

Microsoft Liable for Patent Infringement of Software Installed Overseas

by
*Ari Rafilson**

In a case that is sure to have major repercussions for the domestic software industry, the Federal Circuit Court held Microsoft liable for damages arising from foreign-made copies of Windows software containing patent-infringing code.¹ The issue in *AT&T Corp. v. Microsoft Corp.* was whether a software manufacturer could be held liable for patent infringement when it exported software from the United States and foreign computer manufacturers subsequently copied and installed the software onto foreign computers.² Under 35 U.S.C. § 271(f), liability only arises when components of a patent-infringing invention are *supplied* from the United States to foreign countries.³ Microsoft contended it was not liable for the foreign sales under two alternative arguments. First, the software was merely intangible information, and therefore it could not be a “component” of a patented invention.⁴ Second, even if software was a “component,” software copied in another country could not be deemed “supplied” from the United States.⁵ Whether the software could be deemed “supplied” when it is copied overseas onto a foreign computer was an issue of first impression for the court.⁶ The statute does not define the term “supplied,” and the Federal Circuit struggled with this determination.⁷

I. OPENING PANDORA’S BOX

Opening Pandora’s Box of liability for software copied and installed abroad contradicts the presumption against the extraterritorial reach of U.S. patent law.⁸ This sets a dangerous precedent according to Judge Radar in his

* Ari Rafilson is a candidate for Juris Doctor, class of 2007 at Southern Methodist University Dedman School of Law. After receiving his bachelors degree from Bradley University, he worked in the Information Technology field for several years as a developer, analyst, instructor, and mentor. He would like to thank the members of the Computer Law Review and Technology Journal for their assistance and his wife Jami and son Connor for their support.

1. *AT&T Corp. v. Microsoft Corp.*, 414 F.3d 1366, 1368 (Fed. Cir. 2005).
2. *Id.* at 1368-69.
3. 35 U.S.C.A. § 271(f) (West 2006).
4. *AT&T Corp.*, 414 F.3d at 1368-69.
5. *Id.*
6. *Id.* at 1369.
7. *Id.*; *see also* 35 U.S.C.A. § 271(f) (West 2006).
8. *See AT&T Corp.*, 414 F.3d at 1372-76 (Radar, J., dissenting).

dissenting opinion.⁹ Microsoft warned that opening this box will lead to companies exporting jobs from this country to avoid liability.¹⁰ Absent a clear message from Congress that such liability should apply to foreign-replicated software, the court should heed these warnings, and show restraint in its interpretation of the statute.

II. TECHNICAL BACKGROUND

In order to facilitate installation of Microsoft Windows in foreign countries, Microsoft supplies the software to foreign computer manufacturers via “golden master” disks or electronic transmission.¹¹ The district court explained that the Windows software on the master disks is not installed onto foreign-made computers.¹² Instead, foreign computer manufacturers copy the software from the master disk, and the copies are subsequently installed onto the foreign computers.¹³

In the case at hand, the version of Microsoft Windows sent overseas utilized “speech codecs” protected by AT&T’s patent.¹⁴ A “speech codec” is a program used to compress a speech signal; the program also decompresses and restores the signal when played back.¹⁵

III. PROCEDURAL HISTORY

The Southern District Court of New York held Microsoft liable for each and every copy of Microsoft Windows software with AT&T’s patented speech codecs installed on foreign-made computers.¹⁶ Microsoft appealed this decision to the Federal Circuit, but the court affirmed the decision¹⁷. In a summary judgment motion to the district court, Microsoft made two alternative arguments. First, software is intangible, and therefore cannot be a “component” of a patented assembly as required by Section 271(f).¹⁸ Second, even if software is a “component,” installation of a foreign version of software cannot be deemed “supplied” from the United States as also re-

9. *Id.*

10. *Id.* at 1372.

11. *Id.* at 1368.

12. *AT&T Corp. v. Microsoft Corp.*, No. 01-CV-4872 at *4 (S.D.N.Y. Mar. 5, 2004), *aff’d*, 414 F.3d 1366 (Fed. Cir. 2005).

13. *Id.*

14. *See AT&T Corp.*, 414 F.3d at 1368; U.S. Patent No. 32,580 (filed Dec. 1, 1981).

