

WALKING THE LINE: WHY THE PRESUMPTION AGAINST EXTRATERRITORIAL APPLICATION OF U.S. PATENT LAW SHOULD LIMIT THE REACH OF 35 U.S.C. § 271(F)

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ABSTRACT

The advent of the digital era and the global market pose unique challenges to intellectual property law. To adapt, U.S. patent laws require constant interpretation in the face of rapidly changing technological advances. In AT&T Corp. v. Microsoft Corp., the Federal Circuit interpreted 35 U.S.C. § 271(f) in a technology-dependent manner in order to effectuate the purpose of the law with respect to global software distribution. However, the Federal Circuit failed to consider the presumption against extraterritorial application of U.S. law, and its decision now risks international discord and harm not only to the American software industry, but other U.S. industries as well. This iBrief critiques the lower court decisions in AT&T Corp. v. Microsoft Corp. in light of the presumption against extraterritoriality, and analyzes how the Supreme Court should apply the presumption in its review of the case.

INTRODUCTION

¶1 The requirements for establishing infringement of a U.S. patent are stated in § 271 of the United States Patent Act.² While § 271(a) establishes the basis for patent infringement within the United States, § 271(f) sets out the conditions for liability where inventions patented in the United States are exported.³ The broad language of the provision raises several questions

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² 35 U.S.C. § 271 (2000).

³ *Id.* § 271(a), (f). Section 271(f) states:

(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

that courts have attempted to clarify in the twenty years since § 271(f)'s enactment.⁴ Some issues courts have wrestled with include determining the scope of "component," the nature of conduct that constitutes "supplying" from the United States, and whether liability under § 271(f) attaches differently depending on the technological nature of the patent.⁵ In attempting to resolve these issues, the Federal Circuit, in its recent decision in *AT&T Corp. v. Microsoft Corp.*,⁶ expanded the scope of § 271(f) by interpreting the provision to have extraterritorial effects. The Federal Circuit's expansive interpretation of § 271(f) risks disrupting the well-being of the U.S. software industry and, more significantly, the role the United States plays in the international scheme of intellectual property enforcement.

¶2 This iBrief addresses the Federal Circuit's interpretation of § 271(f) in *AT&T v. Microsoft*, where it held: (1) that for the purposes of § 271(f), software code could be a component of a patented invention, and (2) that liability for infringement attaches to copies of such software made abroad and used in a manner that would infringe on a patented invention if the conduct occurred in the United States.⁷ Part I summarizes the enactment and subsequent judicial interpretation of § 271(f), describing the Federal Circuit's recent trend of interpreting the statute broadly. Part II outlines the facts, procedural history and lower court decision in *AT&T v. Microsoft* and the arguments presented by the parties before the Supreme Court. Part III expands on the principles of comity and national treatment underlying 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.

(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.

Id. (emphasis added).

⁴ Alex Cartove, *Activities that Occur Outside the U.S. May Result in Liability for Infringement of a U.S. Patent: AT&T Corp. v. Microsoft Corp.*, 414 F.3d 1366 (Fed. Cir. 2005), MORRISON FOERSTER, LEGAL UPDATES & NEWS, April 2006, <http://www.mofo.com/news/updates/files/update02178.html>.

⁵ *Id.*

⁶ *AT&T Corp. v. Microsoft Corp.*, 414 F.3d 1366, 1371 (Fed. Cir. 2005), *cert. granted*, 127 S. Ct. 467 (U.S. Oct. 27, 2006).

⁷ *Id.* at 1369–70.

current international intellectual property system and elaborates on how the presumption against extraterritorial application of U.S. law stems from and supports these principles. Discussion focuses on both the basis of the presumption in the separation of powers doctrine and institutional competence of the individual branches of the federal government and the potential international and national repercussions of the Federal Circuit's decision. Part IV concludes by suggesting how the Supreme Court should consider these principles in its review of *AT&T v. Microsoft* and recommends that the Court apply the presumption against extraterritoriality, interpreting § 271(f) conservatively in the absence of Congressional intent to do otherwise, so as to avoid international discord and economic harm to industry.

I. THE HISTORY OF 35 U.S.C. § 271(F)

¶3 Section 271(f) of Title 35⁸ was enacted by Congress in response to *Deepsouth Packing Co. v. Laitram Corp.*,⁹ a case that exposed an exploitable loophole for patent infringement.¹⁰ In *Deepsouth Packing*, a manufacturer of shrimp deveining machines successfully avoided liability for patent infringement by manufacturing only components of the machines in the United States and then shipping the components abroad for final assembly.¹¹ Because the patents at issue were combination patents, infringement could only occur once the various components were assembled, which in this case was abroad.¹² At the time of *Deepsouth Packing*, only § 271(a)–(c) had been enacted and it was clear that the manufacture and use of a patented device outside the United States was not an infringement under U.S. patent law.¹³ Despite the obvious exposure of U.S. patent holders to infringement, the Supreme Court refused to expand the reach of § 271 to acts conducted abroad without “a clear and certain signal from Congress.”¹⁴ The Court recognized that its precedent strongly emphasized the territoriality of U.S. patent law and that only Congress had the constitutional authority to legislate with respect to the extraterritorial effects of U.S. law.¹⁵

⁸ 35 U.S.C. § 271(f).

⁹ 406 U.S. 518 (1972).

¹⁰ *AT&T v. Microsoft*, 414 F.3d at 1371.

¹¹ *Deepsouth Packing*, 406 U.S. at 523–24. Assembly of the machine's components was very simple and the manufacturer referred to the components as the “machine” in its instructions and correspondence with customers.

¹² *Id.* at 528–29.

¹³ *Id.* at 527 (discussing *Dowagiac Mfg. Co. v. Minn. Moline Plow Co.*, 235 U.S. 641, 650 (1915), *Brown v. Duchesne*, 60 U.S. (19 How.) 183 (1856)).

¹⁴ *Id.* at 531.

¹⁵ *Id.* at 527, 530—31.

¶4 In response to *Deepsouth Packing*, Congress enacted § 271(f) to expand the reach of Title 35 and close its exposed infringement loophole to address the domestic impact of foreign sales of U.S.-patented inventions.¹⁶ The legislative history referred to § 271(f) as a “housekeeping-oriented measure” enacted to “prevent copiers from avoiding U.S. patents by supplying components of a patented product in this country so that the assembly of the components may be completed abroad.”¹⁷

¶5 Initially the courts were relatively conservative in interpreting the reach of § 271(f), emphasizing the expressed Congressional intent and the plain meaning of statutory text.¹⁸ Two cases, *Waymark Corp. v. Porta Systems Corp.*¹⁹ and *Pellegrini v. Analog Devices, Inc.*,²⁰ illustrate the Federal Circuit’s concern for both Congressional intent and the territorial aspect of U.S. patent law. In *Waymark*, the Federal Circuit held that “the statutory language in [§ 271(f)(2)] does not require an actual combination of the components [abroad], but only a showing that the infringer shipped them with the intent that they be combined.”²¹ Thus, liability “attaches with mere shipment of the component from the United States and does not consider the presence or absence of acts occurring abroad.”²² While this holding made it easier to sue for infringement under § 271(f), the Federal Circuit reinforced the territoriality of U.S. patent law by explaining that “[i]f 271(f)(2) required actual assembly abroad, then infringement would depend on proof of infringement in a foreign country . . . rais[ing] the difficult obstacle of proving infringement in foreign countries and pos[ing] the appearance of giving extraterritorial effect to United States patent protection.”²³ In *Pellegrini*, the Federal Circuit found that § 271(f) was “clear on its face. . . . It applies only where components of a patent invention are *physically present* in the United States *and then* either sold or

¹⁶ *AT&T Corp. v. Microsoft Corp.*, 414 F.3d 1366, 1371 (Fed. Cir. 2005), *cert. granted*, 127 S. Ct. 467 (U.S. Oct. 27, 2006) (discussing 130 Cong. Rec. 28069 (daily ed. Oct. 1, 1984) (Congressional debate on Patent Law Amendments Act of 1984, Pub. L. No. 98-622, 98 Stat. 3383)).

¹⁷ *Id.*

¹⁸ See Virginia Zaunbrecher, *Eolas, AT&T & Union Carbide: The New Extraterritoriality of U.S. Patent Law*, 21 BERKELEY TECH. L.J. 33, 37–42 (2006) (discussing the cautious approach of the courts in deciding several cases after § 271(f)’s enactment).

¹⁹ 245 F.3d 1364 (Fed. Cir. 2001).

²⁰ 375 F.3d 1113 (Fed. Cir. 2004).

²¹ *Waymark*, 245 F.3d at 1368.

²² *AT&T v. Microsoft*, 414 F.3d at 1373 (Rader, J., dissenting) (discussing *Waymark*, 245 F.3d at 1368, as an example of the territorial focus and application of § 271(f) and U.S. patent law in general).

