to nation. Hence, comity, the respect for the freedom of other nations to create their own laws, is especially applicable to the realm of patent law.

Territorial principles have limited the scope of infringement liability in U.S. patent law from the time Congress enacted the first Patent Act in 1790.⁴⁴ The 1790 Act limited infringement to prohibited conduct that occurs "within these United States."⁴⁵ The Act thus drew an important distinction between foreign and domestic conduct. This distinction resurfaces in later statutes and decisions, including *AT&T III*.⁴⁶

The Supreme Court first explicitly restricted the territorial scope of a U.S. patent in *Brown v. Duchesne*, an 1856 decision by Chief Justice Roger Taney.⁴⁷ Like *AT&T III*, *Duchesne* turned on a distinction between the domestic and foreign supply of an infringing device.⁴⁸ The issue in *Duchesne* was whether the unauthorized presence of a U.S.-patented nautical device on board a foreign vessel docked in Boston gave rise to infringement liability.⁴⁹ There were two potential sources of infringement liability: from use of the device while in international waters; or from use of the device within U.S. territorial boundaries, while the vessel was entering or leaving American waters.⁵⁰ The *Duchesne* Court rejected both sources of liability and found no infringement.⁵¹ It reasoned that use of the device at sea did not constitute patent infringement because patent rights

42. Microsoft Corp. v. AT&T Corp. (*AT&T III*), 127 S. Ct. 1746, 1758 (2007).

43. *Id.*

44. Patent Act of 1790, Ch. 7, § 4, 1 Stat. 109, 111 (1790).

45. *Id.*

46. See, e.g., 35 U.S.C. § 271(f)(1) ("Whoever without authority supplies or causes to be supplied *in or from the United States*. . .") (emphasis added); *AT&T III*, 127 S. Ct. at 1751 (holding that Microsoft could not be liable for infringement under § 271(f) because it did not "supply" components from *within* the United States).

47. *Brown v. Duchesne*, 60 U.S. (19 How.) 183 (1856).

48. Compare *Duchesne*, 60 U.S. (19 How.) at 193-94, 198-99 (infringing device is sailing-vessel gaff; no infringement because device was supplied abroad) with *AT&T III*, 127 S. Ct. at 1750, 1757-58 (infringing device is computer running Microsoft Windows; no infringement because components were supplied abroad).

49. *Duchesne*, 60 U.S. (19 How.) at 194.

50. *Id.* at 196.

51. *Id.* at 198-99.

do not operate beyond the borders of the United States.⁵² The Court also carved out an exception for potentially infringing use on the vessel while entering or leaving American waters, based on foreign policy concerns.⁵³ It found no infringement where defendant placed the device on the vessel “in a foreign port”—i.e., when the device was not supplied domestically.⁵⁴

Half a century after *Duchesne*, the Supreme Court again refused to give extraterritorial effect to U.S. patents in *Dowagiac Manufacturing Co. v. Minnesota Moline Plow Co.*⁵⁵ The defendant in *Dowegiac* purchased infringing devices in the United States and later resold them in the United States and Canada.⁵⁶ The act of purchasing did not constitute patent infringement.⁵⁷ However, the patentee wished to recover damages for the defendant’s subsequent sales of infringing devices in the United States and Canada. The Court found the defendant liable for U.S. but not Canadian sales.⁵⁸ Although selling an infringing device in the United States was illegal and triggered infringement, patent law did not prohibit sales abroad.⁵⁹ As the Court explained, “[t]he right conferred by a patent under our law is confined to the United States and its Territories and infringement of this right cannot be predicated of acts wholly done in a foreign country.”⁶⁰ Because the Canadian sales took place outside the territorial boundaries of the United States, the Court refused to find liability under U.S. patent laws.

Commentator Donald Chisum notes that, unlike copyright and trademark law, patent law’s territoriality is found in the express language of the statute.⁶¹ Copyright law does not invoke or explicitly define territoriality.⁶² Trademark law applies to uses “in commerce,” which extends to “all commerce which may lawfully be regulated by Congress.”⁶³ In contrast, the statute defining the grant of rights to a patentee, 35 U.S.C. § 154(a)(1),

52. *Id.* at 195-96.

53. *Id.* at 198 (reasoning that patentees cannot interfere with the right of Congress to regulate commerce with foreign nations).

54. *Id.* at 198-99.

55. *Dowagiac Mfg. Co. v. Minnesota Moline Plow Co.*, 235 U.S. 641 (1915).

56. *Id.* at 642-44.

57. *Id.*

58. *Id.* at 650.

59. *Id.*

60. *Id.*

61. Donald S. Chisum, *Normative and Empirical Territoriality in Intellectual Property: Lessons from Patent Law*, 37 VA. J. INT’L L. 603, 605 (1997).

62. See 17 U.S.C. § 101 (2000).

63. 15 U.S.C. §§ 1125-1127 (2000).

explicitly makes patent rights territorial in nature.⁶⁴ The rights conferred by a patent—to exclude others from making, using, selling, offering for sale or importing the invention—are explicitly limited to the United States, its territories and possessions.⁶⁵

D. *Deepsouth* and the Enactment of § 271(f)

Although patent law includes a general presumption against extraterritoriality, § 271(f) of the current Patent Act is aimed at extraterritorial conduct.⁶⁶ Congress enacted the statute in response⁶⁷ to the Supreme Court's application of territoriality in *Deepsouth Packing Co. v. Laitram Corp.*⁶⁸

1. *The Deepsouth Case*

Laitram, the plaintiff in *Deepsouth*, held U.S. patents for a machine used to de-shell and de-vein shrimp.⁶⁹ Deepsouth Packing Co. infringed these patents by manufacturing the patented invention within U.S. borders. Laitram successfully sued for damages and obtained an injunction against continued manufacture.⁷⁰ However, Laitram's patent claimed only the combination of components of the machine, but not the individual components themselves.⁷¹

Deepsouth sought to skirt the injunction through a new manufacturing plan.⁷² Under the new plan, infringing combinations of components would not be made in the United States.⁷³ Instead, Deepsouth would manufacture individual components for export. Foreign customers could assemble an infringing machine from the exported components in less than an hour.⁷⁴

64. See 35 U.S.C. § 154(a)(1) (2000) (“Every patent shall contain a short title . . . of the right to exclude others from making, using, offering for sale, or selling the invention *throughout the United States* or importing the invention *into the United States*”) (emphasis added). The territorial nature of patent rights is also explicit in the statutes governing infringement. For example, § 271(a) provides that infringing acts occur “*within the United States*” 35 U.S.C. § 271(a) (2000) (emphasis added).

65. See 15 U.S.C. §§ 1125-1127 (2000); 35 U.S.C. § 100(c) (2000).

66. 35 U.S.C. § 271(f) (2000).

67. See 130 Cong. Rec. H10,525 (daily ed. Oct. 1, 1984), reprinted in 1984 U.S.C.C.A.N. 5827, 5828 (statement of Sen. Kastenmeier) (“This proposal responds to the United States Supreme Court decision in *Deepsouth Packing Co. v. Laitram Corp.*, 406 U.S. 518(1972) [sic] concerning a need for a legislative solution to close a loophole in patent law.”).

68. *Deepsouth Packing Co. v. Laitram Corp. (Deepsouth)*, 406 U.S. 518 (1972).

69. *Id.* at 519-21.

70. See *Laitram Corp. v. Deepsouth Packing Co.*, 301 F. Supp. 1037 (D. La. 1969).

71. See *Deepsouth*, 406 U.S. at 520-21.

72. See *Laitram Corp. v. Deepsouth Packing Co.*, 310 F. Supp. 926 (D. La. 1970).

73. *Deepsouth*, 406 U.S. at 523-24.

