

NOTE

PATENT INFRINGEMENT BY COMPONENT EXPORT: *WAYMARK CORP. V. PORTA SYSTEMS CORP.* AND THE EXTRATERRITORIAL EFFECT OF U.S. PATENT LAW*

TABLE OF CONTENTS

- I. INTRODUCTION 804
- II. THE FEDERAL CIRCUIT’S DECISION IN
WAYMARK CORP. V. PORTA SYSTEMS CORP...... 807
 - A. *Summary of the Facts*..... 807
 - B. *§ 271(a): No Violation* 807
 - C. *§ 271(f)(2): No Assembly Required*..... 808
- III. § 271(a): THE SUPREME COURT’S STRICT
TERRITORIAL PRESUMPTION IN
DEEPSOUTH PACKING CO. V. LAITRAM CORP. 811
- IV. § 271(f): CONGRESSIONAL RESPONSE 814
 - A. *Legislative Intent and Judicial Construction*..... 814
 - 1. *§ 271(f) General Statutory Terms*..... 816
 - 2. *§ 271(f)(1) Statutory Terms* 818
 - 3. *§ 271(f)(2) Statutory Terms* 820
 - 4. *Summary: Expanded Liability*..... 821
 - B. *No Liability for Attempt?*
The “Offer to Sell” Analogy..... 823
 - C. *Extraterritorial Effects*..... 828
- V. CONCLUSION: THE FUTURE OF § 271(f) 833

* This paper was selected as the recipient of the 2002 Howrey Simon Arnold & White, LLP award for most outstanding paper in the area of intellectual property.

I. INTRODUCTION

Marketplace globalization continues to revolutionize the way modern companies conduct business; “in today’s world market, the components of a patented product may be produced in one country, assembled in a second country, and sold in yet other countries.”¹ Manufacturers shipping U.S.-made components for foreign assembly may be rewarded with cost savings² and increased sales.³ However, as the Federal Circuit’s⁴ *Waymark Corp. v. Porta Systems Corp.*⁵ decision makes clear, companies exporting components for foreign assembly also may be rewarded with U.S. patent infringement liability, regardless of whether foreign assembly actually occurs.⁶

1. David S. Safran, *Protection of Inventions in the Multinational Marketplace: Problems and Pitfalls in Obtaining and Using Patents*, 9 N.C. J. INT’L L. & COM. REG. 117, 117 (1983) (noting that marketing an invention in one country may implicate patent enforcement in another); see also Jerry Pacheco, *Is a Maquiladora Viable for Your Firm?*, ALBUQUERQUE J., Jan. 15, 2001, at 10, available at 2001 WL 6626957 (explaining that “[t]ypically, U.S. companies send their U.S.-manufactured . . . components to their Mexican maquila for final . . . assembly,” then export “[t]he finished product . . . to its final market destination . . . for sale”). This is the scenario described in the noted case. See *Waymark Corp. v. Porta Sys. Corp.*, 245 F.3d 1364, 1365 (Fed. Cir. 2001) (noting that the U.S. company sent components to Mexico for final assembly).

2. See Pacheco, *supra* note 1, at 10 (indicating that “foreign companies establish manufacturing operations in Mexico to benefit from the economical Mexican labor” for tasks that have “evolved from simple assembly . . . to high-tech and advanced manufacturing”); see also Joseph Kahn, *Foreigners Help Build China’s Trade Surplus*, WALL ST. J., Apr. 7, 1997, at A1, available at 1997 WL-WSJ 2415905 (“Foreign companies also contract with Chinese plants for . . . low-value-added assembly of [high-value] imported components . . .”). *But cf.* Hassaun A. Jones-Bey, *Building a Presence in Asia: Optics Manufacturers Find Low-Cost Labor with Strings Attached*, 37 LASER FOCUS WORLD, July 1, 2001, at 98, available at 2001 WL 25988504 (revealing that while “[m]any firms cite . . . cutting costs as the primary motivation for setting up manufacturing operations in Asia[,] . . . [some] also say they’ve found more than they bargained for”); Kenichi Ohmae, *Manager’s Journal: Rethinking Global Corporate Strategy*, WALL ST. J., Apr. 29, 1985, available at 1985 WL-WSJ 223754 (warning that a decline in the labor content of traditional assembly operations, combined with a narrowing labor cost differential between developing and developed nations, may result in manufacturing cost savings that “no longer offset[] the cost of transporting key components and products to and from low-wage countries”).

3. See, e.g., Jones-Bey, *supra* note 2, at 98 (suggesting that a U.S. optics manufacturer is present in Japan because “the ‘vast majority’ of what the company makes in Japan is also sold in Japan”).

4. The United States Court of Appeals for the Federal Circuit (Federal Circuit) has exclusive appellate jurisdiction over all lower-court patent cases. See 28 U.S.C. § 1295(a) (2000). See generally Mark D. Janis, *Patent Law in the Age of the Invisible Supreme Court*, 2001 U. ILL. L. REV. 387, 387 (2001) (asserting that the Federal Circuit, established in 1982, “has become the de facto supreme court of patents”).

5. 245 F.3d 1364 (Fed. Cir. 2001).

6. *Id.* at 1367–68 (holding that shipping key components abroad with intent for foreign assembly into a U.S.-patented combination infringes the U.S. patent).