15. *AT&T Corp.*, 414 F.3d at 1368 n.1.

16. *Id.* at 1368; *see also AT&T Corp. v. Microsoft Corp.*, No. 01-CV-4872 at *8-9 (S.D.N.Y. Mar. 5, 2004).

17. *AT&T Corp.*, 414 F.3d at 1372.

18. *Id.*

quired by the statute.¹⁹ The district court disagreed with Microsoft's interpretation of the terms "component" and "supplied," and denied Microsoft's motion, finding the company liable for damages.²⁰

IV. FEDERAL CIRCUIT REASONING

First, the Federal Circuit Court addressed Microsoft's contention that software is not a "component" under Section 271(f).²¹ The court quickly rejected Microsoft's argument that a "component" must be physical because the court already addressed the issue in its recent decision in *Eolas Technologies, Inc. v. Microsoft Corp.*²² In that case, the Federal Circuit reasoned that because software is patentable, and there is no requirement in Section 271(f) that a component must be physical, software can be a "component" of a patented invention.²³

Next, in a matter of first impression, the court addressed the issue of whether software replicated abroad is "supplied" from the United States under Section 271(f).²⁴ Microsoft argued that because the software was copied and installed in foreign countries, it was not supplied from the United States, but the court found this argument unpersuasive.²⁵ The court held that software is different from other components, and because copying is an integral part of software distribution, "for software . . . the act of copying is subsumed within the act of 'supplying.'"²⁶ The court held that Section 271(f) applies to foreign-made copies of software originally supplied from the United States via "golden master" disks.²⁷

Next, the court addressed Microsoft's contention that software sent by electronic transmission should be treated differently for liability purposes because no physical medium is used to ship the software.²⁸ The court rejected this argument and held that such a finding would amount to exalting "form over substance."²⁹ The court provided an example, asserting that "when a

19. *Id.*

20. *Id.* at 1369.

21. *Id.* (citing 35 U.S.C. § 271(f) (2000)).

22. *Id.* at 1369; *Eolas Techs., Inc. v. Microsoft Corp.*, 399 F.3d 1325, 1339 (Fed. Cir. 2005), *cert. denied*, 126 S. Ct. 568 (2005).

23. *Eolas*, 399 F.3d at 1339; *see also* 35 U.S.C. § 271(f) (2000).

24. *AT&T Corp.*, 414 F.3d at 1369.

25. *Id.* at 1369-70.

26. *Id.*

27. *Id.*

28. *Id.*

29. *Id.*

user downloads software from a server on the Internet, the server ‘supplies’ the software to the user’s computer by transmitting an exact copy.’³⁰

V. BACKGROUND OF 35 U.S.C. § 271(F)

At the heart of both the court’s ruling and Microsoft’s objection was a disagreement as to the extraterritorial reach of United States patent law.³¹ In order to understand both positions, it is useful to understand the history of Section 271(f). Section 271(f) was enacted in 1984 “to close a loophole” brought to the legislature’s attention by a 1972 Supreme Court holding, *Deepsouth Packing Co. v. Laitram Corp.*³² In that case, Deepsouth Packing, an American company, manufactured all the components of a shrimp deveining machine domestically, and then shipped the components to buyers in other countries where the components were assembled into a working machine.³³ Although the manufacturer blatantly used this shipping method to avoid patent infringement, the Court found that under Section 271, the manufacturer was not liable for violating a United States patent unless it made, used, or sold the fully assembled product within the United States.³⁴

The Supreme Court in *Deepsouth* emphasized the territorial limits of United States patent law stating, “these acts of Congress do not, and were not intended to, operate beyond the limits of the United States.”³⁵ Indeed, as the dissent in *AT&T Corp.* recognized, the presumption against extraterritoriality has long been one of the basic tenets of United States patent law.³⁶ The Supreme Court deferred to this presumption³⁷ asserting that it could not prevent patent infringement abroad without a “clear and certain signal” from the legislature that such activity was not permitted.³⁸ Congress sent this message in 1984 when, in a dramatic expansion of the territorial reach of United States patent law, Congress enacted Section 271(f).³⁹ Legislative history indicates that Section 271(f) was passed in response to *Deepsouth*—to “prevent copiers from avoiding U.S. patents by supplying components of a patented

30. *Id.*

31. *See AT&T Corp.*, 414 F.3d 1366.