74. *Id.* at 524.

The issue for the Court was whether minimal final assembly abroad of components manufactured in the United States involved “making” or “selling” the patented invention in the United States.⁷⁵

A narrow 5-4 majority of the Court found no infringement. “Making” or “selling” an infringing machine required final assembly in the United States, and Deepsouth did not intend domestic assembly.⁷⁶ Thus, Deepsouth did not infringe Laitram’s patents.⁷⁷

Both the majority and the dissenting opinions discussed the policy concerns underlying their differing constructions of the Patent Act. The majority, citing *Dowegiac* and *Duchesne*, clung to the traditional view that U.S. patent law applies only within U.S. borders. In the majority’s opinion, the plaintiff’s patent secured patent protection only on the U.S. market.⁷⁸ The plaintiff had the option of pursuing foreign patents to secure protection in foreign markets.⁷⁹ In contrast, the dissent stressed the unfairness of using a narrow statutory interpretation to reward the defendant’s “iniquitous” behavior that deprived the plaintiff of profit from foreign sales.⁸⁰ It argued that this deprivation reduced the incentives for future innovation.⁸¹

2. Congress Enacts § 271(f) in Response to Deepsouth

Concerns about increasing competition from foreign manufacturers who leveraged U.S. inventions and research led to a strong pro-patent swing beginning in the late 1970s.⁸² Pressure from proponents of stronger patent protection eventually led to the enactment of § 271(f) of the Patent Act in 1984.⁸³

Section 271(f) attempted to close the *Deepsouth* “loophole” by creating liability for manufacturers who produce unpatented components in the United States and export the components for combination abroad in a

75. *Id.* at 522-23.

76. *Id.* at 527-31.

77. *Id.*

78. *Id.* at 527.

79. *Id.* at 523.

80. *Id.* at 532-33 (Blackmun, J., dissenting).

81. *Id.* at 534 (Blackmun, J., dissenting). The minority’s reasoning assumed that the competition faced by American innovators selling patented products in foreign markets would arise from other American manufacturers, rather than from foreign competitors.

82. *See, e.g.*, FEDERAL TRADE COMMISSION, TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY 14-23 (2003), available at <http://www.ftc.gov/os/2003/10/innovationrpt.pdf> (describing how, for much of the twentieth century, antitrust and patent law have traded ascendancy and how patent law has been ascendant since 1980).

83. 35 U.S.C. § 271(f) (2000).

manner that would infringe a U.S. patent.⁸⁴ It specifies two ways a manufacturer can be held liable, the first analogous to inducement under § 271(b) and the second analogous to contributory infringement under § 271(c).

First, a manufacturer can be liable for supplying from within the United States all or a substantial portion of the components of a patented invention for assembly and distribution overseas:

(1) Whoever without authority supplies or causes to be supplied in or from the United States all or a substantial portion of the components of a patented invention, where such components are uncombined in whole or in part, in such manner as to actively induce the combination of such components outside of the United States in a manner that would infringe the patent if such combination occurred within the United States, shall be liable as an infringer.⁸⁵

Second, a manufacturer can be liable for supplying from the United States any component of a patented invention that is either specially made or specially adapted for use in the invention, but is not a staple article or commodity of commerce suitable for substantial non-infringing use:

(2) Whoever without authority supplies or causes to be supplied in or from the United States any component of a patented invention that is especially made or especially adapted for use in the invention and not a staple article or commodity of commerce suitable for substantial noninfringing use, where such component is uncombined in whole or in part, knowing that such component is so made or adapted and intending 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, shall be liable as an infringer.⁸⁶

Section 271(f) is somewhat ambiguous because it does not clearly delineate its scope or provide definitions for key terms such as “component.” However, two important aspects of the statute are immediately clear. First, § 271(f) does not purport to directly regulate extraterritorial conduct. Rather, it regulates domestic conduct undertaken with the intent to induce or contribute to acts performed abroad that would be infringing if performed within the United States. Foreign conduct alone cannot give rise to § 271(f) liability. Hence, the statute seeks *indirect* extraterritorial

84. *Id.*; see also Chisum, *supra* note 61, at 607.

85. 35 U.S.C. § 271(f) (2000).

86. 35 U.S.C. § 271(f)(2) (2000).

impact through its express limitations on domestic conduct. Second, both prongs of the statute limit liability to acts of supply “in or from” the United States. Hence, a domestic component manufacturer, such as the *Deepsouth* plaintiff, could locate manufacturing facilities abroad to evade liability under § 271(f). As a result, § 271(f) does not effectively close the “loophole” for which it was intended.

III. THE RISE AND FALL OF EXTRATERRITORIALITY

This Part details the rise and fall of extraterritoriality since the passage of § 271(f). Section III.A examines the ambiguous wording of the statute and discusses its early lack of use. Section III.B reviews a series of Federal Circuit decisions that broadly construed § 271(f) to expand the extraterritorial reach of U.S. patent law. Section III.C examines the Supreme Court’s opinion in *AT&T III* that partially reversed the Federal Circuit decisions.

A. Early Lack of Use

Relatively few cases were brought under § 271(f) in the decade after its passage.⁸⁷ The ambiguous wording of the statute may have led litigants to assume it only applied to a subset of patents that did not involve method claims or intangible components.

1. Inherent Ambiguity

Legislative history supports the view that Congress intended § 271(f) to apply only to components of manufactured products, as in *Deepsouth*.⁸⁸ A number of statements in the record indicate that Congress also assumed the components and the foreign-produced invention would be tangible items.⁸⁹

Nevertheless, § 271(f) lends itself to broader application than the facts of *Deepsouth*. First, the statute sets a very low threshold for liability: the supply of a single component.⁹⁰ Second, Congress did not define key

87. See Farrand, *supra* note 38, at 1232.

88. See, e.g., 130 Cong. Rec. H10,529 (daily ed. Oct. 1, 1984) (statement of Sen. Kastenmeier) (“[A] product’s patent protection cannot be avoided through the manufacture of component parts.”)

89. See Farrand, *supra* note 38, at 1231 n.32 (citing the repeated use in the legislative record of terms that connote physical objects, the use of the term “manufacturing” as the activity Congress intended to regulate, and the multiple references to the fact pattern of *Deepsouth* involving physical components of a mechanical invention).

90. 35 U.S.C. § 271(f)(2) (2000) (“Whoever without authority supplies or causes to be supplied in or from the United States *any* component . . .”) (emphasis added). In contrast, the defendant in *Deepsouth* manufactured all of the multiple components of the

terms used in the statute or explicitly limit the statute's scope.⁹¹ As a result, it is possible to construe § 271(f) to apply to method patents, or those involving intangible components.

This possibility arises because § 271(f) does not explicitly require that the "component" or resulting "patented invention" are tangible.⁹² Consequently, the courts could interpret "components" to refer to intangibles, such as computer software. In addition, they can interpret "patented invention" to refer to an intangible process. Thus, disregarding the legislative history of § 271(f), a court could read the statute to encompass method patents or other intangible "components."