²³ *Waymark*, 245 F.3d at 1365 (citations omitted); see Zaunbrecher, *supra* note 18, at 41–42.

exported.”²⁴ As such, “the language of § 271(f) clearly contemplates that there must be an intervening sale or exportation; there can be no liability under § 271(f)(1) unless components are shipped from the United States for assembly.”²⁵ Even though the defendant in *Pellegrini* supplied instructions for the production and disposition of components of a patented invention and provided corporate oversight from its U.S. headquarters, thus facilitating the production of infringing products, the Federal Circuit refused to attach liability to its conduct under § 271(f) because the components were never physically present in the United States.²⁶ In an axiomatic closing, the Court cites *Dowagiac Manufacturing Co. v. Minnesota Moline Plow Co.* to emphasize that “the 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 on acts wholly done in a foreign country.”²⁷

¶6 More recently, however, several Federal Circuit decisions have significantly expanded the scope of § 271(f). In March of 2005, the Federal Circuit held in *Eolas Technologies Inc. v. Microsoft Corp.* that software code encoded on master disks and exported abroad falls within the scope of “components” in § 271(f).²⁸ The case involved Microsoft’s supply of its Windows operating system bundled with Internet Explorer to licensed foreign computer manufacturers via “golden master discs.”²⁹ Eolas alleged that certain aspects of Microsoft’s Internet Explorer software infringed one of its software patents³⁰ and sought damages for infringement from Microsoft for its foreign sales under § 271(f).³¹ Microsoft argued that software code was not a “component” under the auspices of § 271(f) because a “component” must be a tangible element like the shrimp deveining machine components in *Deepsouth Packing*.³² The Federal Circuit disagreed based on a plain interpretation of the statutory language, lack of clear Congressional prohibition preventing the inclusion of software within the meaning of “component” under § 271(f), and sound doctrinal

²⁴ *Pellegrini*, 375 F.3d at 1117 (emphasis added).

²⁵ *Id.*

²⁶ *Id.* at 1115, 17.

²⁷ *Id.* at 1119 (discussing *Dowagiac Mfg. Co. v. Minn. Moline Plow Co.*, 235 U.S. 641, 650 (1915)).

²⁸ *Eolas Techs. Inc. v. Microsoft Corp.*, 399 F.3d 1325, 1338–41 (Fed. Cir. 2005), *cert. denied*, 126 S. Ct. 568 (2005).

²⁹ *Id.* at 1331 (“Golden master disk[]” is the name given to the single master copy of the software shipped to each manufacturer for use in making subsequent copies of the software that will then be installed on computers.) *Eolas* has very similar facts to *AT&T v. Microsoft*. See *infra* Part II.A.

³⁰ U.S. Patent No. 5,838,906 (filed Oct. 17, 1994) (issued Nov. 17, 1998).

³¹ *Eolas*, 399 F.3d at 1331–32.

³² *Id.* at 1340.

policy.³³ The Federal Circuit reasoned that the “statutory language did not limit § 271(f) to patented ‘machines’ or patented ‘physical structures’ . . . or to ‘machine’ components or ‘structural or physical’ components.”³⁴ The Federal Circuit was also swayed by the fact that “[e]xact duplicates of the software code on the golden master disk are incorporated as an operating element of the ultimate device . . . [and the code] in effect drives the ‘functional nucleus of the finished computer product.’”³⁵ Four months later, the Federal Circuit decided *AT&T v. Microsoft*, the subject matter of this iBrief, where it both affirmed its holding in *Eolas* and further expanded it by attaching liability under § 271(f) to the foreign-made copies of software installed on foreign-made computers that are sold abroad.³⁶ Three months after deciding *AT&T v. Microsoft*, the Federal Circuit decided *Union Carbide Chemicals & Plastics Technology Corp. v. Shell Oil Co.*, which dealt with the sale of a catalyst abroad for use in a patented chemical process.³⁷ Using the rationale in *Eolas* and *AT&T v. Microsoft*, the Federal Circuit found that § 271(f) “makes no distinction between patentable method/process inventions and other forms of patentable inventions,” thus once again expanding the scope of § 271(f) to now include “components” of patented processes.³⁸

¶7 Of these recent cases in which the Federal Circuit has expansively interpreted § 271(f) and attached liability for conduct occurring wholly abroad, *AT&T v. Microsoft* alone now sits before the Supreme Court on grant of certiorari.

³³ *Id.* at 1339. Regarding policy, the court stated that it could not “construct a principled reason” to differentiate between different types of inventions. *Id.* The court even discussed the TRIPS Agreement: “Patents shall be available and patent rights enjoyable without discrimination as to the place of invention[] [and] the field of technology” *Id.* (quoting Agreement on Trade-Related Aspects of Intellectual Property Rights, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, Legal Instruments—Results of the Uruguay Round, Part II, Section 5, Apr. 15, 1994, 1869 U.N.T.S. 299, 33 I.L.M. 1125, 1197 [hereinafter TRIPS Agreement]), available at http://www.wto.org/english/docs_e/legal_e/27-trips.pdf.

³⁴ *Id.* at 1339.

³⁵ *Id.* (discussing *Imagexpo, L.L.C. v. Microsoft Corp.*, 299 F. Supp. 2d 550, 553 (E.D. Va. 2003)).

³⁶ *AT&T Corp. v. Microsoft Corp.*, 414 F.3d 1366, 1370–71 (Fed. Cir. 2005), cert. granted, 127 S. Ct. 467 (U.S. Oct. 27, 2006).

³⁷ *Union Carbide Chems. & Plastics Tech. Corp. v. Shell Oil Co.*, 425 F.3d 1366, 1369–72 (Fed. Cir. 2005).

³⁸ *Id.* at 1379–80.

II. *AT&T v. MICROSOFT*: FACTS, LOWER COURT DECISIONS AND ARGUMENTS BEFORE THE SUPREME COURT

A. Facts

¶8 Similar to Eolas's action,³⁹ AT&T's suit against Microsoft is rooted in Microsoft's practice of supplying software to its licensed foreign computer manufacturers via "golden master disks" or electronic transmission.⁴⁰ The software in question is a version of the Microsoft Windows operating system utilizing a speech compression code; when installed on a computer, the speech compression code is protected by AT&T's software patent 32,580.⁴¹ Microsoft writes and exports master copies of the software from the United States to various locations abroad,⁴² where it is then copied and installed onto foreign-made computers for sale in foreign markets.⁴³ AT&T alleges that Microsoft is liable for infringement under § 271(f)⁴⁴ both for its supply of the master copy of the software to its manufacturers abroad and for each of the subsequent copies of the software made and installed onto computers abroad by these manufacturers.⁴⁵

B. The District Court Proceedings

¶9 Based on the facts above, AT&T filed suit against Microsoft for patent infringement for its sale of the Windows operating system utilizing AT&T's speech codec in the United States and abroad.⁴⁶ Microsoft countered by filing a motion in limine to exclude evidence of its foreign software sales.⁴⁷ The parties agreed on a stipulation of the facts, and Microsoft moved for partial summary judgment of non-infringement under

³⁹ *See id.* at 1325.

⁴⁰ *AT&T v. Microsoft*, 414 F.3d at 1368.

⁴¹ *Id.* at 1368 n.1 ("A 'speech codec' is a software program that codes a speech signal into a more compact form, and decodes it back into a signal that sounds like the original."); *see* U.S. Patent No. 32,580 (filed Sept. 18, 1986) (reissued Jan. 1988).

⁴² *AT&T v. Microsoft*, 414 F.3d at 1373 (Rader, J., dissenting). Microsoft sent the software code to Dusseldorf, Germany, and Tokyo, Japan, in addition to New York. Microsoft only contests liability under § 271(f) for copies of the software made abroad by its foreign manufacturers and installed on foreign-made computers. *Id.* at 1369.

⁴³ *Id.* at 1368 (majority opinion); *AT&T Corp. v. Microsoft Corp.*, No. 01CV4872, 2004 WL 406640, at *1 (S.D.N.Y. Mar. 5, 2004).

⁴⁴ 35 U.S.C. § 271(f) (2000).

⁴⁵ *AT&T v. Microsoft*, 2004 WL 406640, at *2.

⁴⁶ *Id.* at *1.

⁴⁷ *AT&T v. Microsoft*, 414 F.3d at 1368.

§ 271(f).⁴⁸ Microsoft argued (1) that the software encoded on the golden master disks and sent by electronic transmission was “merely ‘intangible information,’ and thus not a ‘component’ as contemplated by § 271(f),”⁴⁹ and (2) that it should not be liable under § 271(f) for copies of the software made and installed onto computers abroad because “the copies themselves [were] not ‘supplied from’ the United States.”⁵⁰ Consistent with the Federal Circuit in *Eolas*, the District Court of the Southern District of New York interpreted § 271(f) broadly by holding that software could be a “component” under § 271(f) because “[t]here is no limitation on the term ‘component,’ either in the statutory text or in the legislative history” of § 271(f) and no indication that the term should be limited.⁵¹ The court then found that Microsoft “supplied” the software by sending the golden master disks abroad such that Microsoft was liable for patent infringement under § 271(f) for software copies made abroad and installed on foreign-made machines.⁵² Microsoft entered into a settlement agreement for damages with AT&T after assenting to a stipulated judgment of liability but reserved the right to appeal the district court’s ruling on the § 271(f) issue.⁵³

C. The Appellate Court Proceedings

¶10 Before the Court of Appeals for the Federal Circuit, Microsoft again argued in favor of a narrower scope of liability under § 271(f) and was again unsuccessful.⁵⁴ First, relying on its holding in *Eolas*, the appellate court found software to be a “component” under § 271(f).⁵⁵ Because the software “being supplied is an actual component . . . not instructions to foreign software engineers for designing and coding [the software],” the court rejected Microsoft’s assertion that *Pellegrini* applied to the case.⁵⁶ Then, turning to the issue of whether Microsoft had “supplied”

⁴⁸ *Id.*

⁴⁹ *AT&T v. Microsoft*, 2004 WL 406640, at *2.

⁵⁰ *Id.*

⁵¹ *Id.* at *5.