32. *Id.* at 1371.

33. *Deepsouth Packing Co. v. Laitram Corp.*, 406 U.S. 518, 519-20 (1972).

34. *See id.* at 524 n.5, 527.

35. *Id.* at 531.

36. *See AT&T Corp.*, 414 F.3d at 1373 (citing *Dowagiac Mfg. Co. v. Minn. Moline Plow Co.*, 235 U.S. 641, 650 (1915)).

37. *Deepsouth*, 406 U.S. at 527.

38. *Id.* at 531.

39. *AT&T Corp.*, 414 F.3d at 1371.

product in this country so that the assembly of the components may be completed abroad.”⁴⁰

In *AT&T Corp.*, Microsoft asserted not only that Section 271(f) should be read narrowly and limited to physical components,⁴¹ but also that software is merely a set of instructions and, as case law indicated, instructions are different than components.⁴² Microsoft cited *Pellegrini v. Analog Devices, Inc.* for the proposition that a component must be physical.⁴³ In *Pellegrini*, the Federal Circuit held that a company that designed circuit chips in the United States and provided overseas manufacturers with instructions for making the chips was not liable for patent infringement because none of the components were physically supplied from the United States.⁴⁴ The Federal Circuit Court in *AT&T Corp.* acknowledged that *Pellegrini* differentiated between instructions and components and held liability under Section 271(f) may exist only where a “component itself—as opposed to instructions for manufacturing the component or management oversight—has been ‘supplie[d] or cause[d] to be supplied in or from the United States.’”⁴⁵ *Pellegrini* also implied that a component must be physical, holding that Section 271 liability only arises when the components of a patented invention are “physically present in the United States” before being sold or exported to another country.⁴⁶

The court held, however, that *Pellegrini* did not “control this case” because Microsoft Windows was an actual component as opposed to instructions for manufacturing a component.⁴⁷ The court also recognized that *Eolas* already addressed the issue of whether a component must be physical and held that “[e]very component of every form of invention deserves the protection of” Section 271(f).⁴⁸ The court additionally found that Congress clearly intended for Section 271(f) to have extraterritorial effect, and because Section 271(f) was designed to close a loophole made possible through technology, the court’s interpretation must keep up with technology and close another loophole—software replication.⁴⁹

40. *Id.* (quoting H.R. 6286, PATENT LAW AMENDMENTS ACT OF 1984, 130 Cong. Rec. 28069 (Oct. 1, 1984)).

41. *See id.* at 1370-71.

42. *See id.* at 1370.

43. *Id.*

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

45. *AT&T Corp.*, 414 F.3d at 1370 (quoting *Pellegrini*, 375 F.3d at 1118).

46. *Pellegrini*, 375 F.3d at 1117.

47. *AT&T Corp.*, 414 F.3d at 1370.

48. *Id.* at 1371 (quoting *Eolas Techs., Inc. v. Microsoft Corp.*, 399 F.3d 1325, 1339 (Fed. Cir. 2005)).

49. *Id.*

VI. CRITICISM OF THE COURT'S APPROACH

Most likely, the prior precedent in *Eolas*, which held Microsoft liable for foreign-replicated copies of patent-infringing software, bound the court in *AT&T Corp.*⁵⁰ Although the court in *Eolas* never specifically addressed the meaning of the term “supplied,” the court must have found that Microsoft supplied the software because this finding was crucial to the outcome. Microsoft could not otherwise be liable under the statute. Standing by an incorrect decision, however, only compounds the mistake for the future. Microsoft recently appealed *Eolas* to the Supreme Court, raising the same issues as the case at hand.⁵¹ The Supreme Court denied certiorari, but its reasons for doing so are unclear.⁵² Because Federal Circuit Court decisions carry national authority, the extraterritorial question remains unclear for now.