Because patent holders did not rely much on § 271(f) for a decade or so after its passage, courts did not have the opportunity to interpret the statute until the 1990s.⁹³ Nevertheless, the statute's flaws were apparent upon enactment, drawing criticism from Donald Chisum as an "ill-conceived" legislative attempt to close the supposed loophole created by *Deepsouth*.⁹⁴ The statute imposed liability on U.S. manufacturers who competed in foreign markets by selling components supplied "in or from the United States."⁹⁵ The unintended consequence, Chisum argued, was an incentive for U.S. manufacturers to move component-manufacturing facilities abroad to escape liability.⁹⁶

2. Early Interpretation

Early constructions of the statute yielded a mix of outcomes, some contrary to commentators' expectations. For instance, in 1997, Donald Chisum thought it clear that § 271(f) was limited to mechanical components of manufactured products.⁹⁷ He believed that § 271(f) did not extend to the export of chemical components that were combined abroad to produce a mixture that would have infringed a composition of matter patent, had the combination taken place within the United States.⁹⁸ However, this view was rejected by the courts. Several later district court decisions held that for the purposes of § 271(f), chemical ingredients are "components"

infringing invention in the United States. *Deepsouth Packing Co. v. Laitram Corp.*, 406 U.S. 518, 523-24 (1972).

91. See 35 U.S.C. § 271(f) (2000).

92. See *id.*

93. See Farrand, *supra* note 38, at 1232 (discussing § 271(f)'s early lack of use).

94. See Chisum, *supra* note 61, at 607.

95. 35 U.S.C. § 271(f)(1)-(2).

96. See Chisum, *supra* note 61, at 607; *infra* Section IV.B.2 (analyzing § 271(f)'s adverse economic effects).

97. See Chisum, *supra* note 61, at 617.

98. *Id.*

of a resulting patented mixture.⁹⁹ Hence, export of chemical “components” for combination abroad created liability under the statute.

Commentators also initially assumed that § 271(f) did not apply to method claims or intangibles.¹⁰⁰ The legislative history discouraged the application of § 271(f) to method claims,¹⁰¹ and the statute itself did not employ common method claim terminology such as “act,” “process,” or “step.”¹⁰² Early cases aligned with these expectations. For example, in *Standard Havens v. GenCor Indus.*, 953 F.2d 1360 (Fed. Cir. 1991), the Federal Circuit found that § 271(f) did not apply to method or process patents. *Standard Havens* concerned an infringement action based, in part, on the export of an unclaimed apparatus to perform a patented process. The court found § 271(f) inapplicable on the facts but did not explain its reasoning.¹⁰³

Two later District Court decisions, *Enpat, Inc. v. Microsoft Corp.*, 6 F. Supp. 2d 537 (E.D. Va. 1998), and *Synaptic Pharmaceuticals Corp. v. MDS Panlabs, Inc.*, 265 F. Supp. 2d 452 (D.N.J. 2002), followed *Standard Havens*. Both *Enpat* and *Synaptic* involved the export of components used in method patents. In *Enpat*, the plaintiff alleged that certain Microsoft Corp. (“Microsoft”) software infringed its method patent and sought damages from Microsoft under § 271(f)(2) for foreign sales resulting from Microsoft’s export of the software.¹⁰⁴ Microsoft moved for partial summary judgment, arguing that § 271(f) was inapplicable to method patents because method patents do not have “components.”¹⁰⁵ The court agreed with Microsoft, finding that the language and legislative history of § 271(f) proved the statute did not apply to method patents.¹⁰⁶

Similarly, in *Synaptic*, the plaintiff brought a § 271(f) action based on a method patent for biological testing.¹⁰⁷ The defendant had shipped vari-

99. See, e.g., *Lubrizol Corp. v. Exxon Corp.*, 696 F. Supp. 302, 323-25 (N.D. Ohio 1988); *W.R. Grace & Co. v. Intercat, Inc.*, 60 F. Supp. 2d 316 (D. Del. 1999).

100. See, e.g., Chisum, *supra* note 61, at 607; Dan L. Burk, *Patents in Cyberspace: Territoriality and Infringement on Global Computer Networks*, 68 TUL. L. REV. 1, 67 n.263 (1993) (claiming that “the selling of an item for extraterritorial use in a patented process is not actionable”).

101. See *supra* Section III.A.1.

102. See Farrand, *supra* note 38, at 1232-24; 35 U.S.C. § 271(f)(1)-(2) (2006).

103. *Standard Havens*, 953 F.2d at 1374 (“Finally, we do not find the provisions of 35 U.S.C. § 271(f) (1988) implicated.”).

104. *Enpat, Inc. v. Microsoft Corp.*, 6 F. Supp. 2d 537 (E.D. Va. 1998).

105. *Id.* at 538.

106. *Id.* at 539-40.

107. See *Synaptic Pharm. Corp. v. MDS Panlabs, Inc.*, 265 F. Supp. 2d 452, 454-55 (D.N.J. 2002).

ous supplies used in the patented method to a foreign affiliate that performed the testing.¹⁰⁸ Citing *Standard Havens* and *Enpat*, the court found no liability under § 271(f).¹⁰⁹

B. The Rise: District Courts and the Federal Circuit Broaden § 271(f)

The first case giving § 271(f) broader scope was *Imageexpo, L.L.C. v. Microsoft Corp.*¹¹⁰ The plaintiff, a maker of network workflow software, alleged that Microsoft violated § 271(f) by exporting certain software code on “golden master” disks to distributors abroad.¹¹¹ The foreign distributors replicated the code, and combined the resulting copies with other components to form an apparatus that would have infringed the plaintiff’s patent if made within the United States. Microsoft moved to bar damages for foreign sales on the theory that § 271(f) was inapplicable because the golden masters were not a “component” of the protected apparatus.¹¹² The court denied Microsoft’s motion.¹¹³ Although it implicitly acknowledged that § 271(f) did not apply to pure method patents,¹¹⁴ the court held that Microsoft’s golden master disks with software code were “components” within the meaning of § 271(f) because the patent in question was not for a pure method claim but for a physical apparatus—a computer running the software to perform a certain task.¹¹⁵

1. Expansion to All Types of Claims and Components: *Eolas*

Although *Imageexpo* was a major break with tradition, the Federal Circuit, in *Eolas Technologies, Inc. v. Microsoft Corp.*, did not attempt to distinguish the prior case law.¹¹⁶ Although this expansive interpretation was a major break with tradition, the *Eolas* court did not attempt to distinguish the prior case law.¹¹⁷ The decision presaged several Federal Circuit cases that successively expanded the scope of § 271(f), including *Union*

108. *Id.*

109. *Id.* at 463-64.

110. *Imageexpo, L.L.C. v. Microsoft Corp.*, 299 F. Supp. 2d 550 (E.D. Va. 2003).

111. *Id.* at 551-52.

112. *Id.* at 552.

113. *Id.* at 553.

114. *Id.* at 552-553 (distinguishing earlier cases finding § 271(f) inapplicable to method patents, because *Imageexpo*’s patent was for an apparatus).

115. *Id.*

116. 399 F.3d 1325 (Fed. Cir. 2005).

117. *See Eolas Techs., Inc. v. Microsoft Corp. (Eolas)*, 399 F.3d 1325, 1338-40 (Fed. Cir. 2005) (finding § 271(f) applicable to all types of components and patents, based on statutory construction and patent policy rationales, without addressing the contrary *Standard Havens* line of cases).