⁵² *Id.* at *7 (“Microsoft seeks to equate replication of the object code abroad with the manufacturing or ‘supply’ of it from abroad. Microsoft’s argument ignores the undisputed fact that the object code is originally manufactured in the United States, and supplied from the United States to foreign replicators or OEMs [original equipment manufacturers] with the intention of incorporating such software into foreign-assembled computers.”).

⁵³ *AT&T v. Microsoft*, 414 F.3d at 1368; Brief for the United States as Amicus Curiae at 5, *AT&T v. Microsoft*, No. 05-1056 (U.S. Sept. 29, 2006), 2006 WL 2805326 [hereinafter Government Brief].

⁵⁴ *AT&T v. Microsoft*, 414 F.3d at 1368–69, 1372.

⁵⁵ *Id.* at 1369; see *supra* Part I (discussing *Eolas Techs. Inc. v. Microsoft Corp.*, 399 F.3d 1325 (Fed. Cir. 2005), *cert. denied*, 126 S. Ct. 568 (2005)).

⁵⁶ *AT&T v. Microsoft*, 414 F.3d at 1370.

the software component from the United States within the meaning of § 271(f) such that liability attached to the foreign-produced copies of the software, the court looked to the text of the statute and interpreted the term “supply” in a technology-dependent manner, basing its interpretation on the nature of software technology.⁵⁷ The court found that “the act of copying [software] is subsumed in the act of ‘supplying’ [software] such that sending a single copy abroad with the intent that it be replicated invokes § 271(f) liability for those foreign-made copies.”⁵⁸ To support its holding, the court asserted that its interpretation of “supply” was consistent with the Congressional intent in enacting § 271(f)⁵⁹ and that the interpretation was necessary for the statutory provision to remain effective.⁶⁰ The court stated that any other interpretation of the statute would “subvert[] the remedial nature of § 271(f) [to close the loophole exposed by *Deepsouth Packing*], permitting a technical avoidance of the statute by ignoring the advances in a field of technology—and its associated industry practices—that developed after [§ 271(f)’s enactment].”⁶¹ Relying again on *Eolas*, the court refused to draw a distinction between Microsoft’s supplying the software via golden master disk and supplying the software via electronic transmission, and held that the software was “supplied” abroad within the meaning of § 271(f) by both methods of transmission.⁶² The court also was not persuaded by “Microsoft’s impassioned recitation of a parade of horrors that may befall the domestic software industry” if the court were to find Microsoft liable for infringement.⁶³ The court was confident that “Congress intended that the language it enacted would be applied as [the court] . . . applied it.”⁶⁴

¶11 Judge Rader wrote a forceful dissent to the panel majority’s decision that was somewhat surprising in light of his opinion for the court in *Eolas*.⁶⁵ While “agreeing that software may be a component of a patented invention,” he criticized the majority’s broad technology-dependent interpretation of “supply” in § 271(f) and its disregard for the territoriality of patent law in the international arena.⁶⁶ Judge Rader refuted the majority assertion that a plain interpretation of § 271(f) includes “copying” within the meaning of “supplying” and that “copying” is subsumed in the act of

⁵⁷ *Id.* at 1369–70.

⁵⁸ *Id.* at 1370.

⁵⁹ *Id.* at 1370; *see supra* Part I (discussing key cases interpreting § 271(f)).

⁶⁰ *AT&T v. Microsoft*, 414 F.3d at 1371.

⁶¹ *Id.*

⁶² *Id.*

⁶³ *Id.* at 1372.

⁶⁴ *Id.* (discussing *Griffin v. Oceanic Contractors, Inc.*, 458 U.S. 564, 576 (1982)).

⁶⁵ *Id.* (Rader, J., dissenting).

⁶⁶ *Id.* at 1372–73, 1376.

“supplying” for software code.⁶⁷ He stated that “[t]he act of supplying is separate and distinct from copying, reproducing, or manufacturing,”⁶⁸ and that “[t]he only true difference between making and supplying software components and physical components is that copies of software components are easier to make and transport.”⁶⁹ Judge Rader stressed that the ease with which infringement may occur for software code is an incorrect basis upon which to differentiate between patented inventions under § 271(f).⁷⁰ As a result, Judge Rader found that the majority’s interpretation departed from the holding of *Pellegrini* requiring that components “supplied” from the United States actually physically exist in the United States.⁷¹ Because the software components that were installed on foreign-made computers abroad were foreign-made copies of the “supplied” master copy, those components were never in the United States.⁷² Additionally, interpreting § 271(f) in a technologically-dependent manner “ignores [the Federal Circuit’s] case law that refuses to discriminate based on the field of technology.”⁷³

¶12 Judge Rader also drew a clear line between acts that occur in the United States (“supply” of a *master copy* of the software to manufacturers in New York, Dusseldorf, and Tokyo) and acts that occurred abroad (“copying” of the software by foreign manufacturers and installation of the *copies* onto foreign-made computers).⁷⁴ He found the majority’s interpretation of “supply,” as applying to foreign-made copies of software, to be an extraterritorial expansion of U.S. patent law, creating liability for acts done wholly abroad that, prior to this case, could incur liability only under the law of the country in which they occurred.⁷⁵ Such a result

⁶⁷ *Id.* at 1372–73.

⁶⁸ *Id.* at 1373.

⁶⁹ *Id.* at 1374.

⁷⁰ *Id.*

⁷¹ *Id.* at 1374–75.

⁷² *Id.* (quoting *Pellegrini v. Analog Devices, Inc.*, 375 F.3d 1113, 1117 (Fed. Cir. 2004) (“[Section 271(f)] applies only where components of a patented invention are physically in the United States and then either sold or exported . . .”). Judge Rader’s stance here is a little surprising in light of the *Eolas* decision, which he authored, because finding liability in *Eolas* necessarily implied a finding that the software copies replicated abroad from the golden master disks were supplied from the United States under § 271(f). See *Eolas Techs. Inc. v. Microsoft Corp.*, 399 F.3d 1325, 1339 (Fed. Cir. 2005), *cert. denied*, 126 S. Ct. 568 (2005) (“[T]he software code on the golden master disk is not only a component, it is probably the key part of this patented invention.”).

⁷³ *AT&T v. Microsoft*, 414 F.3d at 1374 (Rader, J., dissenting).

⁷⁴ *Id.* at 1373, 1375.

⁷⁵ *Id.* at 1373 (discussing *Dowagiac Mfg. Co. v. Minn. Moline Plow Co.*, 235 U.S. 641, 650 (1915) (“The 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 on acts wholly done in a foreign country.”)).

contravenes the plain language of § 271(f) to “expressly limit[] liability . . . to activities occurring in the United States”⁷⁶ and the precedent of both the Federal Circuit and the Supreme Court with regard to the territorial nature of U.S. patent law.⁷⁷ He emphasized that prior to the majority’s decision in *AT&T v. Microsoft*, companies could protect themselves from competitors copying and manufacturing their software technology in foreign markets only by “obtaining and enforcing foreign patents.”⁷⁸

D. On Grant of Certiorari to the Supreme Court

1. Questions Presented

¶13 Microsoft’s petition to the Supreme Court for certiorari was granted in October of 2006,⁷⁹ and oral arguments were heard on February 21, 2007.⁸⁰ Microsoft presented two questions to the Court: “(1) Whether digital software code—an intangible sequence of ‘1’s’ and ‘0’s’—may be considered a ‘component[] of a patented invention’ within the meaning of Section 271(f)(1); and, if so, (2) Whether copies of such a ‘component[]’ made in a foreign country are ‘supplie[d]’ . . . from the United States.”⁸¹

2. Microsoft’s Arguments

¶14 Microsoft presented two theories under which the Court could conclude that software is not a “component” within the meaning of § 271(f).⁸² First, Microsoft argued that the Court could avoid deciding “whether software can *ever* be a ‘component of a patented invention’ within the meaning of Section 271(f),” by narrowly deciding whether the “golden master discs” and electronic transmissions of the software code themselves were components of the allegedly infringing devices manufactured abroad.⁸³ Microsoft, relying on the stipulated facts, asserted that it was undisputed that the “golden master discs,” the code encoded thereon, the electronic transmissions, and the code therein, were not components of any allegedly infringing computers sold abroad; only copies of the code sent from the United States were encoded onto foreign-made computers sold

⁷⁶ *Id.* at 1374.

⁷⁷ *Id.* at 1373–74.

⁷⁸ *Id.* at 1376.

⁷⁹ *AT&T Corp. v. Microsoft Corp.*, 127 S. Ct. 467 (2006) (grant of petition for certiorari).

⁸⁰ Oral Argument, *AT&T v. Microsoft*, No. 05-1056 (U.S. argued Feb. 21, 2007).

⁸¹ Petition for Writ of Certiorari at *i*, *AT&T v. Microsoft*, No. 05-1056 (U.S. Feb. 17, 2006), 2006 WL 403897 [hereinafter Certiorari Petition].

⁸² Brief for Petitioner at 34–44, *AT&T v. Microsoft*, No. 05-1056 (U.S. Dec. 15, 2006), 2006 WL 3693463 [hereinafter Petitioner Brief].