2002] WAYMARK CORP. V. PORTA SYSTEMS CORP. 805

At issue in the noted case is the extraterritorial⁷ impact of U.S. patent law.⁸ Historically, the Patent Act⁹ limited direct infringement liability to the unauthorized making, using, or selling of a patented invention “within the United States.”¹⁰ But in 1984, perhaps in recognition of marketplace globalization and a desire to protect U.S. patent rights abroad,¹¹ Congress began enacting what would become a series of amendments specifying additional infringing acts.¹² Viewed narrowly, these acts give rise to liability solely for conduct within the United States.¹³ However, viewed with a wider lens, these discrete acts of infringement have the effect of extending the influence of U.S. patents beyond U.S. borders to reach conduct in the global marketplace.¹⁴

7. “Extraterritorial” means outside the United States, its territories, and its possessions. *See* 35 U.S.C. § 100(c) (2000).

8. *Waymark*, 245 F.3d at 1367 (declaring that the case “presents the possibility of giving [U.S.] patent protection extraterritorial effects”).

9. 35 U.S.C. §§ 1–376.

10. *See id.* § 271(a) (reciting the legislative history); *see also* Curtis A. Bradley, *Territorial Intellectual Property Rights in an Age of Globalism*, 37 VA. J. INT’L L. 505, 520–21 (1997) (delineating the original scope of the direct infringement statute).

11. *See* Bradley, *supra* note 10, at 506–07, 509 (noting a rise in the number of transnational intellectual property cases and requests for courts to apply U.S. laws to foreign conduct).

12. *See* Uruguay Round Agreements Act, Pub. L. No. 103-465, § 531, 108 Stat. 4809, 4982–83 (1994) (codified at 35 U.S.C. § 271(a)); Process Patent Amendments Act of 1988, Pub. L. No. 100-418, § 9003, 102 Stat. 1107, 1563–64 [hereinafter Process Patent Amendments Act of 1988] (codified at 35 U.S.C. § 271(g)); Patent Law Amendments Act of 1984, Pub. L. No. 98-622, § 101, 98 Stat. 3383, 3383 [hereinafter Patent Law Amendments Act of 1984] (codified at 35 U.S.C. § 271(f)).

13. *See* 35 U.S.C. § 271(f) (imposing liability for *supplying component(s)* for foreign assembly into a U.S.-patented invention); *id.* § 271(g) (imposing liability for *importing* a product made by a U.S.-patented process); *id.* § 271(a) (imposing liability for *offering to sell* or *importing* a U.S.-patented invention).

14. *See* Donald S. Chisum, *Normative and Empirical Territoriality in Intellectual Property: Lessons from Patent Law*, 37 VA. J. INT’L L. 603, 607 (1997) [hereinafter Chisum, *Territoriality*] (suggesting that “Congress did not extend patent rights to acts outside the United States, but rather *relied on some domestic act as a hook to reach foreign-based economic activity* that harms a patent owner’s interest in deriving full economic advantage from the U.S. market” (emphasis added)).

United States laws and patents have always affected businesses abroad to some extent. For example, the former 19 U.S.C. § 1337 of the Tariff Act of 1930, a parallel precursor to 35 U.S.C. § 271(g), prohibited the importation of products made with U.S.-patented processes abroad without the consent of the patentee. *See* Amgen, Inc. v. U.S. Int’l Trade Comm’n, 902 F.2d 1532, 1534, 1538–39 (Fed. Cir. 1990); Safran, *supra* note 1, at 117 (discussing this statute as enabling “U.S. industry [to] enforce their U.S. patents that contain[ed] claims to a process, even though the process [was] never directly infringed within the United States”). Additionally, under § 271(b) and (c), enacted in 1952, foreign businesses may be liable for indirect infringement when they purchase goods within the United States or commission manufacturing within the United States. 35 U.S.C. § 271(b)–(c); *see also* Safran, *supra* note 1, at 117 (observing that a foreign company may be held liable as a contributory infringer, “despite the fact that its activities occur wholly outside of the United States, if direct infringement occurs within the United

This Note focuses on the fluid scope of one of these Congressional enactments, 35 U.S.C. § 271(f). Congress enacted § 271(f) in direct response to the Supreme Court's controversial decision in *Deepsouth Packing Co. v. Laitram Corp.*¹⁵ In *Deepsouth*, the Court found no infringement under § 271(a) when a U.S. manufacturer made all *components* of a patented invention—but not the invention itself—within the United States, then shipped them in modular form for easy foreign assembly.¹⁶ Twelve years later, Congress enacted § 271(f) to change this result and thereby “close a loophole in patent law.”¹⁷

Initially, there was very little case law interpreting the new statute.¹⁸ However, recent decisions demonstrate that § 271(f) provides viable means for a U.S. patentee to establish a competitor's direct infringement absent a making, use, or sale of the patented invention within the United States.¹⁹ Moreover, the viability of another avenue for establishing infringement for foreign manufacture—offer to sell—remains unsettled.²⁰ The door to infringement actions under the underused § 271(f) provision has been cracked open; this Note predicts that the *Waymark* decision will operate to open the door wide.

Part II of this Note describes the *Waymark* case and the Federal Circuit's bases for decision. Part III analyzes underlying case law and policy rationales. Part IV analyzes § 271(f)'s terms in light of legislative intent and judicial construction, then examines § 271(f) in the context of broader debate over the existence and desirability of extraterritorial effects. Part V predicts an expanded role for § 271(f) as a means to extend the influence of U.S. patents abroad. Finally, this Note concludes that § 271(f) extends U.S. patent rights beyond the “loophole” it was enacted to close and offers compelling reasons not to extend U.S. patent rights this far.