Carbide Chemicals & Plastics Technology Corp. v. Shell Oil Co.,¹¹⁸ and *AT&T Corp. v. Microsoft Corp. (AT&T II)*.¹¹⁹

Eolas involved a patent held by Eolas Technologies, Inc. (“Eolas”) on the automatic display of objects by software running on a computer. Eolas alleged that Microsoft infringed its patent when a user executed Microsoft’s Internet Explorer software.¹²⁰ Eolas alleged infringement of a product and a method claim, but the case focused on the product claim because Eolas also alleged that the product claim embodied the method claim.¹²¹ Eolas sought damages under § 271(f) for golden master disks containing Internet Explorer that Microsoft shipped abroad to foreign manufacturers. The foreign manufacturers replicated the disks and used the copies to install Internet Explorer on computers overseas.¹²² In affirming a lower court finding that the Internet Explorer code on the golden master disks was a “component” for the purposes of § 271(f), the *Eolas* court found § 271(f) applicable to all types of components and claims.¹²³

The court began its analysis by noting that the issue of whether software is a component under § 271(f) turns on the interpretation of the phrase “any component of a patented invention” in the statute.¹²⁴ Because the statute contained no express limitation to structural or physical components, the Federal Circuit held that “component” encompassed intangible items.¹²⁵ Similarly, it interpreted “patented invention” to encompass method claims because the statute was not expressly limited to “machines” or “physical structures.”¹²⁶ The court reasoned that excluding method claims from the reach of § 271(f) would impermissibly discriminate among types of inventions contrary to the 1994 TRIPS agreement.¹²⁷ Hence, it interpreted § 271(f) to apply to “every component of every form” and “every form of invention.”¹²⁸ Under this view, the statute extended to method claims and to claims involving intangible components such as computer software. Although *Eolas* conflicted with *Standard Havens*, *Enpat* and *Imageexpo*, the Federal Circuit panel did not discuss those opinions.

118. 425 F.3d 1366 (Fed. Cir. 2005).

119. 414 F.3d 1366 (Fed. Cir. 2005).

120. *See Eolas Techs. v. Microsoft Corp.*, 274 F. Supp. 2d 972 (N.D. Ill. 2003).

121. *See Eolas*, 399 F.3d at 1331.

122. *Id.*

123. *Id.* at 1341.

124. *Id.* at 1340.

125. *Id.* at 1341.

126. *Id.* at 1339.

127. *See id.* at 1339.

128. *Id.* at 1338-39.

2. *Expansion to Method Patents: Union Carbide*

Strictly speaking, the *Eolas* court's extension of § 271(f) to method claims was dictum. The finding was not required for the resolution of the case because the claim at issue was a product claim. However, in *Union Carbide* the Federal Circuit relied on *Eolas* to apply § 271(f) to a method claim.¹²⁹ Union Carbide Corp. ("Union Carbide") claimed that Shell Oil Co. ("Shell") infringed its patented process for the manufacture of ethylene oxide using catalysts.¹³⁰ At trial, a jury found that Shell contributorily infringed Union Carbide's patent by selling catalysts to third parties who used the patented process to manufacture the chemical.¹³¹ However, the court excluded Shell's sales to foreign third-party buyers from damage calculations because it believed that damages for foreign sales were not available for method claims under § 271(f).¹³² The Federal Circuit overruled the district court's damages calculations by finding § 271(f) applicable to method claims.¹³³ The *Union Carbide* court relied heavily on *Eolas*, even though the claim at issue in *Eolas* was not a method claim,¹³⁴ and the *Eolas* court had not explicitly addressed precedent finding § 271(f) inapplicable to method claims.¹³⁵

3. *Expansion of Liability: AT&T II*

The Federal Circuit's *AT&T II* decision represents the peak of extraterritoriality in modern U.S. patent law.¹³⁶ AT&T Corporation ("AT&T") owned a patent on an apparatus for digitally encoding and compressing recorded speech.¹³⁷ Microsoft's Windows operating system incorporated software code that enabled a computer to process speech in the manner claimed by AT&T's patent.¹³⁸ Microsoft distributed Windows code to foreign computer manufacturers, either by shipping golden master disks containing Windows object code, or by transmitting the code electronically.¹³⁹

129. Union Carbide Chems. & Plastics Tech. Corp. v. Shell Oil Co. (*Union Carbide*), 425 F.3d 1366, 1380 (Fed. Cir. 2005).

130. *Union Carbide*, 425 F.3d at 1369.

131. See Union Carbide Chems. v. Shell Oil Co., 2004 WL 1305849, at *1 (D. Del. June 9, 2004).

132. See *Union Carbide*, 425 F.3d at 1369.

133. See *id.* at 1380.

134. The claim at issue in *Eolas* was a product claim that embodied a process claim. See *Eolas Techs., Inc. v. Microsoft Corp.*, 399 F.3d 1325, 1331 (Fed. Cir. 2005).

135. See *Eolas*, 399 F.3d at 1338-41 (finding § 271(f) applicable to method claims without distinguishing prior case law).

136. *AT&T Corp. v. Microsoft Corp. (AT&T II)*, 414 F.3d 1366 (Fed. Cir. 2005).

137. *Id.* at 1368.

138. *Id.*

139. *Id.*

The foreign manufacturers made copies of the master disks, and used the copies to install Windows on computers sold in foreign markets.¹⁴⁰

In *AT&T Corp. v. Microsoft Corp. (AT&T I)*,¹⁴¹ the decision on appeal in *AT&T II*, the district court found Microsoft liable for foreign sales of Windows under § 271(f). On appeal, Microsoft presented two main arguments. First, it argued that it was not liable for foreign sales because its software was not a “component” of the patented invention within the meaning of § 271(f).¹⁴² Second, Microsoft argued that foreign parties made and distributed the disks—i.e., Microsoft did not “supply” Windows from within the United States.¹⁴³ Microsoft also offered a policy consideration: finding Microsoft liable under these circumstances would hurt the domestic software industry because U.S. software manufacturers would move their operations offshore to escape similar liability.¹⁴⁴

The Federal Circuit rejected all of Microsoft’s arguments. The court first relied on *Eolas* to hold that software was a “component” of a patented invention within the meaning of § 271(f), because the statute is not limited to physical machines or physical structures.¹⁴⁵ Then, it broadly interpreted “supply,” for the purposes of § 271(f), to include the act of providing a master component from which copies are made abroad.¹⁴⁶ Hence, the single act of supplying a master disk to a foreign manufacturer, who then made copies, would be sufficient to create § 271(f) liability for all of the multiple acts of infringement that arise from the use of the copies. Finally, the Federal Circuit rejected Microsoft’s policy consideration. The court disclaimed responsibility for any adverse economic outcome by noting that it was merely carrying out Congressional will.¹⁴⁷

The Federal Circuit also rejected the proposition that, for purposes of § 271(f) liability, software sent by electronic transmission should be treated differently from software shipped on disks. It reasoned that such a distinction amounted to the “exaltation of form over substance.”¹⁴⁸ The court buttressed its reasoning with a policy argument: “Section 271(f), if it is to remain effective, must therefore be interpreted in a manner that is ap-

140. *Id.*

141. 71 U.S.P.Q. 2d (BNA) 1118 (2004).

142. *See AT&T II*, 414 F.3d at 1368-69.

143. *Id.*

144. *Id.* at 1372.

145. *Id.* at 1370-71.

146. *Id.* at 1371-72.

147. *Id.* The legislative history of § 271(f) does not appear to support the Federal Circuit’s interpretation of Congressional will. *See supra* Section III.A.1.

148. *AT&T II*, 414 F.3d at 1370.

propriate to the nature of the technology at issue.”¹⁴⁹ In other words, advancement of replication technologies since the drafting of § 271(f) should not be allowed to defeat the purpose of the statute.