⁸³ *Id.* at 34.

abroad.⁸⁴ Microsoft's second argument was that binary software code lacking a physical existence (i.e., not encoded in a physical media) is not a "component" under § 271(f) because (1) such sequence "is design information, analogous to product specifications or a recipe," which can be used to make a product but is not itself a component of the product, and (2) such a sequence "is incapable of being 'combined' with other components . . . to practice the invention" as it is neither readable nor executable by a computer and thus cannot direct a computer "to function as the device claimed in the patent."⁸⁵

¶15 For the second question presented—whether copies of software made abroad can be supplied from the U.S for the purposes of § 271(f)—Microsoft had two main arguments. First, Microsoft claimed that under a plain reading of the statute its conduct should not incur liability under § 271(f).⁸⁶ Microsoft also maintained that both the majority and the dissent of the Federal Circuit panel and AT&T itself recognized that the software code installed on foreign-made computers were *copies created by foreign manufacturers abroad* and *not actually supplied from the U.S* by Microsoft.⁸⁷ Thus, Microsoft argued that the Federal Circuit's majority erred in conflating "copying" with "supplying" specifically for software inventions.⁸⁸ Microsoft indicated that such an interpretation was also impermissible in the absence of Congressional intent that software should be treated differently under the patent laws than other types of inventions.⁸⁹ Thus, to apply § 271(f) consistently to all types of inventions, liability cannot attach to the foreign-made software copies because the physical embodiment of the software code on the foreign-made copies was not the "very same" physical embodiment of the master code supplied by Microsoft; the copies were not created in the United States.⁹⁰

¶16 Also with respect to the second question before the Court, Microsoft focused on how statutory principles of construction prohibit an

⁸⁴ *Id.* at 35.

⁸⁵ *Id.* at 38.

⁸⁶ *Id.* at 14–15.

⁸⁷ *Id.* at 15–17, 23.

⁸⁸ *Id.* at 18–19.

⁸⁹ *Id.* at 20–23.

⁹⁰ *Id.* at 24–26. Microsoft drew an analogy between current modes of storing software code (e.g., DVDs, CDs, hard drives) and player piano music rolls and early computer punch-card technology; each being a physical embodiment of instructions to tell a device how to function. *Id.* at 23–25. Microsoft argued that, if the software code in the case at hand was embodied on punch-cards instead of on CDs or DVDs, it would be obvious that the copies of the software made abroad for use with foreign-made computers truly were not supplied from the United States. *Id.* at 25.

expansive reading of the provision.⁹¹ Microsoft argued that Congress did not intend to reach circumstances such as that presented here (i.e., where foreign-made copies are combined abroad); rather, “mak[ing] no mention of copies,” Congress “prohibited the supply of ‘components’ where ‘such components’—that is, the originals—may be combined overseas.”⁹² In light of this, Microsoft asserted that the Federal Circuit was acting in a legislative manner “to ensure that Section 271(f) ‘remain[s] effective,’” which raised separation of powers issues.⁹³ Furthermore, the presumption against extraterritorial application of U.S. law—arising out of comity, the territoriality of U.S. law, and separation of powers—limits the reach of § 271(f) and prohibits a statutory interpretation that would enable extraterritorial effects.⁹⁴

3. AT&T's Arguments

¶17 In response to Microsoft, AT&T first raised procedural arguments. AT&T maintained that, if the proper question before the Court was the narrower question of whether the golden master disk and electronic transmission of the software code themselves were components of the devices manufactured abroad, then the Court should dismiss the writ as improvidently granted.⁹⁵ Alternatively, AT&T asserted that the argument is “neither preserved nor correct” and is thus waived because Microsoft did not raise it in the courts below or in its petition for certiorari.⁹⁶

¶18 AT&T's interpretation of the term “component” within the meaning of § 271(f) encompassed both the physical *and* intangible parts of a system.⁹⁷ AT&T pointed out that “component” means “‘a constituent part’ or ‘ingredient’” and is not limited to physical parts of a system or device.⁹⁸ Additionally, the term “component” is “routinely used to describe software independent of any physical format, whether as part of a computer system consisting of both hardware and software or as part of a larger non-physical software program.”⁹⁹ AT&T reasoned that Congress could have chosen to limit the scope of § 271(f) to physical components of a patented invention in the language of the statute but did not because “[i]ntangible ‘[software] code . . . is not only *a* component,’ but [is] *the key part*’ of virtually any

⁹¹ *Id.* at 26–33.

⁹² *Id.* at 27–28.

⁹³ *Id.* at 29 (citation omitted).

⁹⁴ *Id.* at 29–30.

⁹⁵ Brief for Respondent at 17, *AT&T Corp. v. Microsoft Corp.*, No. 05-1056 (U.S. Jan. 2007), 2006 WL 789602 [hereinafter Respondent Brief].

⁹⁶ *Id.*

⁹⁷ *Id.* at 19.

⁹⁸ *Id.* (citations removed).

⁹⁹ *Id.* at 20.

invention practiced through software.”¹⁰⁰ Thus, AT&T asserted that “if object code as such did *not* qualify as a ‘component’ of such products, Section 271(f) would have no meaningful application to the software industry,” which could not have been the intent of Congress.¹⁰¹

¶19 AT&T supported its statutory interpretation by arguing that “[o]bject code is an essential component of software technology even if it must be combined with physical components to function” and further reasoned that intangible software code is like any other component that has no utility on its own and needs to be combined with another component to yield a functional device.¹⁰² AT&T stated that “combining intangible object code with physical components such as a hard drive or CD to make software technology work within a variety of computer systems” reflects the “basic structure of modern computer technology.”¹⁰³ As such, for software it does not make sense to try and distinguish “instructions” from patented “product” because “the product is a machine that contains and continuously performs the ‘instructions’ expressed in object code.”¹⁰⁴

¶20 Based on the above arguments, AT&T maintained that Microsoft did supply intangible object code from the United States for combination with other components abroad and is thus liable under § 271(f) for the foreign-made copies combined with foreign-made computers.¹⁰⁵ Disputing Microsoft’s arguments regarding “supply” of components from the United States, AT&T pointed out that Microsoft’s position is based on incorrect reasoning regarding whether software code is a “component.”¹⁰⁶

¶21 Finally, AT&T found no solid policy reason to disregard the plain meaning of the statute and exclude intangible components from within the scope of § 271(f).¹⁰⁷ AT&T asserted that Microsoft’s arguments would essentially amount to a repeal of § 271(f) with regards to software components, creating a special exception in the patent laws amongst technologies for software and leaving software inventors in the United States open to free-riding abroad.¹⁰⁸ In practice, Microsoft’s position would mean that only the copy of the software embodied on a physical medium

¹⁰⁰ *Id.* at 22 (quoting *Eolas Techs. Inc. v. Microsoft Corp.*, 399 F.3d 1325, 1339 (Fed. Cir. 2005), *cert. denied*, 126 S. Ct. 568 (2005)).

¹⁰¹ *Id.*

¹⁰² *Id.* at 23.

¹⁰³ *Id.* at 24.

¹⁰⁴ *Id.* at 28.

¹⁰⁵ *Id.* at 28, 32–33.

¹⁰⁶ *Id.* at 28–30.

¹⁰⁷ *Id.* at 36.

¹⁰⁸ *Id.* at 37–41. AT&T points out that U.S. companies can avoid liability by sending instructions as to how to write the software code abroad, as opposed to sending the complete code itself. *Id.* at 36–37.

and sent abroad could be considered a “component” under § 271(f); thus, there would be no liability for any software installed on a computer abroad after being shipped from the United States.¹⁰⁹ Additionally, AT&T reasoned that the presumption against extraterritoriality did not apply because (1) the conduct at issue did occur in the United States (Microsoft “ship[ed] its U.S.-developed, U.S.-tested Windows software from the United States” abroad),¹¹⁰ (2) the presumption “operates only to break interpretive ties when a statute is ambiguous as to its geographic scope,” which was not the case here,¹¹¹ (3) § 271(f) was created to overcome the presumption in situations defined by the statute’s plain language,¹¹² (4) Microsoft did not cite any authority that application of § 271(f) to its conduct runs counter to any foreign nation’s policy,¹¹³ and (5) Congress enacted § 271(f) so that U.S. patent holders would not need to seek foreign patent protection or redress for infringement abroad.¹¹⁴ AT&T concluded that it is up to Congress to alter the balance it has set between U.S. patent holders and component suppliers, innovation and competition.¹¹⁵

4. *Amicus Curiae Briefs*

¶22 Amicus curiae briefs were submitted by representatives of different industries, academics and practitioners, and the Court solicited the opinion of the Department of Justice.¹¹⁶ While the briefs contained arguments both for and against the inclusion of software within the term “component” under § 271(f), where addressed, they almost unanimously disagreed with the Federal Circuit’s disregard for the inherency of territoriality in U.S.

¹⁰⁹ *Id.* at 39.

¹¹⁰ *Id.* at 41.

¹¹¹ *Id.* at 42.

¹¹² *Id.* at 42–43.

¹¹³ *Id.* at 44–46.

¹¹⁴ *Id.* at 46.

¹¹⁵ *Id.* at 47–49.

¹¹⁶ The following parties have filed amicus curiae briefs with the Supreme Court for this appeal: Software & Information Industry Association (“SIIA”); Business Software Alliance (“BSA”); Amazon.com, Inc. *et al.*; Yahoo! Inc.; Intel Corp.; Autodesk, Inc.; Shell Oil Co.; Intellectual Property Professors; Software Freedom Law Center (“SFLC”); Fédération Internationale Des Conseils en Propriété Industrielle (“FICPI”); the Solicitor General; American Intellectual Property Law Association (“AIPLA”); Eli Lilly, BayhDoyle25.inc; U.S. Philips Corp.; Wisconsin Alumni Research Foundation *et al.*; Professor Edward Lee; Software Freedom Law Center; the Houston Intellectual Property Law Assoc., and the Patent, Trademark & Copyright Section of the District of Columbia.

intellectual property law as a part of the international intellectual property right system.¹¹⁷

III. 35 U.S.C. 271(F) SHOULD BE INTERPRETED CONSERVATIVELY TO AVOID INTERNATIONAL DISCORD AND NATIONAL HARM

A. Extraterritorial application of U.S. patent law will disrupt the comity-based international scheme of intellectual property rights.