States”). The distinction here is that, under the new statutory enactments, U.S. laws and patents may affect businesses both within the United States and abroad for purchasing and manufacturing activities conducted on foreign soil.

15. 406 U.S. 518 (1972).

16. *Id.* at 527–29; *see also* 35 U.S.C. § 271(a).

17. Patent Law Amendments Act of 1984, *supra* note 12, at 5828.

18. *See* Chisum, *Territoriality*, *supra* note 14, at 607 (noting as recently as 1997 a “relative dearth” of interpretive case law).

19. Refer to Part IV.A *infra* (discussing case law interpreting § 271(f)).

20. Refer to Part IV.B *infra* (discussing whether a U.S. offer to sell a patented product abroad infringes the U.S. patent).

II. THE FEDERAL CIRCUIT'S DECISION IN
WAYMARK CORP. V. PORTA SYSTEMS CORP.

A. *Summary of the Facts*

Ronald Caravello, among others, invented a battery monitoring system that sounds an alarm if any battery in a string is in danger of falling below an acceptable capacity.²¹ The inventors assigned the patent rights to Fibercorp.²² Fibercorp employed but did not license Porta Systems to develop a battery monitoring system called Battscan.²³ After Fibercorp filed for bankruptcy, Porta Systems continued its unlicensed development of Battscan by (1) testing components in New York, and (2) shipping components to Mexico, where it intended to build twenty Battscan systems.²⁴

Caravello Family LP obtained Fibercorp's patent rights, joined with licensee Waymark Corp., and sued Porta Systems for patent infringement.²⁵ Porta Systems stopped all work on Battscan, returned the developmental components from Mexico, and never built a working system.²⁶

The district court granted summary judgment of noninfringement under 35 U.S.C. § 271(a) and rejected Waymark's argument for reconsideration under § 271(f)(2).²⁷ Waymark appealed.²⁸

B. *§ 271(a): No Violation*

In an opinion authored by Judge Rader, the Federal Circuit first considered whether Porta Systems infringed under § 271(a) of the Patent Act²⁹ by testing Battscan components within the United States.³⁰ The court explained that, while testing may be

21. *Waymark Corp. v. Porta Sys. Corp.*, 245 F.3d 1364, 1365 (Fed. Cir. 2001) (citing U.S. Patent No. 5,705,929 (issued Jan. 6, 1998)).

22. *Id.*

23. *Id.*

24. *Id.*

25. *Id.*

26. *Id.*

27. *Id.* at 1365–66 (citing *Waymark Corp. v. Porta Sys. Corp.*, No. 98-8545-Civ, slip op. at 12–15 (S.D. Fla. Feb. 25, 2000) (Omnibus Order) and slip op. at 1–2 (S.D. Fla. Apr. 11, 2000) (Recons. Decision)).

28. *Id.*

29. 35 U.S.C. § 271(a) (2000) (“[W]hoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the [patent] term . . . , infringes the patent.”).

30. *Waymark*, 245 F.3d at 1366.

an unauthorized “use,” infringement under § 271(a) requires unauthorized use of the entire “patented invention,” not merely its unassembled components.³¹

Relying on the Supreme Court’s *Deepsouth* decision,³² the Federal Circuit emphasized that under § 271(a) “[n]o wrong is done the patentee until the combination is formed. . . . and not even then if it is done outside the territory for which the monopoly was granted.”³³ Accordingly, the court held that “[b]ecause Porta Systems tested only components . . . within the United States, it did not use the claimed invention and did not infringe under § 271(a).”³⁴

The Federal Circuit acknowledged another case, *Paper Converting Machine Co. v. Magna-Graphics Corp.*,³⁵ in which it did find infringement when a party tested all components, shipped them to customers, but did not assemble them until after the patent expired.³⁶ The *Waymark* panel distinguished this case on the basis of its extratemporal and not extraterritorial context, reiterating that *Deepsouth* controlled on the facts.³⁷ “Like *Deepsouth*, this case presents the possibility of giving [U.S.] patent protection extraterritorial effects. . . . [because] the accused infringer . . . exported components for assembly in a foreign country.”³⁸ Thus, based on *Deepsouth* analysis, the court affirmed summary judgment of noninfringement under § 271(a).³⁹

C. § 271(f)(2): No Assembly Required

The Federal Circuit next considered whether Porta Systems infringed under § 271(f)(2)⁴⁰ by shipping Battscan components to

31. *Id.* (citing *Roche Prods. v. Bolar Pharm. Co.*, 733 F.2d 858, 863 (Fed. Cir. 1984), superseded in part by 35 U.S.C. § 271(e)).

32. *Deepsouth Packing Co. v. Laitram Corp.*, 406 U.S. 518 (1972). Refer to Part III *infra* (examining the *Deepsouth* case).

33. *Waymark*, 245 F.3d at 1366 (quoting *Deepsouth*, 406 U.S. at 529, for the premise that there is no direct infringement under § 271(a) when a party uses components of a patented product within the United States or combines them into the patented product outside the United States).

34. *Id.*

35. 745 F.2d 11 (Fed. Cir. 1984).

36. *Waymark*, 245 F.3d at 1366–67 (citing *Paper Converting*, 745 F.2d at 19–20 (“Where . . . significant, unpatented [component] assemblies . . . are tested during the patent term, enabling the infringer to deliver the patented combination in parts to the buyer, without testing the entire combination together . . . , testing [component] assemblies can be held to be in essence testing the patented combination and, hence, infringement.”)).

37. *Id.* at 1367.