In a more reasoned approach, Judge Rader's dissenting opinion in *AT&T Corp.* urged the court to show restraint and read Section 271(f) narrowly to avoid finding liability in this case because of the presumption against the extraterritorial reach of United States patent law.⁵³ The majority in *AT&T Corp.* actually claimed to be adopting a conservative approach because it interpreted the statute using the “ordinary, contemporary, [and] common meaning” of the terms.⁵⁴ The court in *Eolas* also asserted that patent rights should be applied uniformly, without discrimination to the type of technology used.⁵⁵ Despite these conservative and non-discriminatory assertions, the court in *AT&T Corp.* interpreted the terms “component” and “supply” broadly with respect to software, asserting that for software alone, “the act of copying is subsumed in the act of ‘supplying’.”⁵⁶

This discriminatory treatment of software becomes apparent when evaluating the meaning of the terms “supply” and “copy.” To support the claim that software is different than other components, the majority explained that a “disk is merely a container” and implied that the method of storage is immaterial for intangible or virtual components.⁵⁷ This contention does not lead to the conclusion that with respect to software, copying is merely a part of supplying. The dissent recognized that the only difference between copy-

50. *Eolas*, 399 F.3d at 1328.

51. Petition for a Writ of Certiorari, *Eolas*, 126 S. Ct. 568 (2005)(No. 05-288).

52. *Eolas Techs., Inc. v. Microsoft Corp.*, 74 U.S.L.W. 3269 (U.S. Oct. 31, 2005) (No. 05-288), *denying cert. to* 399 F.3d 1325 (Fed. Cir. 2005).

53. *See AT&T Corp.*, 414 F.3d at 1373, 1378.

54. *Id.* at 1369.

55. *Eolas*, 399 F.3d at 1339.

56. *Id.*

57. *See id.* at 1370-71.

ing software and copying physical constructs is the ease with which the copying takes place.⁵⁸

A simple example illustrates the fallacy of the majority's claim. Copying music and pictures is incredibly easy with modern copiers and computers. In fact, copying music or pictures is arguably much easier than installing Windows on a PC. Like software, the value of a photograph or CD lies not in the container in which it is stored, but in the content itself. If Tina gave Jim a photograph of herself, and a CD entitled "The Eagles Greatest Hits," it is obvious that she supplied him with a copy of each. Even if Jim made 1,000 copies of the CD and 1,000 copies of the picture, it would be absurd to suppose that Tina supplied Jim with 1,000 copies of either item. Likewise, it is absurd to find Microsoft liable for copies of software that it did not make.

Additionally, *Pellegrini* compels reversal by holding that Section 271(f) only applies when the components of an invention are physically present in the United States and are subsequently exported and then put together in a manner by which they would infringe upon a patent if constructed domestically.⁵⁹ This implies that the court in *Pellegrini* conceived of components as physical constructs only, not as intangible information such as software.

Even if the court did not accept the premise from *Pellegrini* that a component must be physical, *Pellegrini* would still compel the court to find Microsoft free from liability for the foreign made copies because software is merely a set of instructions. *Pellegrini* clarifies that there is a difference, stating that Section 271(f) liability only applies to the "physical supply of components" and not "to the supply of instructions or corporate oversight."⁶⁰ An operator of even the simplest machine provides instructions on the task to be performed by controlling or directing the machine, yet this does not make the operator a component of the machine. For example, a lathe operator supplies the lathe with instructions or "management oversight." Although the lathe operator is critical to the lathe's transformation from an inert object into a functioning machine, it would be absurd to view the operator as a component. So too, "[s]oftware is a set of instructions, known as code, that directs a computer to perform specified functions or operations."⁶¹ Still, this does not make software a component. Instead, software is like a lathe operator, as both provide instructions to a machine.

Similarly, an "operating system" is "software that controls the operation of a computer and directs the processing of programs (as by assigning storage space in memory and controlling input and output functions)."⁶² An op-

58. *Id.* at 1373-74.

59. *See id.* at 1374 (Radar, J. dissenting).

60. *Pellegrini*, 375 F.3d at 1118.

61. *Fantasy Sports Props., Inc. v. Sportsline.com*, 287 F.3d 1108, 1118 (Fed. Cir. 2002).

62. MERRIAM-WEBSTER'S COLLEGIATE DICTIONARY 815 (10th ed. 1995).

erating system such as Microsoft Windows takes inert computer components, such as the processor and the hard drive, and transforms them into working components in such a way as to make the components work together as a functioning computer.