¶23 The presumption against extraterritoriality is a “longstanding principle of American law ‘that legislation of Congress, unless a contrary intent appears, is meant to apply only within the territorial jurisdiction of the United States.’”¹¹⁸ The presumption “serves to protect against unintended clashes between our laws and those of other nations[,] which could result in international discord.”¹¹⁹ A cornerstone of this presumption is the doctrine of comity, which is defined as “[a] practice among political entities (as nations, states, or courts of different jurisdictions), involving esp[ecially] mutual recognition of legislative, executive, and judicial acts.”¹²⁰ Comity reflects the respect of one sovereign nation for another.

¶24 Comity considerations are a significant factor in all major international intellectual property treaties, including the Paris Convention¹²¹ and TRIPS Agreement.¹²² The United States is a signatory of both these treaties. A governing principle of these treaties arising out of comity is

¹¹⁷ Respondent Brief, *supra* note 95, at 46. Of the amicus briefs filed that address the application of the presumption against extraterritoriality to § 271(f), Microsoft, Intellectual Property Professors, SIIA, Intel, FICPI, Yahoo, and the United States support the application of the presumption, while BayhDoyle25.inc opposes it.

¹¹⁸ *EEOC v. Arabian American Oil Co. (Aramco)*, 499 U.S. 244, 248 (1991) (quoting *Foley Bros., Inc. v. Filardo*, 336 U.S. 281, 285 (1949)).

¹¹⁹ *Id.*

¹²⁰ BLACK’S LAW DICTIONARY 284 (8th ed. 2004). The entry also quotes *Hilton v. Guyot*, 159 U.S. 113, 163–64 (1895) (“‘Comity,’ in the legal sense, is neither a matter of absolute obligation, on the one hand, nor of mere courtesy and good will, upon the other. But it is the recognition which one nation allows within its territory to the legislative, executive, or judicial acts of another nation, having due regard both to international duty and convenience, and to the rights of its own citizens, or of other persons who are under the protection of its laws.”). *Id.*

¹²¹ Paris Convention for the Protection of Intellectual Property, Mar. 20, 1883, 21 U.S.T. 1583, 828 U.N.T.S. 305 [hereinafter Paris Convention], *available at* <http://www.wipo.int/treaties/en/ip/paris/>. The treaty has been amended several times (most recently in 1979).

¹²² TRIPS Agreement, *supra* note 33.

national treatment.¹²³ National treatment is “[t]he policy or practice of a country that accords the citizens of other countries the same intellectual property protection as it gives its own citizens, with no formal treaty of reciprocity required.”¹²⁴ National treatment “allows countries the autonomy to develop and enforce their own laws, while meeting the demands for international protection. Effectively, national treatment is a mechanism of international protection without harmonization.”¹²⁵ Thus, the reliance on national treatment in these treaties has permitted nations to ensure protection for patentable inventions while maintaining independent patent law systems.¹²⁶ This is in contrast to international copyright treaties where the trend has been towards harmonization.¹²⁷ However, the national treatment principle is a core principle in international copyright treaties, and it maintains a strong presumption against extraterritorial application of U.S.

¹²³ See World Intellectual Property Organization, Summary of the Paris Convention for the Protection of Intellectual Property (1883), http://www.wipo.int/treaties/en/ip/paris/summary_paris.html (last visited Mar. 25, 2007) (Applying broadly to all intellectual property rights, the Convention’s substantive provisions “fall into three main categories: national treatment, right of priority, [and] common rules.”); World Trade Organization, TRIPS: A More Detailed Overview of the TRIPS Agreement, http://www.wto.org/english/tratop_e/trips_e/intel2_e.htm (last visited Mar. 25, 2007) (“[T]he Agreement provides for certain basic principles, such as national and most-favoured-nation treatment, and some general [procedural] rules . . . [and] requires Member countries to make patents available for any inventions, whether products or processes, in all fields of technology without discrimination, subject to the normal tests of novelty, inventiveness and industrial applicability.”). The author benefited greatly from discussing this topic with Professor Reichman.

¹²⁴ BLACK’S LAW DICTIONARY 1054 (8th ed. 2004).

¹²⁵ *Id.* (quoting LIONEL BENTLY & BRAD SHERMAN, INTELLECTUAL PROPERTY LAW 5 (Oxford Univ. Press, USA 2004) (2001)).

¹²⁶ See Andrew J. Sherman, *International Protection of Brands and Patents*, KAUFFMAN EVENTURING, Aug. 1, 2006, http://www.eventuring.org/eShip/Redirect?key=Entrepreneurship/Resource/Resource_569.htm (discussing the international treaties that govern patent rights).

¹²⁷ See the Berne Convention for the Protection of Literary and Artistic Works, (PARIS ACT) July 24, 1971, S. Treaty Doc. No. 99-27 (1986), 1161 U.N.T.S. 3 (entered into force Mar. 1, 1989) available at <http://www.wipo.int/treaties/en/ip/berne/>, for the primary treaty governing international copyright law requirements. This treaty has resulted in significant international harmonization of copyright protections. Michael Trenholm and John Holcomb, *International Intellectual Property Conventions*, RIVERSIDE LAWYER, Sept. 2006, at 14, 15, available at <http://riversidecountybar.com/barpubs/0609RL.pdf>.

intellectual property laws.¹²⁸ As such, the territorial nature of intellectual property law is implicit in the principles of comity and national treatment.¹²⁹ Guided by these principles, the judiciary has largely avoided “act[ing] in a manner that might disrupt Congress’s efforts to secure a more stable international intellectual property regime unless Congress otherwise clearly has expressed its intent . . . [as such action] might well send the signal that the United States does not believe that the protection accorded by the laws of other member nations is adequate.”¹³⁰

¶25 The Federal Circuit’s ruling in *AT&T v. Microsoft*, expanding the interpretation of § 271(f) to encompass acts conducted outside the territorial limits of the United States, will disrupt this international scheme with regards to both software patent infringement and other areas of intellectual property right enforcement more generally. For example, technology-driven e-commerce, in which software plays a significant role, is an important aspect of today’s economy, both nationally and internationally. While software is protected in the United States and abroad by copyright law, patent protection for software is much less uniform.¹³¹ Software is patentable in the United States and Japan, but patentability in Europe varies from country to country.¹³² In fact, software patentability is a hotly-debated

¹²⁸ See *Subafilms, Ltd. v. MGM-Pathe Comm. Co.*, 24 F.3d 1088, 1097 (9th Cir. 1994) (en banc) (“[I]t is commonly acknowledged that the national treatment principle implicates a rule of territoriality.”). The Court in *Subafilms* discusses how U.S. treaty obligations under the newly joined Berne Convention and newly created TRIPS Agreement influence its decision to interpret the Copyright Act conservatively. *Id.* at 1097–1098. The significance of this case in copyright law was pointed out to the author by Professor Reichman.

¹²⁹ See *Deepsouth Packing Co. v. Laitram Corp.*, 406 U.S. 518, 531 (1972) (“Our patent system makes no claim to extraterritorial effect; ‘these acts of Congress do not, and were not intended to, operate beyond the limits of the United States,’ and we correspondingly reject the claims of others to such control over our markets.”) (citations omitted).

¹³⁰ *Subafilms*, 24 F.3d at 1097–98.

¹³¹ See Fenwick & West LLP, 2006 Update: International Legal Protection for Software Chart Spring 2006, <http://www.softwareprotection.com/chart.htm> (last visited Apr. 2, 2007), for a general chart describing patent and copyright protection in different countries and applicable treaties, and World Intellectual Property Organization, Business Method and Computer Software Patents, http://www.wipo.int/sme/en/e_commerce/computer_software.htm (last visited Apr. 2, 2007) [hereinafter Business Method and Computer Software Patents], which generally describes the state of software patentability in the world.

¹³² Fenwick & West LLP, International Legal Protection for Software, Patent Protection, <http://www.softwareprotection.com/patent.htm> (last visited Apr. 2, 2007) [hereinafter International Legal Protection for Software]; Business Method and Computer Software Patents, *supra* note 131. These articles discuss how, despite the fact that software is patentable under the European Patent

issue in the European Union on which member states have yet to reach a consensus.¹³³ Because the state of patent protection for software is unsettled in Europe, the imposition of U.S. patent law abroad, particularly in a manner that creates protection for software, will cause “serious risk of interference with a foreign nation’s ability to regulate its own affairs.”¹³⁴ The extraterritorial reach of § 271(f) as interpreted by the Federal Circuit in *AT&T v. Microsoft* will also cause “difficult choice-of-law problems . . . that the federal courts’ general adherence to the territoriality principle largely has obviated [until now].”¹³⁵ In addition, such protection under U.S. patent law may deter inventors from obtaining patents outside the United States for their inventions and thus “threatens to disrupt foreign nations’ patent law schemes.”¹³⁶

¶26 Importantly, comity and related principles of international law also support the position that § 271(f) should be repealed in its entirety, as suggested by recent patent reform bills.¹³⁷ Even narrowly construed,

Convention, the national nature of patent prosecution and litigation in the European Union has resulted in variable software patent protection (patent issuance and enforcement) from country to country. *See also* *State St. Bank & Trust Co. v. Signature Fin. Group*, 149 F.3d 1368, 1374 (Fed. Cir. 1998) (holding that a numerical calculation that produces a “useful, concrete and tangible result” is patentable).