38. *Id.* (citing *Deepsouth*, 406 U.S. at 523–24).

39. *Id.*

40. Subsection 271(f)(2) provides:

2002] WAYMARK CORP. V. PORTA SYSTEMS CORP. 809

Mexico, where it planned to, but did not, assemble twenty Battscan systems.⁴¹

The Federal Circuit determined that liability for shipping key components of a patented product for foreign assembly under § 271(f)(2) requires intended—but not actual—assembly.⁴² The court supported its decision with both statutory and policy-based rationales.⁴³

The court proffered three statutory bases for its decision. First, the court turned to the statute's plain language, asserting that "[o]n its face, [§] 271(f)(2) requires that the infringer only intend[] that such component will be combined. At no point does the statutory language require or suggest that the infringer must actually combine or assemble the components."⁴⁴

Second, the court compared terms with those of contributory infringement provision § 271(c) and concluded that the district court erred in reading contributory infringement analysis into § 271(f)(2).⁴⁵ While acknowledging that contributory infringement liability under § 271(c) depends on proof of a separate act of direct infringement under § 271(a), the Federal Circuit found that § "271(f)(2) does not include language with that meaning."⁴⁶ Accordingly, the court held that § 271(f)(2) neither implies a requirement of a separate act under § 271(a) nor expressly requires "an actual combination of the components, but only a showing that the infringer shipped them with the intent that they be combined."⁴⁷

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.

35 U.S.C. § 271(f)(2) (2000).

41. *Waymark*, 245 F.3d at 1365.

42. *Id.* at 1367–68.

43. *See id.* at 1368.

44. *Id.* at 1367–68 (citing 35 U.S.C. § 271(f)(2)).

45. *Id.* at 1368 (comparing the statutory language of § 271(f)(2), "shall be liable as an infringer," with that of § 271(c), "shall be liable as a *contributory* infringer . . . , thereby making infringement . . . dependent on an act of direct infringement [under § 271(a)]," and concluding that, unlike § 271(c), § "271(f)(2) does not incorporate the doctrine of contributory infringement"). Refer to Part IV.A *infra* (discussing the doctrine of contributory infringement).

46. *Waymark*, 245 F.3d at 1368.

47. *Id.*

Third, the court reasoned that the statute's legislative history does not show an actual assembly requirement.⁴⁸ Instead, the court concluded, the legislative history shows that Congress enacted § 271(f)(2) in response to *Deepsouth*, and a "no assembly required" liability rule under § 271(f) already changes *Deepsouth's* result.⁴⁹

The Federal Circuit buttressed statutory argument with policy rationale. First, the court asserted that its § 271(f)(2) interpretation creates no impermissible liability for "attempt."⁵⁰ In doing so, Judge Rader opined that "shipping components of an invention abroad without combining them is no more an attempt than offering to sell an invention without actually selling it."⁵¹ The court further reasoned that, by not requiring proof of actual assembly abroad, the statute avoids undesirable extraterritorial effects:

If [§] 271(f)(2) required actual assembly abroad, then infringement would depend on proof of infringement in a foreign country. This requirement would both raise the difficult obstacle of proving infringement in foreign countries and pose the appearance of "giving extraterritorial effect to [U.S.] patent protection."⁵²

Because it found error in requiring actual assembly, the Federal Circuit vacated the district court's summary judgment of noninfringement and remanded the case for reconsideration under § 271(f)(2).⁵³

48. *Id.* (citing S. REP. NO. 98-663, at 2-3 (1984) (indicating that the legislative history "does not address whether [§] 271(f)(2) requires actual assembly") and 130 CONG. REC. H28069 (1984) (failing to address actual, as opposed to intended, assembly by indicating only that § 271(f) imposes infringement liability for supplying components that "are to be combined outside the United States").

49. *Id.* Refer to Part IV.A *infra* (discussing Congressional enactment of § 271(f) in response to *Deepsouth*).

50. *Waymark*, 245 F.3d at 1368.

51. *Id.* (citing § 271(a) in pertinent part as prohibiting unauthorized "offers to sell . . . any patented invention, within the United States"). Refer to Part IV.B *infra* (discussing the significance of Judge Rader's assertion in the face of recent conflicting decisions regarding the scope and extraterritorial reach of the § 271(a) "offer to sell" language).

52. *Waymark*, 245 F.3d at 1368 (quoting *Paper Converting Mach. Co. v. Magna-Graphics Corp.*, 745 F.2d 11, 17 (Fed. Cir. 1984)). Refer to Part IV.C *infra* (evaluating the court's claim that a "no assembly required" liability rule avoids extraterritorial effects).

53. *Waymark*, 245 F.3d at 1368-69.

III. § 271(a): THE SUPREME COURT'S
STRICT TERRITORIAL PRESUMPTION IN
DEEPSOUTH PACKING CO. V. LAITRAM CORP.

The Patent Act's direct infringement statute limits liability to specific acts conducted "within the United States."⁵⁴ Consistent with this language, the Supreme Court has adopted a strict territorial approach to patent cases,⁵⁵ as it has in other areas of law,⁵⁶ and has refused to give the Patent Act extraterritorial construction "unless plain and express words indicate[] that such was the intention of the Legislature."⁵⁷

In *Deepsouth*, a high-water mark for the Supreme Court's strict territorial approach to patent law, critics charged that the Court went too far in strictly construing the territorial scope of § 271(a).⁵⁸ In the *Deepsouth* case, a manufacturer made all components of a patented shrimp deveining machine within the United States, then shipped the components outside the United States for assembly by foreign buyers.⁵⁹ In a five-to-four decision, the Court ruled that the "making" term in § 271(a) requires an "operable assembly of the whole and not the manufacture of its parts."⁶⁰ Because the manufacturer did not combine components into an operable assembly within the United States, there was no "making" within the meaning of § 271(a) and hence no direct infringement.⁶¹

54. 35 U.S.C. § 271(a) (2000) (prohibiting the unauthorized making, use, offer for sale, sale, or import of a patented invention "within the United States" during the patent term). Acts other than those specified do not infringe, "no matter how great the adverse impact of that activity on the [patent's] economic value." *Paper Converting Mach. Co. v. Magna-Graphics Corp.*, 745 F.2d 11, 16 (Fed. Cir. 1984).