In fact, all software is a set of instructions to the component parts of a computer and is used to create a working machine. The Federal Circuit recognized this premise in an earlier case where it held that “programming creates a new machine, because a general purpose computer in effect becomes a special purpose computer once it is programmed to perform particular functions pursuant to instructions from program software.”⁶³ Software is a set of instructions, not a component.

Judge Radar wisely acknowledged that companies are not left without protection by a narrow reading of Section 271(f) because companies can simply file for patents in those countries where they desire protection.⁶⁴ Indeed, the majority’s approach expands United States software patent protection overseas thereby transforming a domestic patent into a super-patent with extraterritorial effect. Consequently, it becomes unnecessary to obtain a foreign patent in all countries in which a company desires protection. While this may sound appealing, it is bound to meet resistance from foreign countries, and worse, could result in those countries reciprocating by making their patent laws extraterritorial, covering acts occurring within the United States.

Extraterritoriality is not the only danger that will be released from Pandora’s Box if this decision stands. Microsoft warned that it may have no choice but to move operations to other countries to avoid the danger of large infringement damages under Section 271.⁶⁵ Presumably, other domestic companies would come to the same chilling conclusion likely resulting in domestic layoffs and mass exportation of lucrative technology jobs. As an indication of the inequity of the court’s interpretation, Microsoft pointed out that this interpretation of Section 271(f) unfairly discriminates against domestic companies, because “foreign software companies do not face Section 271(f) liability, and can sell software world-wide without incurring the same liability in the United States.”⁶⁶

Since the Supreme Court has passed up the opportunity to address the meaning of Section 271(f) by denying certiorari for *Eolas*, the legislature is this country’s greatest hope to make a timely change by creating an exception to Section 271(f) for software. After several organizations and scholars called for patent reform, Congressman Lamar Smith, chairman of the House Subcommittee on Courts, the Internet, and Intellectual Property introduced

63. *In re Alappat*, 33 F.3d 1526, 1545 (Fed. Cir. 1994).

64. *See AT&T Corp.*, 414 F.3d at 1376.

65. *AT&T Corp. v. Microsoft Corp.*, No. 01 Civ.4872(WHP), 2004 WL 406640, at *8 (S.D.N.Y. Mar. 5, 2004).

66. *Id.*

the Patent Act of 2005.⁶⁷ A pre-draft version of the bill addressed this issue by requiring that a component be tangible, thus creating an exemption for software.⁶⁸ But changes to Section 271(f) are notably absent from the proposed bill and a substitute bill.⁶⁹ Apparently fearing further negative effects on the economy, several corporations proposed the “Coalition Print” calling for a complete repeal of Section 271(f).⁷⁰ The legislature should take action to protect the American software industry before further damage is wrought by repealing Section 271(f) or creating an exception for software, thus closing Pandora’s Box of extraterritorial liability for software that is copied abroad.

67. 151 CONG. REC. E1160 (daily ed. June 8, 2005) (statement of Rep. Berman).

68. HOUSE SUBCOMM. ON COURTS, THE INTERNET, AND INTELLECTUAL PROP., 109TH CONG., PATENT ACT OF 2005 (Comm. Print 2005), *available at* <http://www.promotetheprogress.com/ptpfiles/patentreform/houseoversight/committeepoint.pdf> (last visited Mar. 2, 2006).

69. Patent Act of 2005, H.R. 2795, 109th Cong. §3 (2005) (Patent Act of 2005 as introduced in the House, June 8, 2005), *available at* http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109_cong_bills&docid=f:h2795ih.txt.pdf (last visited Feb. 28, 2006); Patent Act of 2005, H.R. 2795, 109th Cong. (2005) (substitute bill as written July 26, 2005), *available at* http://www.promotetheprogress.com/ptpfiles/patentreform/patentact2005/Patentact2005_draftamend-subst.pdf (last visited Mar. 2, 2006).

70. Patent Act of 2005, H.R. 2795, 109th Cong. §6 (2005) (as written Sept. 1, 2005), *available at* http://www.promotetheprogress.com/ptpfiles/patentreform/patentact2005/Patentact2005_IPOcoalitionprint.pdf (last visited Mar. 2, 2006).