¹³³ *See* Steven J. Vaughan-Nichols, *American-Style Patents Won’t Cross the Pond to EU*, EWEEK.COM, July 6, 2005, <http://www.eweek.com> (search “American-style patents”; then follow article hyperlink); *Software Patent Bill Thrown Out*, BBC NEWS, July 6, 2005, <http://news.bbc.co.uk/2/hi/technology/4655955.stm>. These articles describe the controversial *Proposal for a Directive of the European Parliament and of the Council on the Patentability of Computer-Implemented Inventions*, COM (2002) 92 final (Feb. 20, 2002), available at http://eur-lex.europa.eu/LexUriServ/site/en/com/2002/com2002_0092en01.pdf, and its failure to be enacted by the European Parliament on July 6, 2005.

¹³⁴ *See* *Certiorari Petition*, *supra* note 81, at 28 (discussing how “subjecting foreign manufacturer’s to the requirements of U.S. patent law” will disrupt the intellectual property law systems of foreign nations); *cf.* *F. Hoffmann-LaRoche Ltd. v. Empagran, S.A.*, 542 U.S. 155, 165 (2004) (discussing the presumption against extraterritoriality in the context of applying U.S. antitrust laws to conduct that occurs outside the United States).

¹³⁵ *See* *Subafilms, Ltd. v. MGM-Pathe Comm. Co.*, 24 F.3d 1088, 1098 (9th Cir. 1994) (en banc). “Although the [copyright] treaties do not expressly discuss choice-of-law rules, it is commonly acknowledged that the national treatment principle implicates a rule of territoriality.” *Id.* at 1097.

¹³⁶ *Certiorari Petition*, *supra* note 81, at 13.

¹³⁷ *See* *Patents and Global Drug Development*, PHARMA FOCUS ASIA, Feb. 2007, http://www.pharmafocusasia.com/magazine/previous_issue/coverstory.htm (“Since being introduced [on 8 June 2005], various substitutes of [H.R. 2795, the Patent Act of 2005] have been proposed in an attempt to reach agreement

§ 271(f) represents an extraterritorial measure in U.S. law. It would be more in accordance with these principles for U.S. patent law to require the inventor of any given invention (e.g., a shrimp deveining machine) to apply for foreign patents where protection for the invention is desired abroad. Patent schemes vary from country to country and differences should be respected as reflecting the policy choices of sovereign nations. Inventions that are patentable in one country may not be patentable in another for a variety of reasons (e.g., subject matter, date of invention or filing, etc.). Thus, the question arises as to why U.S. patent law should extend in these circumstances to provide patent protection against competitors in the United States while no protection can be obtained abroad. AT&T argued that “Congress enacted Section 271(f) because it understood that foreign patent protections are sometimes weaker than their U.S. counterparts, and because it wished to spare U.S. patent-holders from the considerable expense of obtaining patent protections in dozens of foreign jurisdictions.”¹³⁸ However, this point of view is both out-of-date and directly counter to the principles underlying the significant international intellectual property treaties to which the United States has become a member since the enactment of § 271(f).¹³⁹ The benefits of § 271(f) are also called into question when U.S. companies either face tremendous potential infringement liability, diminished competitiveness, or the choice of moving development and manufacturing operations outside of the United States.¹⁴⁰

B. Separation of powers supports the presumption against extraterritorial application of U.S. law.

¶27 The Federal Circuit’s ability to disrupt the patent law schemes of foreign nations illustrates why the presumption against extraterritoriality also reflects the institutional roles and competence of the different branches

between interested parties. One proposed substitute known as The Coalition Print was suggested by a coalition of major US corporations in September 2005. Section 6(b) of The Coalition Print would repeal 35 U.S.C 271.”); *see also* Brief of BSA as Amicus Curiae Supporting Petitioner at 21–22, *AT&T Corp. v. Microsoft Corp.*, No. 05-1056 (U.S. Dec. 15, 2006) (pointing out that H.R. 2795, 109th Cong. § 5 (2005) (proposing to amend § 271(f) to limit “component” to “tangible item[s] that [are themselves] combined physically with other components to create the combination that is alleged to infringe”), and S. 3818, 109th Cong. § 5 (2006) (proposing an outright repeal of Section 271(f)), “evince a desire to ensure that software is on the same footing as other patentable material, and that it should receive neither increased scrutiny nor added protections.”). The author is grateful to Professor Rai for pointing out this argument.

¹³⁸ Respondent Brief, *supra* note 95, at 46.

¹³⁹ *See supra* Part III.A.

¹⁴⁰ Certiorari Petition, *supra* note 81, at 20; *infra* Part III.C.2.

of the federal government. Under the United States Constitution, the executive branch, with the consent of the Senate, has the power to enter into treaties, while the legislative branch has the power to regulate commerce.¹⁴¹ By interpreting § 271(f) in a technology-dependent manner, the Federal Circuit moved liability for infringement of a U.S. patent into the realm of international law, affecting past and future trade negotiations and interfering with the functions of the other federal branches.¹⁴² As such, the Federal Circuit's decision to interpret § 271(f) expansively is unwise because "the legislative and executive branches are much better equipped than the judiciary to evaluate the complex foreign policy considerations raised by the extraterritorial application of U.S. law."¹⁴³ In addition, if Congress wants § 271(f) to reflect the advances in software technology since its enactment, it can amend the statute; the judiciary should not take it upon itself to update the law through case interpretation.¹⁴⁴ Thus, separation of powers and

¹⁴¹ U.S. CONST. art. I, § 2, cl. 2 (Treaty Power), art. II, § 8, cl. 3 (Commerce Clause).

¹⁴² See *Brown v. Duchesne*, 60 U.S. (19 How.) 183, 195 (1856) (discussing how the power of Congress to "promote the progress of science and the useful arts" is "separate and distinct" from the power of the Executive to enter into treaties and the power of Congress to regulate commerce); Brief for FICPI as Amicus Curiae Supporting Petitioner at 8–9, *AT&T v. Microsoft*, No. 05-1056 (U.S. Dec. 14, 2006), 2006 WL 3805865 [hereinafter FICPI Brief] (arguing that the United States has the duty, as a signatory of the Paris Convention, "to adopt in accordance with its constitution, the measures necessary to ensure the application of this Convention" and that for "§ 271(f) to extend to foreign countries, there must be a special agreement between the United States and the foreign countries by treaty, not by unilateral act of Congress"); Petitioner Brief, *supra* note 82, at 31 ("The presumption against the extraterritorial application of U.S. law is especially strong in the patent context because the application of U.S. patent law to foreign commercial activity intrudes upon other nations' intellectual property law systems and thereby creates a significant risk of international discord.").

¹⁴³ *Certiorari Petition*, *supra* note 81, at 23 (discussing *Chi. & S. Air Lines, Inc. v. Waterman S.S. Corp.*, 333 U.S. 103, 111 (1948) (asserting that "the Judiciary has neither the aptitude, facilities nor responsibility" to make decisions affecting international relations)).

¹⁴⁴ See *Deepsouth Packing Co. v. Laitram Corp.*, 406 U.S. 518, 530–31 (1972) (refusing to interpret § 271(f) expansively in the absence of a "clear and certain signal from Congress" because "the sign of how far Congress has chosen to go [to promote the progress of science and the useful arts] can come only from Congress"); *AT&T Corp. v. Microsoft Corp.*, 414 F.3d 1366, 1375 (Fed. Cir. 2005), *cert. granted*, 127 S. Ct. 467 (U.S. Oct. 27, 2006) (Rader, J., dissenting) (discussing the policy of *Deepsouth*); Government Brief, *supra* note 53, at 14 (giving the Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860 (1998) (codified at 17 U.S.C. §§ 1201–1204 (2000)), as an example of intellectual property right legislation enacted by Congress to address the

institutional competence concerns weigh in favor of judicial restraint in interpreting § 271(f).¹⁴⁵

C. The Federal Circuit's interpretation of § 271(f) will disrupt foreign relations and harm the national software industry.

1. Foreign Relations

¶28 Extraterritorial application of U.S. law dramatically elevates the risk of international discord due to the potential for interference with the intellectual property systems of other sovereign nations.¹⁴⁶ By interpreting the term “supplying” to include “copying” for software technology in *AT&T v. Microsoft*, the Federal Circuit created liability for patent infringement under § 271(f) for acts conducted outside the United States.¹⁴⁷ In so doing, the court imposed this country’s policy choice to provide patent protection for software on other countries. The countries to which Microsoft shipped master copies of the software code, Germany and Japan, illustrate how this can be a problem. As discussed above, patent protection for software is not a settled issue in Europe, and enforcement of software patents in Germany specifically is rarely successful.¹⁴⁸ Additionally, patent protection for

technological advances of the digital era); Brief of Intel Corp. as Amicus Curiae in Support of Petitioner at 15–16, *AT&T v. Microsoft*, No. 05-1056 (U.S. Dec. 15, 2006) (discussing “the lesson of *Deepsouth*,” that “it is up to Congress, not the courts, to extend the territorial scope of U.S. patent law to address modern developments in technology and international trade”).

¹⁴⁵ See *Parker v. Flook*, 437 U.S. 584, 596 (1978) (“It is our duty to construe the patent statutes as they now read in light of our precedents, and we must proceed cautiously when we are asked to extend patent rights into areas wholly unforeseen by Congress.”).

¹⁴⁶ See *F. Hoffmann-LaRoche Ltd. v. Empagran, S.A.*, 542 U.S. 155, 165 (2004) (discussing how the presumption against extraterritorial application of U.S. law “helps the potentially conflicting laws of different nations work together in harmony”).