55. See *Deepsouth Packing Co. v. Laitram Corp.*, 406 U.S. 518, 527 (1972) ("The statute makes it clear that it is not an infringement to make or use a patented product outside of the United States."); *Brown v. Duchesne*, 60 U.S. (19 How.) 183, 195 (1856) ("[T]hese acts of Congress do not, and were not intended to, operate beyond the limits of the United States."); see also Bradley, *supra* note 10, at 521–23 (tracing development of the Supreme Court's strict territorial approach to patent law).

56. See William S. Dodge, *Understanding the Presumption Against Extraterritoriality*, 16 BERKELEY J. INT'L L. 85, 86–87 (1998) (noting that "[o]ver the last ten years, the Supreme Court has applied the presumption against extraterritoriality . . . to Title VII[,] . . . the Foreign Sovereign Immunities Act, the Federal Tort Claims Act, and the Immigration and Nationality Act," but not to the Lanham Act and only in modified form to the Sherman Act (footnotes omitted)).

57. *Brown*, 60 U.S. (19 How.) at 195; see also *Deepsouth*, 406 U.S. at 531 (refusing to extend patent rights absent "a clear and certain signal from Congress").

58. *Deepsouth*, 406 U.S. at 532 (Blackmun, J., dissenting) (charging that the majority applied "too narrow a reading").

59. *Id.* at 523–24.

60. *Id.* at 527–29.

61. *Id.* at 527–28 (citing § 271(a)). The *Deepsouth* Court also cited *Dowagiac*

The Court thus declined to extend extraterritorial reach by broadening the “making” term to include the manufacture of all parts of a patented invention within the United States, as urged by Justice Blackmun in his vigorous dissent.⁶² In addition, the Court did not broaden the “making” term to include partial component assemblies.⁶³

Yet, in a later case, the Federal Circuit did redefine “making” to include partial assemblies in the context of patent enforcement beyond term expiration.⁶⁴ However, most courts view this holding as limited to its factual context and have refused to extend it to patent enforcement beyond U.S. territorial limits.⁶⁵ Based on this precedent, the *Waymark* panel concluded that *Deepsouth* controls in the context of extraterritorial (and not extratemporal) “assembl[ies] of the whole.”⁶⁶

In *Deepsouth*, opponents argued that the Court’s “hypertechnical reading of the patent code” would deprive the

Manufacturing Co. v. Minnesota Moline Plow Co., *id.* at 527, which states: “[t]he right conferred by a patent under our law is confined to the United States and its territories, and infringement of this right cannot be predicated of acts wholly done in a foreign country.” 235 U.S. 641, 650 (1915) (citation omitted). Elsewhere in its opinion the *Deepsouth* Court found no indirect infringement—induced or contributory—because those forms of infringement traditionally had to be accompanied by additional proof of a direct infringement by someone, usually the customer, and assembly abroad was not such an act. *See Deepsouth*, 406 U.S. at 526.

62. *Id.* at 532 (Blackmun, J., dissenting) (disagreeing with the Court’s denial of “patent law protection . . . when the mere assembly is effected abroad”). Justice Blackmun characterized the majority’s conclusion as based “on the theory that there is then no ‘making’ of the patented invention in the United States even though every part is made here and . . . shipped] . . . in response to an order from abroad.” *Id.* (Blackmun, J., dissenting).

63. *Id.* at 528 (requiring an “operable assembly of the whole”).

64. *See Paper Converting Mach. Co. v. Magna-Graphics Corp.*, 745 F.2d 11, 14, 19–20 (Fed. Cir. 1984) (holding that testing subassemblies “can be . . . in essence testing the patented combination and, hence, infringement” if full assembly will occur after the patent term expires). *See generally* Stuart Watt, *Patent Infringement: Redefining the “Making” Standard to Include Partial Assemblies—Paper Converting Machine Co. v. Magna-Graphics Corp.*, 60 WASH. L. REV. 889 (1985). In *Paper Converting*, the defendant made all parts of an infringing paper rewinder machine, tested subassemblies, and sold the rewinder disassembled. 745 F.2d at 15–16. In an effort to avoid infringement, the defendant and purchaser agreed that they would not fully assemble the rewinder until two days after the patent expired. *Id.* at 15. The Federal Circuit affirmed that this conduct was nevertheless an infringing sale of the patented invention. *Id.* at 19, 24.

65. *See, e.g., Conner Peripherals, Inc. v. W. Digital Corp.*, No. C-93-20117-RMW-EAI, 1993 WL 645932, at *12 (N.D. Cal. Aug. 16, 1993) (distinguishing *Paper Converting* as “clearly intended” to protect legislative intent for a full patent term); *Hughes Aircraft Co. v. United States*, 29 Fed. Cl. 197, 219 & n.23 (Ct. Fed. Cl. 1993) (noting “significant tension” between analyses by the Federal Circuit in *Paper Converting* and the Supreme Court in *Deepsouth*, and contending that *Paper Converting* is a narrow exception to *Deepsouth*’s operable assembly rule).