C. The Fall: The Supreme Court Reverses in *AT&T III*

The extraterritorial reach of patent law engendered by the *Eolas* line of cases was short-lived. In *AT&T III*, the Supreme Court reversed the Federal Circuit’s *AT&T II* decision.¹⁵⁰ The Court’s conclusion was driven by the “exceptional” nature of § 271(f).¹⁵¹ Extraterritoriality is not the general rule in U.S. patent law but is a limited exception created by Congress to resolve a specific issue.¹⁵² The Court recognized that plausible arguments could be made to extend § 271(f) liability to Microsoft’s conduct, but concluded that the exceptional nature of § 271(f) warranted judicial restraint in interpretation.¹⁵³

As a result, the Supreme Court found Microsoft not liable under § 271(f) because Microsoft did not supply components from the United States within the meaning of the statute.¹⁵⁴ Section 271(f) provides that infringement occurs only when one “supplies . . . from the United States, for combination abroad, a patented invention’s components.”¹⁵⁵ The Court reached its conclusion by narrowly interpreting the words “component” and “supply.”

First, the Court held that software in the abstract could not be a “component” of a tangible invention for the purposes of § 271(f).¹⁵⁶ Both prongs of the statute, §§ 271(f)(1) and 271(f)(2), refer to “components” amenable to “combination.” Abstract software code is an idea that cannot be “combined” with other components, much like a blueprint or design, and hence is not within the scope of the statute.¹⁵⁷ The Court held that to turn this abstraction into a component, an extra step is required: the encoding of the software instructions onto a physical medium that can be read

149. *AT&T II*, 414 F.3d at 1370.

150. *Microsoft Corp. v. AT&T Corp. (AT&T III)*, 127 S. Ct. 1746, 1751 (2007).

151. *Id.* at 1750.

152. *See id.* at 1751.

153. *Id.*

154. *Id.*

155. 35 U.S.C. § 271(f)(1) (2000) (emphasis added).

156. The Court analogized abstract software to the notes of Beethoven’s Ninth Symphony, whereas tangible software is like the score to Beethoven’s Ninth Symphony encoded on a CD-ROM. *AT&T III*, 127 S. Ct. at 1754. The Court noted that if § 271(f) applies to method patents (an issue on which it expressed no opinion), software in the abstract might qualify as a component under those circumstances. *See id.* at 1756 n.13.

157. *See id.* at 1755.

by a computer and used to create an infringing product.¹⁵⁸ Although this extra step may be easy to perform, no violation occurs in its absence.¹⁵⁹ Congress included components within the scope of § 271(f) but did not include “information, instructions, or tools from which those components readily may be generated.”¹⁶⁰ Hence, only the physical embodiments containing the code actually used to create an infringing product are § 271(f) “components.”¹⁶¹

Second, the Court held that U.S. exporters of master components do not “supply” components within the meaning of § 271(f), in the case where foreign manufacturers make copies of these components abroad and then use the copies to assemble infringing products.¹⁶² The Court made a distinction between the activities of Microsoft and the foreign manufacturers.¹⁶³ Although Microsoft supplied the original master disk, the foreign manufacturers supplied the copies used to assemble the infringing products. Microsoft was not responsible for these downstream activities.¹⁶⁴

The Court rejected the Federal Circuit’s reasoning that no distinction exists between the activities of Microsoft and the foreign manufacturers because the copies were easy to create from the original disks supplied by Microsoft.¹⁶⁵ The “absence of anything addressing copying in the statutory text” weighed against the Federal Circuit.¹⁶⁶ The Court also noted that Congress was aware of the ease of electronic replication and had acted to address the issue in copyright law by passing the Digital Millennium Copyright Act.¹⁶⁷ The Court reasoned that Congress, not the judiciary, was the appropriate actor to make similar alterations to patent law.¹⁶⁸

Finally, the Supreme Court resolved doubts about Microsoft’s conduct by relying on the presumption against extraterritoriality.¹⁶⁹ In the absence

158. *See AT&T III*, 127 S. Ct. at 1748.

159. *Id.*

160. *Id.* at 1756.

161. *See id.*; *see also id.* at 1754 n.8 (explaining that operational software exists in object code format, and that the master disks and electronic transmissions sent abroad by Microsoft contained object code).

162. *See id.* at 1748-49.

163. *See id.*

164. *See AT&T III*, 127 S. Ct. at 1748-49.

165. *Id.* at 1757.

166. *Id.*

167. *Id.* at 1760. The Digital Millennium Copyright Act, 17 U.S.C. § 1201, provides legal sanctions for copyright owners to protect their works from piracy engendered by new copying and distribution technologies.

168. *AT&T III*, 127 S. Ct. at 1760.

169. *See id.* at 1758.

of any explicit Congressional direction, the Court chose to avoid the expansive reading of § 271(f) required to sanction Microsoft's conduct.¹⁷⁰

IV. ANALYSIS

This Part discusses the mechanics and outcome of the Supreme Court's *AT&T III* opinion. Section IV.A examines the legal arguments of the parties and the rationales chosen by the Court to explain its holdings. Section IV.B reviews the underlying policy considerations of the decision.

A. Legal Reasoning and Impact of Decision

1. *AT&T's Argument*

AT&T faced a major obstacle. AT&T's two main issues before the Supreme Court related to each other such that it had to win both. The threshold issue was whether, for the purposes of § 271(f), software in the abstract is a "component" of a patented invention. The secondary issue was whether Microsoft "supplied" components from the United States.

Microsoft sent golden master disks containing software to foreign manufacturers, who made and installed copies.¹⁷¹ The golden master disks alone could not be considered § 271(f) "components" because the foreign manufacturers used the copies to practice the invention.¹⁷² Accordingly, if the abstract software encoded on the disks was not a § 271(f) "component," the secondary issue of Microsoft "supplying" components was moot.¹⁷³ For the purposes of the statute, Microsoft would have "supplied" nothing.¹⁷⁴

AT&T framed the case primarily around the threshold issue: whether abstract object code is a "component" under § 271(f).¹⁷⁵ It noted that the statutory text does not contain a physicality requirement and argued that, unlike a blueprint, manufacturers incorporate software into a patented invention. However, AT&T's strongest argument arose not from the statutory language but from the structure of software technology itself.¹⁷⁶ Even several *amici* who advocated reversal of AT&T's victory at the Federal Circuit conceded that, for all practical purposes, abstract object code is a

170. *See id.*

171. *Id.* at 1753.

172. *Id.*

173. *See id.* at 1754.

174. *AT&T III*, 127 S. Ct. at 1754.

175. Brief for Respondent at 3, *Microsoft Corp. v. AT&T Corp. (AT&T III)*, 127 S. Ct. 1746 (No. 05-1056).

176. *Id.* at 19-21.

component of a modern computer system.¹⁷⁷ Computer systems consist of several layers of technology, some intangible and others not.¹⁷⁸ If object code is not a component, § 271(f) would not apply to the entire software industry.¹⁷⁹ If § 271(f) extends beyond the facts of *Deepsouth*, it makes little sense to limit its scope because the product in question incorporates intangible components.¹⁸⁰

On the other hand, as noted by the Federal Circuit dissent in *AT&T II*, a ruling in AT&T's favor would violate the presumption against extraterritoriality by making domestic liability turn on foreign acts.¹⁸¹ Although a defendant could incur liability by sending even a single golden master disk encoded with object code abroad, the magnitude of this liability would depend on the number of foreign copies produced.¹⁸² Any attempt to assess damages would require the observation and measurement of foreign manufacturing activities.