¹⁴⁷ *AT&T v. Microsoft*, 414 F.3d at 1370.

¹⁴⁸ See Wendy M. Grossman, *Euro Software Patents Pending*, WIRED NEWS, Mar. 19, 2005, <http://www.wired.com/news/politics/0,1283,66938,00.html> (describing how software patents granted by the European Patent Office have not been enforced in Germany); Wikipedia, *Software patents under the European Patent Convention*, http://en.wikipedia.org/wiki/Software_patent_under_the_European_Patent_Convention (naming the German Federal Court cases rejecting “monopoly claims to computers and programs operating thereon”) (as of Apr. 2, 2007, 12:30 EST); R. G. C. Jenkins & Co., *Computer Program Inventions Before the German Supreme Court—A Brief Summary*,

software in Japan has also recently come into question.¹⁴⁹ The extraterritorial application of § 271(f) thus brings U.S. law into direct conflict with the intellectual property schemes of other nations and can affect the ability of foreign governments to regulate their own affairs as they see fit.¹⁵⁰ Such exportation of U.S. law could thereby disrupt American foreign relations and negatively impact future international negotiations.¹⁵¹ Furthermore, enforcing U.S. law within foreign jurisdictions may provoke retaliation by the countries affected.¹⁵² Such retaliation could include the expansion of foreign laws to encompass activities within the United States, diminished comity towards U.S. law, and even reduction in trade relations.¹⁵³ Thus, an expansive reading of § 271(f) by the judiciary not only risks harming the standing of the United States in the international arena, but also could destabilize the international scheme of intellectual property

http://www.jenkins-ip.com/serv/serv_10.htm (last visited Mar. 25, 2007)

(summarizing key software patent cases where patentability of software requires the invention to be of “a technical nature”).

¹⁴⁹ See Emma Barraclough, Japan’s Top IP Judges Overturn Panasonic Patent, MANAGING INTELLECTUAL PROPERTY NEWS, Oct. 1, 2005,

<http://www.managingip.com> (search for “Japan Panasonic Patent”; then follow hyperlink for article) (discussing the Japanese Intellectual Property High Court invalidation of Panasonic’s software patent in an infringement suit, despite the fact that Japan is typically considered to be much in line with the United States regarding the patentability of software).

¹⁵⁰ See Brief of Amicus Curiae Yahoo! Inc. in Support of Petitioner at 18, *AT&T v. Microsoft*, No. 05-1056 (U.S. Dec. 15, 2006), 2006 WL 3723904 [hereinafter Yahoo Brief] (“These nations are actively engaged in deciding how and under what circumstances software should be patentable. Interference with their carefully made decisions is unlikely to be eagerly welcome.”).

¹⁵¹ See Brief for Amicus Curiae Bar of D.C., Patent, Trademark & Copyright Section in Support of Neither Party at 10, *AT&T v. Microsoft*, No. 05-1056 (U.S. Dec. 15, 2006), 2006 WL 3740356 (“Regardless of whether a violation of TRIPS has occurred, the Federal Circuit should be cognizant of possible missteps that would cause the United States to suffer international repercussions.”); World Intellectual Property Organization, Substantive Patent Law Harmonization, <http://www.wipo.int/patent/law/en/harmonization.htm> (last visited Mar. 25, 2007) (describing the current drafting of the Substantive Patent Law Treaty); FICPI Brief, *supra* note 142, at 20 (discussing the failure of the European Union’s proposed Directive on software patentability and the impasse of the international negotiations over the Substantive Patent Law Treaty, partly due to the scope of software patentability).

¹⁵² Certiorari Petition, *supra* note 81, at 28–29. While *AT&T v. Microsoft* only deals with Microsoft’s activities in Japan and Germany, the impact of the Federal Circuit’s interpretation of § 271(f) will reach all foreign markets.

¹⁵³ *Id.*

rights.¹⁵⁴ To avoid these problems, a company wanting to protect its foreign market shares from competitors must look to the patent law of those countries and, where protection is unavailable (i.e., software is not patentable or protection is not enforced), such companies must abide by the policy choices of those sovereign nations and not look to U.S. patent law for protection.

2. Domestic Economic Harm

¶29 In addition to its international effects, the Federal Circuit's interpretation of § 271(f) will also likely result in significant harm to the U.S. software industry.¹⁵⁵ American companies will be competitively disadvantaged abroad due to the fact that they, unlike their foreign competitors, are potentially exposed to expansive secondary liability for infringement under § 271(f) for their activities abroad.¹⁵⁶ The potential for liability is significant because the U.S. software industry has accumulated huge numbers of software patents.¹⁵⁷ Because the practice of shipping master copies of software abroad for manufacturing purposes was a permissible activity prior to the Federal Circuit's holding, American companies who have followed this practice are also now subject to what is essentially a de facto compulsory licensing scheme by the ex post application of the Federal Circuit's new expansive reading of § 271(f).¹⁵⁸

¹⁵⁴ See discussion *supra* Part III.A; see also JAMES BOYLE, SHAMANS, SOFTWARE, AND SPLEENS: LAW AND THE CONSTRUCTION OF THE INFORMATION SOCIETY 3 (Harvard University Press 1997) (1996) (discussing how the United States has become the world's most vigorous and effective champion of strengthened intellectual property rights). By interfering with the intellectual property regimes of other nations, the United States harms its reputation as champion of intellectual property rights.

¹⁵⁵ See Brief Amici Curiae of Intellectual Property Professors in Support of Reversal at 11–12, *AT&T v. Microsoft*, No. 05-1056 (U.S. Dec. 14, 2006), 2006 WL 3740618.

¹⁵⁶ *Id.*

¹⁵⁷ See Certiorari Petition, *supra* note 81, at 20 (discussing “the looming threat of crippling global liability” U.S. companies face and the high risk due to the “thousands of unexploited patents that comprise the ‘modern patent thicket’”).

¹⁵⁸ See *AT&T Corp. v. Microsoft Corp.*, 414 F.3d 1366, 1376 (Fed. Cir. 2005), *cert. granted*, 127 S. Ct. 467 (U.S. Oct. 27, 2006) (Rader, J., dissenting) (discussing how, prior to *AT&T v. Microsoft*, companies needed to seek protection for inventions abroad under the laws of other countries); Certiorari Petition, *supra* note 81, at 20, 22 (discussing the “daunting and unforeseen” potential infringement damages U.S. companies now face and how this “jeopardizes the billions of dollars of investments that American high-technology business have made in overseas manufacturing facilities”). The Federal Circuit's interpretation of § 271(f) would create a situation much like a de facto compulsory licensing system because companies like Microsoft, who

The extent of liability that such companies will incur if prosecuted will be unexpected and financially detrimental and, as a result, may drive many companies out of business.¹⁵⁹ In addition, the threat of such liability may force companies within the United States to relocate their research and development divisions outside the United States to avoid liability, and it could deter new technology-businesses from locating operations within the United States in the first place.¹⁶⁰ The Federal Circuit's interpretation of "supplies" also opens the door to expanded liability in the semiconductor, pharmaceutical and biotechnology industries as well.¹⁶¹

developed business models using foreign manufacturers to copy software for foreign markets, in reliance on the state of the law prior to *AT&T v. Microsoft*, will be forced now to either license the software for use abroad, risk liability for infringement under § 271(f), or incur the heavy costs of redesigning their business models.

¹⁵⁹ Certiorari Petition, *supra* note 81, at 22. American companies that have such foreign manufacturing facilities will not have considered this liability in their foreign investment calculations and now may incur significant costs in changing their business strategy. Such companies also did not have the opportunity to negotiate better licensing terms than will be imposed by the courts. An example of the potential damages that can arise from expansive liability under § 271(f) is the recent verdict against Microsoft for \$1.52 billion in damages for infringement (in the United States and abroad) of two software patents held by Lucent-Alcatel: this is the largest damages award for patent infringement to date. See Special Verdict Form, *Lucent Techs. Inc. v. Gateway, Inc.* (2007) (No. 02cv2060-B(CAB)), available at <http://www.casd.uscourts.gov/casd/filerev.nsf/a4224145c26d1ccb88256913007f6e67/eaddc4a24ae1242d8825728b00047562?OpenDocument>; Jeff St. Onge and Bill Callahan, *Microsoft Told to Pay Alcatel-Lucent \$1.52 Billion (Update 7)*, BLOOMBERG.COM, Feb. 22, 2007, <http://www.bloomberg.com> (search "Search News" for "Alcatel-Lucent"; then follow article hyperlink).

¹⁶⁰ Certiorari Petition, *supra* note 81, at 22.

¹⁶¹ See Certiorari Petition, *supra* note 81, at 21 (discussing how the Federal Circuit's expansive interpretation of "component" of a patented invention opens the door to liability in the semiconductor and biotechnology industries); Brief of SIIA as Amicus Curiae Supporting Petitioner at 18–19, *AT&T v. Microsoft*, No. 05-1056, 2006 WL 3740362 [hereinafter SIIA Brief]; Patents and Global Drug Development, PHARMA FOCUS ASIA, Feb. 2007, http://www.pharmafocusasia.com/magazine/previous_issue/coverstory.htm. In the face of such open-ended liability, there have been moves in Congress to amend and repeal § 271(f); see also *supra* text accompanying notes 137–40.