66. *Waymark Corp. v. Porta Sys. Corp.*, 245 F.3d 1364, 1367 (Fed. Cir. 2001).

2002] WAYMARK CORP. V. PORTA SYSTEMS CORP. 813

patentee's "right to the fruits of the inventive genius"⁶⁷ and thereby "would subvert the Constitutional scheme of promoting 'the Progress of Science and useful Arts'"⁶⁸ by allowing an infringer "to reap the fruits of the American economy—technology, labor, materials, etc.—but . . . not be subject to the responsibilities of the American patent laws."⁶⁹ The Supreme Court responded to these assertions in two ways. First, the Court referenced the "notion[] that underlie[s] the patent laws. . . . that monopolies—even those conferred by patents—are not viewed with favor."⁷⁰ To protect the public's right to compete freely with U.S. patentees in foreign markets, the Court emphasized:

Our patent system makes no claim to extraterritorial effect To the degree that the inventor needs protection in [foreign] markets . . . , the wording of [the statute] . . . reveals a congressional intent to have him seek it abroad through patents secured in countries where his goods are being used.⁷¹

Second, the Court challenged opponents to produce "a clear and certain signal from Congress . . . [that the patentee's] privilege is wider, and the area of public use narrower, than courts had previously thought."⁷² Twelve years later, Congress enacted § 271(f) to change *Deepsouth's* result.⁷³ But while § 271(f) provides a separate cause of action for direct infringement by component export, "as to claims brought under § 271(a), *Deepsouth* remains good law: one may not be held liable under § 271(a) for 'making' . . . less than a complete invention."⁷⁴

Why did Congress ultimately respond to *Deepsouth*? Possibly it was the particularly "iniquitous and evasive nature of *Deepsouth's* operations"⁷⁵—all parts were shipped in a three-box

67. *Deepsouth*, 406 U.S. at 524.

68. *See id.* at 525 (White, J.) (addressing this counterargument); *id.* at 534 (Blackmun, J., dissenting).

69. *Id.* at 534 (Blackmun, J., dissenting) (quoting *Laitram Corp. v. Deepsouth Packing Co.*, 443 F.2d 936, 939 (5th Cir. 1971)).

70. *Id.* at 525 (quoting *Laitram Corp. v. Deepsouth Packing Co.*, 310 F. Supp. 926, 929 (E.D. La. 1970)).

71. *Id.* at 531.

72. *Id.* at 530–31 ("When . . . the Constitution is permissive, the sign of how far Congress has chosen to go can come only from Congress.").

73. Refer to Part IV.A *infra* (discussing enactment of § 271(f) in response to *Deepsouth*).

74. *Rotec Indus., Inc. v. Mitsubishi Corp.*, 215 F.3d 1246, 1252 n.2 (Fed. Cir. 2000); *see also Hughes Aircraft Co. v. United States*, 29 Fed. Cl. 197, 218 n.22 (Ct. Fed. Cl. 1993) (indicating that adding § 271(f) neither redefined nor overruled *Deepsouth's* interpretation of § 271(a)'s terms).

75. *Deepsouth*, 406 U.S. at 533 (Blackmun, J., dissenting) (referring to *Deepsouth* as an "artful competitor").

“kit” with instructions for assembly in less than an hour⁷⁶—and the conclusion that *Deepsouth* was clearly “motivated by a desire to avoid patent infringement.”⁷⁷ Congress also may have been encouraged by increased marketplace globalization⁷⁸ and a desire to protect the rights of U.S. patentees in the international arena.⁷⁹ Indeed, several other statutes having “extraterritorial” effects were created at nearly the same time—for example, those imposing infringement liability for importation of the unpatented output of a patented process practiced abroad⁸⁰ and for inducement committed abroad.⁸¹

IV. § 271(f): CONGRESSIONAL RESPONSE

[I]t is one of the surest indexes of a mature and developed jurisprudence not to make a fortress out of the dictionary; but to remember that statutes always have some purpose or object to accomplish, whose sympathetic and imaginative discovery is the surest guide to their meaning.⁸²

A. *Legislative Intent and Judicial Construction*

Congress enacted § 271(f) to overrule the Supreme Court’s *Deepsouth* holding and thereby “to close a loophole in patent law.”⁸³ The legislative history indicates that the provision’s

76. See *id.* at 524, 527 n.9 (indicating that *Deepsouth* advertised final parts assembly “as of no importance”).

77. *Id.* at 523 n.5 (referencing *Deepsouth*’s explanation to a Brazilian customer that U.S. law would allow “manufacture [of] the entire machine without any complication . . . except[] that . . . two parts . . . must not be assembled in the United States, but assembled after the machine arrives in Brazil”).

78. Refer to notes 1–3 *supra* and accompanying text (discussing marketplace globalization).

79. See Bradley, *supra* note 10, at 506–07 (suggesting likely reasons for increasing requests to apply U.S. intellectual property laws to foreign conduct: “more [U.S.] business abroad; U.S. intellectual property laws are often more protective than those of other countries; . . . [recent] heightened focus . . . on the value of intellectual property as a business asset; and technology . . . facilitat[ing] the transmission and duplication of intellectual property”).