AT&T argued that the presumption against extraterritoriality does not apply to § 271(f) because Congress specifically enacted the statute to extend the reach of U.S. patent law.¹⁸³ The Supreme Court disagreed, stating that even when a statute addresses an issue of extraterritorial application, the presumption against extraterritoriality remains instructive in determining the *extent* of the statutory exception.¹⁸⁴ Hence, the presumption applied and worked against the expansive interpretation of "component" required for AT&T's victory.¹⁸⁵

177. See, e.g., Brief of American Intellectual Property Law Association as Amicus Curiae Supporting Neither Party at 4-11, *Microsoft Corp. v. AT&T Corp. (AT&T III)*, 127 S. Ct. 1746 (No. 05-1056); Brief of Intellectual Property Professors as Amici Curiae Supporting Reversal at 1, *Microsoft Corp. v. AT&T Corp. (AT&T III)*, 127 S. Ct. 1746 (No. 05-1056).

178. Brief for Respondent, *supra* note 175, at 4-6.

179. Brief for Respondent, *supra* note 175, at 4 ("Having so far failed in these legislative efforts, the same alliance urges this Court to strip Section 271(f) of all meaning in the software industry.").

180. Brief for Respondent, *supra* note 175, at 14 ("And because that provision indisputably applies in contexts far removed from the facts of *Deepsouth*, it would be nonsensical to rely on those facts as a basis for reading artificial limitations into the statutory language.").

181. See *AT&T Corp. v. Microsoft Corp. (AT&T II)*, 414 F.3d 1366, 1372-74 (Fed. Cir. 2005) (Rader, J., dissenting).

182. *Id.*

183. Brief for Respondent, *supra* note 175, at 22-24.

184. *Microsoft Corp. v. AT&T Corp. (AT&T III)*, 127 S. Ct. 1746, 1758 (2007).

185. *Id.*

2. *Microsoft's Argument*

A win on the threshold issue—whether software is a “component” supplied under § 271(f)—was all Microsoft needed to succeed at litigation. However, Microsoft’s status as a major software producer constrained its arguments that it supplied no § 271(f) “components.”

For example, Microsoft could have argued, as an amicus brief advocated, that its software is not a “component” of a patented invention under § 271(f) because software itself is not patentable subject matter under 35 U.S.C. § 101.¹⁸⁶ However, the adoption of this position would have been contrary to Microsoft’s own business interests. Instead, Microsoft admitted that software could be a component of a patented invention.¹⁸⁷ Moreover, it acknowledged that physical media containing object code would infringe AT&T’s patent when combined with a computer to perform speech coding.¹⁸⁸

Nor did Microsoft raise a defense based on claim construction. Microsoft could have argued that the golden master disks were not § 271(f) components based on a favorable construction of the claim language.¹⁸⁹ However, Microsoft’s brief only touched on claim language and it did not advance arguments based on claim construction.¹⁹⁰ This may be because Microsoft’s dominant financial position makes potential plaintiffs view the company as an attractive defendant. A win on factual issues would have left unresolved the critical legal issue of whether software is a “component” under § 271(f), leaving the door open for similar lawsuits in the future.

Microsoft circumvented these limitations by arguing that its object code, as supplied to foreign distributors via disks or electronic transmissions, could not be a component of a claimed invention under § 271(f) because the material supplied was never physically combined to create an infringing device.¹⁹¹ In addition, the abstract object code could not be a

186. Brief of Software Freedom Law Center as Amicus Curiae Supporting Petitioner at 3-4, *Microsoft Corp. v. AT&T Corp.* (*AT&T III*), 127 S. Ct. 1746 (No. 05-1056).

187. Brief for Petitioner at 34 n.9, *Microsoft Corp. v. AT&T Corp.* (*AT&T III*), 127 S. Ct. 1746 (No. 05-1056).

188. *Id.*

189. For example, the AT&T patent did not include any obviously problematic claims such as a Beauregard claim, which is a product claim for a computer-readable medium containing a set of instructions a computer can execute. The claim is named after *In re Beauregard*, 53 F.3d 1583 (Fed. Cir. 1995). A legitimate Beauregard claim on AT&T’s patent would have been a problem for Microsoft because the very creation of the golden master disk would have infringed the claim.

190. See Brief for Petitioner, *supra* note 188, at 3-4.

191. Brief for Petitioner, *supra* note 188, at 35-36.

component because, lacking tangibility, it was incapable of being “combined” with anything to practice the invention.¹⁹² The code was design information used to create the infringing device, not a component of the device itself.¹⁹³ This line of argument had several advantages. It did not require any general pronouncement on the patentability of software, an issue the Supreme Court has consistently avoided. Moreover, the argument was not specific to AT&T’s claim. Thus, a favorable holding would immunize Microsoft from future liability for shipping object code to foreign manufacturers.

3. *The Supreme Court’s Analysis*

The Supreme Court’s finding of non-infringement for Microsoft was unsurprising. Even Justice Stevens’ dissent acknowledged strong policy arguments in favor of the decision.¹⁹⁴ However, by adopting Microsoft’s narrow analysis and relying on the presumption against extraterritoriality, the Court only partially reversed Federal Circuit precedent expansively construing § 271(f). *Eolas* is no longer good law because there is now a physicality requirement for “components” of a tangible invention.¹⁹⁵ However, the Court reserved its opinion as to whether an intangible method or process qualifies as a “patented invention” under § 271(f).¹⁹⁶ Hence, § 271(f) might still apply to process patents as in *Union Carbide*.¹⁹⁷ In the event that § 271(f) does extend to process patents, software in the abstract may well qualify as a “component.”¹⁹⁸ In addition, *AT&T III* is unlikely to affect other provisions of § 271. Under *AT&T III*, for example, the provision of a “golden master” disk to a foreign Original Equipment Manufacturer, containing code that when executed on a computer infringes a domestic patent, does not result in § 271(f) liability. However, the provision of such a disk to a *domestic* manufacturer may still result in contributory infringement under § 271(c).¹⁹⁹

192. *Id.*

193. The transmission abroad of design information or a blueprint does not incur § 271(f) liability. *Pellegrini v. Analog Devices, Inc.*, 375 F.3d 1113, 1117-19 (Fed. Cir. 2004).

194. *See Microsoft Corp. v. AT&T Corp. (AT&T III)*, 127 S. Ct. 1746, 1762 (2007) (Stevens, J., dissenting); *infra* Section IV.B (discussing policy arguments).

195. *See supra* Section III.C (explaining the *AT&T III* holding).

196. *AT&T III*, 127 S. Ct. at 1756 n.13 (“We need not address whether software in the abstract, or any other intangible, can *ever* be a component under § 271(f).” (emphasis in original)).

197. *See supra* Section III.B (analyzing the *Union Carbide* holding).

198. *See AT&T III*, 127 S. Ct. at 1756 n.13.

199. *See, e.g., Lucent Techs., Inc. v. Gateway, Inc.*, 509 F. Supp. 2d 912, 929-30 (S.D. Cal. 2007) (finding *AT&T III*’s reasoning inapplicable to domestic cases of con-

Even had the Supreme Court held that abstract code is a component of a patented invention under § 271(f), Microsoft could have prevailed on the grounds that the “component” in the infringing device was not itself supplied from the United States, but was only a copy made abroad. This view was advocated by several amicus briefs²⁰⁰ and by the United States during oral argument as amicus curiae supporting Microsoft.²⁰¹ When the United States raised this argument, Justice Breyer noted that the Court never decided that software in the abstract is patentable.²⁰² The United States responded that the argument did not assume the patentability of software in the abstract, because the components of patented inventions need not themselves be patentable.²⁰³ As a result, a finding that Microsoft’s abstract software was a component of AT&T’s patented invention had no implications for the patentability of software itself.