IV. THE SUPREME COURT SHOULD STRIKE DOWN THE FEDERAL CIRCUIT'S EXPANSIVE INTERPRETATION OF § 271(F) IF SOFTWARE IS A "COMPONENT" OF A PATENTABLE INVENTION

¶30 The first issue before the Supreme Court is "[w]hether software object code can be a component of a patented invention" within the meaning of § 271(f).¹⁶² There are strong arguments on both sides of this issue, and it rests with the Court to direct future application of Title 35 to software.¹⁶³ Only if the Court concludes that software code can be a "component" under § 271(f) will it reach the second issue presented: "[w]hether copies of such software object code are 'supplie[d]' from the United States when those copies are created overseas by replicating a separate master version supplied from the United States."¹⁶⁴ If the Supreme Court does reach this second issue, it should strike down the Federal Circuit's software-specific interpretation of "supply" within the context of § 271(f) as contrary to the presumption against extraterritorial application of U.S. law.

¶31 In construing § 271(f), the Court should "assume that Congress legislates against the backdrop of the presumption against extraterritoriality."¹⁶⁵ According to the general rules of statutory construction, the Court should look first to the text of the statute and then to the legislative history.¹⁶⁶ In considering whether to apply the presumption, the Court should assess these sources to determine whether Congress has expressed a clear intent for the statute to have extraterritorial effects. In the absence of clearly expressed Congressional intent, "as long as 'the statute's language reasonably permits an interpretation consistent with' the general presumption that Congress seeks to avoid interference with other nations' sovereignty, a court 'should adopt [that interpretation]'" even if it is not the

¹⁶² Government Brief, *supra* note 53, at I.

¹⁶³ See, e.g., Yahoo Brief, *supra* note 150, at 8–9 (software code on the golden master disks is a form of instructions that, when installed on computers, creates a component); SIIA Brief, *supra* note 161, at 9 ("[A] 'component' . . . in the context of computer code must refer to the particular instance of the computer code that is downloaded onto, and thus physically part of, an accused computer system."); Government Brief, *supra* note 53, at 7–10 (Software is not "intangible information" because it has a physical presence; software can be a component because it can be "a part, element or ingredient of a patented invention.").

¹⁶⁴ Government Brief, *supra* note 53, at I. In the author's opinion, the court is likely to answer the first question in the affirmative based on its own and the Federal Circuit's software patent jurisprudence.

¹⁶⁵ *EEOC v. Arabian American Oil Co. (Aramco)*, 499 U.S. 244, 248 (1991).

¹⁶⁶ See *AT&T Corp. v. Microsoft Corp.*, 414 F.3d 1366, 1369–71 (Fed. Cir. 2005), *cert. granted*, 127 S. Ct. 467 (U.S. Oct. 27, 2006).

more natural reading.¹⁶⁷ Thus, if it is possible to interpret a statute without causing the law to have extraterritorial effects, the Court should do so where Congress has not clearly indicated that the law should have such effects. Comity considerations and the territorial nature of patent law compel this approach.¹⁶⁸

¶32 The language of § 271(f) is, on its face, general and technology-neutral. Because the term “supply” is not defined in Title 35, it should be interpreted as having its “ordinary, contemporary, common meaning.”¹⁶⁹ As Judge Rader indicated, “‘suppl[ying]’ . . . does not include ‘copying,’ ‘replicating,’ or ‘reproducing’—in effect ‘manufacturing.’”¹⁷⁰ Copying “is a separate and distinct act” from “suppl[ying].”¹⁷¹ This ordinary interpretation of the term “supplies” is consistent with the Federal Circuit’s practice of applying U.S. patent law in a technology-neutral manner and even with the majority’s rationale in *AT&T v. Microsoft* for interpreting the term to encompass “copying.”¹⁷² It is clear from § 271(f)’s twenty-year-old legislative history that the provision was primarily enacted to close the patent-infringement loophole exposed in *Deepsouth Packing*.¹⁷³ While § 271(f) may have been a remedial measure to stop-gap this loophole, “[n]othing in § 271(f) or its enacting documents expresses an intent to attach liability to manufacturing activities occurring wholly abroad” or an intent that the statute be interpreted in a technology-dependent manner.¹⁷⁴ Thus, Judge Rader was correct in interpreting “supply” within the scope of § 271(f) in a more accurate and technology-neutral manner such that providing one copy of a software code abroad would not cause liability for

¹⁶⁷ Petitioner Brief, *supra* note 82, at 30 (quoting *F. Hoffmann-LaRoche Ltd. v. Empagran, S.A.*, 542 U.S. 155, 174 (2004)) (citations omitted).

¹⁶⁸ See Certiorari Petition, *supra* note 81, at 24 (discussing how “[e]ven where Congress has unequivocally expressed its intention to give a U.S. law extraterritorial effect, the parameters of that authority must be strictly construed in light of the general presumption against extraterritoriality”).

¹⁶⁹ *AT&T v. Microsoft*, 414 F.3d at 1369 (quoting *Williams v. Taylor*, 529 U.S. 420, 431 (2000)).

¹⁷⁰ *Id.* at 1372 (Rader, J., dissenting).

¹⁷¹ *Id.*

¹⁷² *Id.* at 1374. Judge Rader points out that the majority’s interpretation of “supplies” was based on the ease with which software code can be copied and transported, not on the principle that the two acts are the same thing.

¹⁷³ See *id.* (discussing 130 Cong. Rec. 28069 (daily ed. Oct. 1, 1984) (Congressional debate on Patent Law Amendments Act of 1984, Pub. L. No. 98-622, 98 Stat. 3383) (“This proposal responds to the United States Supreme Court decision in *Deepsouth Packing* . . . concerning the need for a legislative solution to close a loophole in patent law.”); see also *supra* text accompanying notes 11–15.

¹⁷⁴ *AT&T v. Microsoft*, 414 F.3d at 1375 (Rader, J., dissenting).

any subsequent copies made that are combined with computers to create what would be infringing devices in the United States.

¶33 Judge Rader's interpretation, "accord[ing] the same treatment to all forms of invention," is consistent with prior § 271(f) jurisprudence, and avoids irritating comity.¹⁷⁵ In addition, the significant burden that has been imposed on the U.S. software industry can also be avoided by not attaching liability to foreign-made copies of software. These factors, coupled with the lack of Congressional intent for § 271(f) to have extraterritorial effects, weighs heavily in favor of Judge Rader's interpretation.¹⁷⁶ By interpreting § 271(f) in a technology-neutral manner, the Court will protect U.S. standing in the international intellectual property stage and leave AT&T with exactly the same remedies it had for redress before it brought suit: foreign patent protection.¹⁷⁷ If AT&T wants to protect its foreign markets from competitors, it must accord with the laws of those countries to obtain patents on its technology. However, in markets where patent protection for software is unavailable, AT&T must abide by the law and policy choices of those sovereign nations and not look to U.S. patent law to obtain protection.¹⁷⁸

CONCLUSION

¶34 The facts in *AT&T v. Microsoft* illustrate the challenges that technological advancements pose on the territoriality of U.S. patent law. Supreme Court precedent, however, dictates that the presumption against extraterritorial application of U.S. law should govern this issue. The presumption restrains U.S. law in accordance with the principles of comity and national treatment so as to avoid conflicts between the laws of the

¹⁷⁵ See *id.* at 1372, 1376. This interpretation is consistent with the Federal Circuit's decisions in both *Waymark Corp. v. Porta Systems Corp.*, 245 F.3d 1364, 1368 (Fed. Cir. 2001), and *Pellegrini v. Analog Devices, Inc.*, 375 F.3d 1113, 1117 (Fed. Cir. 2004), as there is no intent that master copies of the software shipped abroad be combined with foreign computers to create infringing devices; only the foreign-made copies of the software, which are not supplied from the United States, will be combined.

¹⁷⁶ See *AT&T v. Microsoft*, 414 F.3d at 1376 (Rader, J., dissenting).

¹⁷⁷ See *id.* (discussing how the majority's decision expanded the remedies available to patent holders to include liability for acts conducted abroad).

¹⁷⁸ See *F. Hoffmann-LaRoche Ltd. v. Empagran, S.A.*, 542 U.S. 155, 166 (2004) ("Why is it reasonable to apply [U.S.] law to conduct that is significantly foreign insofar as that conduct causes independent foreign harm and that foreign harm alone gives rise to the plaintiff's claim? We can find no good answer to the question."); see also *supra* Parts III.A–B (discussing the principles of comity and national treatment and the separation of powers doctrine with respect to the presumption against extraterritorial application of U.S. patent law).

United States and those of other sovereign nations. In *AT&T v. Microsoft*, the Federal Circuit failed to heed the Supreme Court's application of this presumption in *Deepsouth Packing* and instead chose to interpret § 271(f) in a technology-dependent manner that encompassed copies of software code made abroad from U.S.-supplied master copies. This interpretation broadens the scope of § 271(f) extraterritorially such that protection of software inventions from patent infringement can now be obtained under U.S. law irrespective of the jurisdiction in which the infringement occurs. Not only does the imposition of U.S. law into foreign jurisdictions upset the established international scheme of intellectual property rights and risk damaging the United States' foreign relations, but the expansive liability under § 271(f) that now attaches to certain activities in software and other industries also threatens to diminish innovation and productivity within the United States.

¶35 In reviewing *AT&T v. Microsoft*, it is likely that the Supreme Court will decide that software can be a component of a patented invention for the purposes of § 271(f), and thus will face the issue of how to interpret the term "supplies." In assessing this issue, the Court should look to its case law regarding the presumption against extraterritoriality. Because Congressional intent regarding the applicability of § 271(f) to activities that occur outside the United States is unclear, the Court should interpret § 271(f) in a manner that avoids extraterritorial effects: § 271(f) should be interpreted in a technology-neutral manner and should be applied only to conduct that occurs within the United States.