80. See Process Patent Amendments Act of 1988, *supra* note 12, at 1563–64 (codified at 35 U.S.C. § 271(g)).

81. See, e.g., *Akzona Inc. v. E.I. du Pont de Nemours & Co.*, 662 F. Supp. 603, 613 (D. Del. 1987) (discussing liability for inducing infringement under § 271(b) and for contributory infringement under § 271(c)).

82. *Roche Prods., Inc. v. Bolar Pharm. Co.*, 733 F.2d 858, 861 (Fed. Cir. 1984) (quoting Judge Learned Hand’s observation in *Cabell v. Markham*, 148 F.2d 737, 739 (2d Cir.), *aff’d*, 326 U.S. 404 (1945)).

83. Patent Law Amendments Act of 1984, *supra* note 12, at 5828 (“Section-by-Section Analysis”). Enactment occurred during a period in which Congress adopted an “accelerated pace of overrulings.” Abner J. Mikva & Jeff Bleich, *When Congress Overrules the Court*, 79 CAL. L. REV. 729, 748 (1991) (noting that “[b]etween 1982 and 1986,

2002] WAYMARK CORP. V. PORTA SYSTEMS CORP. 815

primary purpose is “to avoid encouraging manufacturing outside the United States,” and, more specifically, “[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.”⁸⁴

Some commentators point to the “relative dearth” of case law construing § 271(f) and conclude that the provision is of little importance.⁸⁵ However, § 271(f) claims appear to be on the rise. Moreover, recent cases tend to construe the statute broadly,⁸⁶ favoring patentees⁸⁷ and thereby encouraging more claims.

Subsection 271(f) of the Patent Act provides:

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

(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.⁸⁸

Congress overruled at least twenty-three Supreme Court decisions—half within two years of the date of the decision”).

84. Patent Law Amendments Act of 1984, *supra* note 12, at 5827-28 (“Section-by-Section Analysis”).

85. *E.g.*, Chisum, *Territoriality*, *supra* note 14, at 607.

86. Refer to Part IV.A *infra* (describing § 271(f) statutory terms and corresponding interpretive case law).

87. *Cf.* Watt, *supra* note 64, at 889 (suggesting “movement by the Federal Circuit toward a much more protectionist view of patents”).

88. 35 U.S.C. § 271(f) (2000) (emphases added).

Patentees may claim infringement under § 271(f)(1),⁸⁹ (f)(2),⁹⁰ or both,⁹¹ the key difference in applicability being that under § 271(f)(1) the components may be staple articles, but under § 271(f)(2) the components must be “especially made or adapted for use in the invention.”⁹² Surprisingly, there is no indication that the *Waymark* plaintiffs claimed infringement under § 271(f)(1).⁹³ The analysis below considers whether such a claim would have been viable.

The following provides term-by-term analysis of statutory meaning in light of the original legislative intent and after more than seventeen years of judicial gloss. Because § 271(f)(1) and (f)(2) borrow many of their terms from indirect infringement § 271(b) and (c), respectively,⁹⁴ the analysis considers construction of like terms under these provisions. The comparison between legislative intent and judicial interpretation will demonstrate that decisions construing § 271(f) generally have expanded that subsection’s scope beyond mere reversal of *Deepsouth* and beyond treatment of like terms employed elsewhere in § 271.

1. *§ 271(f) General Statutory Terms.* The legislature’s “Section-by-Section Analysis” begins with the statement that § “271(f) makes it an infringement to supply components of a patented invention, or to cause components to be supplied, that are to be combined outside the United States.”⁹⁵ Courts have

89. *E.g.*, *Moore U.S.A. Inc. v. Standard Register*, 144 F. Supp. 2d 188, 193 (W.D.N.Y. 2001); *T.D. Williamson, Inc. v. Laymon*, 723 F. Supp. 587, 591 (N.D. Okla. 1989), *aff’d*, 923 F.2d 871 (Fed. Cir. 1990).

90. *E.g.*, *Waymark Corp. v. Porta Sys. Corp.*, 245 F.3d 1364, 1366 (Fed. Cir. 2001).

91. *E.g.*, *Trs. of Columbia Univ. v. Roche Diagnostics GmbH*, 150 F. Supp. 2d 191, 204 (D. Mass. 2001); *Windsurfing Int’l, Inc. v. Fred Ostermann GmbH*, 668 F. Supp. 812, 820 n.48 (S.D.N.Y. 1987), *aff’d*, 1 F.3d 1214 (Fed. Cir. 1993).

92. *See Williamson*, 723 F. Supp. at 592 (citing Patent Law Amendments Act of 1984, *supra* note 12, at 5828).

93. *Waymark*, 245 F.3d at 1366 (discussing *Waymark*’s petition to the district court to reconsider the grant of summary judgment to defendant *Porta Systems* in light of the new claim of infringement under 35 U.S.C. § 271(f)(2), but without mention of a claim under 35 U.S.C. § 271(f)(1)).

94. Compare § 271(f)(1) with § 271(b), “[w]hoever actively induces infringement of a patent shall be liable as an infringer,” and § 271(f)(2) with § 271(c):

Whoever offers to sell or sells within the United States or imports into the United States a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer.