The Court did not adjudicate this issue instead reasoning that abstract software could not be a “component” of a patented product for the purposes of § 271(f) because intangible components are not amenable to combination with physical components.²⁰⁴ However, it makes little sense to condition § 271(f) liability on whether a component is replicated inside the United States or abroad. Such a holding would make § 271(f) liability for an industry turn on the arbitrary fact of whether components could be easily replicated outside U.S. borders.

B. Policy Considerations

The changing international environment and adverse economic effects favor limiting the scope of § 271(f).²⁰⁵ The counter argument that broad

tributory infringement under § 271(c) because it was driven by concerns regarding the extraterritorial application of patent law).

200. See, e.g., Brief of American Intellectual Property Law Association as Amicus Curiae Supporting Neither Party at 3-4, *Microsoft Corp. v. AT&T Corp. (AT&T III)*, 127 S. Ct. 1746 (No. 05-1056).

201. Transcript of Oral Argument at 22, *Microsoft Corp. v. AT&T Corp. (AT&T III)*, 127 S. Ct. 1746 (No. 05-1056).

202. *Id.* Because the Supreme Court has refrained from directly addressing the issue of software patentability, any argument predicated on that issue’s resolution would have a lesser chance of success.

203. *Id.* at 22-23.

204. The Court left open the possibility that abstract software might constitute a § 271(f) component of a patented *process*. See *supra* note 156 and accompanying text (discussing applicability of § 271(f) to process patents).

205. See Virginia Zaunbrecher, Note, *Eolas, AT&T, & Union Carbide: The New Extraterritoriality Of U.S. Patent Law*, 21 BERKELEY TECH. L.J. 33, 51-56 (2006) (discussing changes in the global economy and the international intellectual property protection regime that argue in favor of a narrow reading of § 271(f)).

scope can reduce the costs of patent infringement, by allowing plaintiffs to consolidate their litigation into a single forum, turns out to be illusory.

1. *Changed Environment*

There have been substantial changes in the international intellectual property regulatory environment since the passage of § 271(f), making it easier for U.S. inventors to enforce their patent rights abroad. The passage of TRIPS²⁰⁶ in 1994 established minimum baseline standards for patent law and an international dispute resolution tribunal for all WTO member countries.²⁰⁷ In addition, the Patent Cooperation Treaty (“PCT”) now enables innovators filing a patent application in the United States to preserve priority rights in over 130 member countries and postpone their decision to file foreign patent applications for thirty months.²⁰⁸

Foreign patents provide more protection than § 271(f). For example, foreign patents provide protection for the full patent term in the countries where patents are obtained.²⁰⁹ Unlike the limited protection conferred by § 271(f), this protection exists against any competitor.²¹⁰

Easier access to foreign patents and the greater strength of international patent protection regimes have thus achieved the original purpose of § 271(f): the protection of U.S. patent holders in international markets. The goal of patent law is to encourage innovation by creating financial incentives to invent.²¹¹ Because inventors can better protect their patent rights abroad through other mechanisms, § 271(f) is less necessary.

2. *Adverse Economic Effects*

There have been major changes in the international economy in the two decades since the passage of § 271(f), including a decline in U.S. manufacturing. The rise of Asia as a center of low-cost manufacturing and the continued globalization of international trade has led to substantial

206. Agreement on Trade-Related Aspects of Intellectual Property Rights vol. 31, Apr. 15, 1994, 33 I.L.M. 81 [hereinafter TRIPS Agreement].

207. See generally Rochelle Cooper Dreyfuss & Andreas F. Lowenfeld, *Two Achievements of the Uruguay Round: Putting TRIPS and Dispute Settlement Together*, 37 VA. J. INT'L L. 275 (1997).

208. See WORLD INTELLECTUAL PROPERTY ORGANIZATION, PCT APPLICANT'S GUIDE - NATIONAL PHASE - NATIONAL CHAPTER (2007), available at <http://www.wipo.int/pct/guide/en/gdvol2/annexes/us.pdf>.

209. See Farrand, *supra* note 38, at 1263-64.

210. See *id.*

211. U.S. patent law is based on the constitutional provision authorizing patent grants to promote “the Progress of Science and useful Arts.” U.S. CONST. art. I, § 8, cl. 8.

losses of competitive advantage for U.S. manufacturers.²¹² Section 271(f) has offered little or no protection against these changing market dynamics. In fact, analysis reveals that § 271(f) has actually created disincentives to innovation.²¹³

Although the statute attempts to protect U.S. patentees operating in foreign markets from competitors selling infringing products, it operates in effect to discriminate against domestic producers.²¹⁴ The statute confers protection through the imposition of liability on domestic component providers who supply foreign manufacturers with components used to make the infringing device. However, since foreign manufacturers can source their products from outside the United States, the actual protection provided is minimal.²¹⁵ Instead, the statute discriminates against manufacturers with operations within the United States, thereby encouraging them to move their operations offshore. Thus, instead of creating incentives for innovation and investment in line with the goals of patent law, § 271(f) creates “perverse incentives.”²¹⁶

*Pellegrini v. Analog Devices*²¹⁷ presents an example of the disincentives created by the statute. The defendant, Analog Devices, created drive circuits abroad that would have infringed a Pellegrini patent if created within the United States. Analog sent blueprints and manufacturing instructions from its U.S. headquarters to manufacturing centers in Ireland and Taiwan.²¹⁸ Analog had U.S. customers, but it never manufactured drive circuits domestically.²¹⁹ Pellegrini sued for patent infringement. The district court granted Analog’s motion for partial summary judgment to exclude foreign sales, on the theory that § 271(f) applies only when the components destined for infringing use are manufactured within the United States.²²⁰ The Federal Circuit affirmed, interpreting § 271(f) to apply only in cases of domestic manufacture.²²¹ The case demonstrates that foreign manufacturers are never liable and domestic manufacturers can avoid § 271(f) by moving their manufacturing operations offshore.

212. See, e.g., Alan W. Wolff, *China’s Drive Toward Innovation*, ISSUES IN SCI. & TECH., Spring 2007, available at <http://www.issues.org/23.3/wolff.html>.

213. See Farrand, *supra* note 38, at 1216 (analyzing disincentives created by the statute).

214. *Id.* at 1260-61.

215. *Id.*

216. *Id.*

217. 375 F.3d 1113 (Fed. Cir. 2004).

218. *Pellegrini v. Analog Devices*, 375 F.3d 1113, 1118 (Fed. Cir. 2004).

219. *Id.*

220. *Id.*

221. *Id.* at 1119.

In contrast to the decline in traditional manufacturing industries, the U.S. software industry and allied knowledge industries have experienced rapid growth to become an important part of the national economy.²²² Expanding the scope of § 271(f) to domestic software producers would create perverse incentives to relocate operations abroad to escape liability.²²³ In addition to the immediate harm, long-term economic damage could result because of the strategic importance of the software sector to the national economy.

However, the perverse incentives created by § 271(f) might not operate in the software industry to the same extent that they operate in other industries. The software development process differs from traditional production methods in many respects. For example, traditional software development consists of several related phases that software producers could relocate abroad without significant disruption to the finished product.²²⁴ As a result, domestic producers might escape liability by relocating only part of their software development operations. Hence, the adverse economic impacts may be limited through the retention of some production phases in the United States.

Nevertheless, the disincentives could still have a substantial negative effect on the economy. It would be ironic if a statute intended for the protection of U.S. manufacturing was instead used to discriminate against domestic producers—in one of the few areas where domestic producers still enjoy a dominant market position.

3. *Inefficiency in Patent Enforcement*

Although the PCT process makes it easier to obtain foreign patents, enforcement of patent rights requires a patentee to file suit in each jurisdiction where infringing acts are alleged. Such a course of action is inconvenient and expensive. One argument favoring the broad application of § 271(f) is that it promotes economic efficiency, by allowing a patent

222. The contributions to U.S. GDP in 2006 from domestic investment in computer software exceeded U.S. \$200 billion. *See* Bureau of Economic Analysis, U.S. Dep't of Commerce, Gross Domestic Product & Corporate Profits, 3rd Quarter 2007 Preliminary, Nov. 29, 2007, at t.3, <http://www.bea.gov/newsreleases/national/gdp/2007/pdf/gdp307p.pdf>.

223. Microsoft argued to the Federal Circuit that such a reading of § 271(f) would cause software manufacturers to relocate their development facilities overseas, leading to job losses and other harms to the domestic software industry. *See AT&T Corp. v. Microsoft Corp. (AT&T II)*, 414 F.3d 1366, 1372 (Fed. Cir. 2005).

224. *See generally* TANDY GOLD, OFFSHORE SOFTWARE DEVELOPMENT: MAKING IT WORK (2004) (discussing the changes required to a traditional software development process for the successful integration of offshore development teams).

holder to collect damages in a single proceeding for domestic and foreign acts of infringement.²²⁵

This argument is attractive because of the prohibitive expense of obtaining relief in a patent infringement action.²²⁶ Because of this cost, suits in multiple forums may not be a viable option for many plaintiffs. For plaintiffs with limited financial resources, a law allowing a patent holder to consolidate multiple infringing acts in a single suit might not just save money; such a suit might be the only means for the patent holder to obtain redress.

Unfortunately, the broad application of § 271(f) to reach this result may have unintended consequences that counsel against this approach. First, broadly applying the statute might hurt plaintiffs more than it helps. For example, using § 271(f) to regulate foreign acts would lead to results that the principle of territoriality seeks to avoid—loss of comity, potential interference with foreign law, and problems with the enforcement of judgments. These issues might increase legal costs for some litigants, should the attempt to obtain extraterritorial jurisdiction result in international conflicts-of-law. Second, since the statute is only available against U.S. businesses, such litigation would discriminate against domestic producers.

A few patent infringement plaintiffs have attempted to avoid interference with foreign law by bringing suit in the United States under U.S. law for domestic acts of infringement but under foreign law for foreign acts of infringement.²²⁷ There are no constitutional problems with jurisdiction since general diversity and supplemental jurisdiction statutes are available.²²⁸ However, in the few cases where plaintiffs have attempted this strategy, district courts have declined to hear the foreign law claims.²²⁹ Given the practical complications at such a proceeding, one can hardly blame the courts for refusing to embark on this enterprise. U.S. courts have little experience interpreting foreign laws. In addition, U.S. trial procedure with its broad discovery provisions differs in important respects not

225. See Farrand, *supra* note 38, at 1281.

226. See AM. INTELL. PROP. LAW ASS'N, REPORT OF ECONOMIC SURVEY 2003 84-85 (2003) (finding the median cost of trying a patent case with \$1 million to \$25 million at risk to be \$2 million).

227. See Farrand, *supra* note 38, at 1282-83 (discussing options available to plaintiffs).

228. See 28 U.S.C. § 1332 (2006) (diversity jurisdiction); 28 U.S.C. § 1367(a) (2006) (supplemental jurisdiction).

229. See Farrand, *supra* note 38, at 1282-83 n.163 (reviewing the rationales that U.S. courts have used to reject such suits).

just from the procedure in civil law jurisdictions but also from the procedures of other common law nations.²³⁰

On the other hand, the difficulties attending redress for acts of patent infringement that span multiple jurisdictions are surmountable. Given the changes in the international legal environment making it easier to acquire foreign patent protection, U.S. companies are better positioned to recover for foreign acts of infringement than they were in 1984 when § 271(f) was enacted.²³¹ Although firms pursuing foreign patent protection incur additional costs, they can control expenses through careful portfolio planning. In addition, financial losses stemming from infringing acts may be concentrated in only a few jurisdictions, thus lowering litigation costs.²³²

V. CONCLUSION

The Supreme Court's application of the principle of territoriality to resolve *AT&T III* was justified by comity, practicality, and self-interest. The outcome also reached the correct economic result. Due to international economic and legal changes since its passage, § 271(f) is no longer needed to create incentives for innovation. On the contrary, the statute has adverse economic effects on U.S. manufacturers in foreign markets. The Court sensibly declined to affirm the Federal Circuit's decision in *AT&T II*, that, *inter alia*, made the extent of § 271(f) liability for domestic suppliers turn on the number of copies made by manufacturers abroad.²³³

However, the Supreme Court did not limit § 271(f) to the maximum extent possible. The principle of territoriality counsels that statutes receive the most restrictive extraterritorial interpretation. In the case of § 271(f), this would restrict the statute to tangible components of product patents.²³⁴ Such a construction would have overruled not only *Eolas*, but also *Union Carbide*, wherein the Federal Circuit expanded the scope of § 271(f) to include method claims.

The Court had several grounds to limit § 271(f) to product claims. For example, it could have interpreted § 271(f) in accordance with the statute's legislative history instead of, or in addition to, reliance on the presumption

230. See Hazard, *Discovery*, *supra* note 17, at 1018-20 (noting that civil law jurisdictions have no concept of pre-trial discovery procedures and that the American system of wide-ranging discovery is unique among common-law jurisdictions).

231. See *supra*, Section IV.B.1.

232. See Farrand, *supra* note 38, at 1281-82 (discussing why expenses for suits in multiple jurisdictions might not be as high as expected).

233. See *AT&T Corp. v. Microsoft Corp. (AT&T II)*, 414 F.3d 1366, 1371-72 (Fed. Cir. 2005).

234. See *supra* Section III.A.1.

against extraterritoriality. Although Congress intended § 271(f) to close the *Deepsouth* manufacturing loophole, there is no evidence Congress intended the statute to apply beyond the manufacturing context of that case.²³⁵ Even if Congress wanted § 271(f) to extend beyond manufacturing, it is not clear that the statute should apply to process patents. The statute itself contains none of the terms commonly used to describe process patents.²³⁶ However, the Court did not issue such a restrictive holding. One possible reason is that the precise issue of the applicability of § 271(f) to method claims was not clearly before it.

Instead, the Supreme Court issued a narrower holding by using the presumption against extraterritoriality to partially limit the reach of § 271(f).²³⁷ Although the Court left open the question of whether the statute applies to method claims,²³⁸ the Court's use of the presumption contrasts sharply with the Federal Circuit's expansive interpretations of § 271(f).²³⁹ Hence, this decision should limit any future tendency of the lower courts to expand the scope of § 271(f).

235. See *supra* note 89 (explaining why the Congressional record supports the view that the statute was intended to apply only to the facts of *Deepsouth*).

236. See 35 U.S.C. § 271(f) (2006).

237. See *Microsoft Corp. v. AT&T Corp.* (*AT&T III*), 127 S. Ct. 1746, 1748-50 (2007).

238. Indeed, assuming § 271(f) encompasses method claims, the Court noted that it may be possible for software in the abstract to be a “component” under § 271(f) because an intangible invention can have intangible components. See *AT&T III*, 127 S. Ct. at 1756 n.13.

239. See *supra* Section III.B (reviewing relevant Federal Circuit cases).