35 U.S.C. § 271(b)–(c), (f) (2000).

95. Patent Law Amendments Act of 1984, *supra* note 12, at 5828 (“Section-by-Section Analysis”).

2002] WAYMARK CORP. V. PORTA SYSTEMS CORP. 817

interpreted this language to apply to shipping components from the United States, as in *Deepsouth*, but not to offering to sell components for foreign assembly.⁹⁶ Courts also have suggested that the element of supplying components from the United States requires that the components be made within the United States,⁹⁷ as they were in *Deepsouth*. Yet, in an apparent extension beyond the facts of *Deepsouth*, courts have interpreted “component” to include not only machine components and structural combinations,⁹⁸ but chemical compositions as well.⁹⁹

As to the quantity of supplied components required for infringement, recall that the defendant in *Deepsouth* supplied *all* of the shrimp deveiner components for foreign assembly.¹⁰⁰ Yet under § 271(f)(2), supplying a single component suffices to infringe,¹⁰¹ and under § 271(f)(1), “one must supply or cause to be supplied ‘all or a substantial portion’ of the components in a manner that would infringe the patent if such a combination occurred within the United States.”¹⁰² Thus, in drafting § 271(f)(1) and (f)(2), Congress did not stop at merely reversing *Deepsouth*’s result. Instead, Congress opted for a more inclusive infringement standard, despite the emphasis in *Deepsouth*’s dissent that “[t]he

96. See *Rotec Indus., Inc. v. Mitsubishi Corp.*, 215 F.3d 1246, 1257–58 (Fed. Cir. 2000) (refusing to read “offering to sell” into § 271(f)(2)’s language prohibiting “supplying or causing to supply”).

97. See *Windsurfing Int’l, Inc. v. Fred Ostermann GmbH*, 668 F. Supp. 812, 820–21 (S.D.N.Y. 1987) (finding reasonable the proposition that Congress did not intend § 271(f) to apply to components made in France, stored in the United States, then shipped to Canada, because this situation was not discussed in *Deepsouth*); see also *Rotec*, 245 F.3d at 1260 (Newman, J., concurring) (“With no . . . component made in the United States[,] the application of § 271(f) was mooted.”).

98. See *Deepsouth Packing Co. v. Laitram Corp.*, 406 U.S. 518, 520–21 (1972) (concluding that the shrimp deveining machine patents were “combination patents”).

99. See *W. R. Grace & Co.-Conn. v. Intercat Inc.*, 60 F. Supp. 2d 316, 320–21 (D. Del. 1999) (finding that § 271(f)’s “component” term applies to chemical compositions); see also *Bristol-Myers Squibb Co. v. Rhone-Poulenc Rorer, Inc.*, No. 95 CIV 8833, 2001 WL 1263299, at *2 (S.D.N.Y. Oct. 19, 2001) (same); *Lubrizol Corp. v. Exxon Corp.*, 696 F. Supp. 302, 325 (N.D. Ohio 1988) (enjoining defendant from “supplying in or from the United States any lubricant additive containing its product . . . for combination in a lubricating composition outside the United States”). But see *Standard Havens Prods., Inc. v. Gencor Indus., Inc.*, 953 F.2d 1360, 1374 (Fed. Cir. 1991) (holding that sale to a foreign buyer of an apparatus for implementing a patented process does not, alone, implicate § 271(f)); *Enpat, Inc. v. Microsoft Corp.*, 6 F. Supp. 2d 537, 539 (E.D. Va. 1998) (finding that process or method patents are “not . . . within the purview of § 271(f)” because they have “no ‘components’ for purposes of § 271(f)”; *Aerogroup Int’l, Inc. v. Marlboro Footworks, Ltd.*, 955 F. Supp. 220, 231–32 (S.D.N.Y. 1997) (finding § 271(f)(1) inapplicable because a design patent for a shoe sole has no “component parts”).

100. Refer to note 59 *supra* and accompanying text (describing the facts in *Deepsouth*).

101. Refer to note 88 *supra* and accompanying text (quoting 35 U.S.C. § 271(f)(2)).

102. Patent Law Amendments Act of 1984, *supra* note 12, at 5828 (“Section-by-Section Analysis”) (emphasis added).

situation, perhaps, would be different were parts, or even only one vital part, manufactured abroad. Here, everything was accomplished in this country except putting the pieces together as directed.”¹⁰³

2. *§ 271(f)(1) Statutory Terms.* While the language of § 271(f)(1) generally tracks that of § 271(b), Congress may have modeled the term “substantial portion” in § 271(f)(1) after the term “material part” in § 271(c).¹⁰⁴ In light of the otherwise higher-bar requirements of non-staple components and intent to assemble in § 271(f)(2),¹⁰⁵ this additional restraint on the applicability of § 271(f)(1) makes sense.

Under § 271(f)(1), courts have construed “substantial portion” to mean a portion contributing more than minimally,¹⁰⁶ a majority of the components,¹⁰⁷ and all but one of the components.¹⁰⁸ One court has indicated that shipping as much as “substantially all” of the components is not required for infringement.¹⁰⁹ It is not yet clear whether a single, very important part would be enough to constitute a “substantial portion” under § 271(f)(1).

In § 271(f)(1), “[t]he term ‘actively induce’ is drawn from existing [§] 271(b) of the patent law, which provides that whoever actively induces patent infringement is liable as an infringer.”¹¹⁰

103. *Deepsouth*, 406 U.S. at 533 (Blackmun, J., dissenting).

104. Refer to note 94 *supra* (quoting 35 U.S.C. § 271(c)). Alternatively, “material” may simply mean “key,” although this interpretation would reduce the subsequent language in § 271(c), “especially made . . . or adapted . . . and not a staple,” to a redundancy. *See id.*

105. Refer to notes 120–26 *infra* and accompanying text (discussing specific elements of infringement under § 271(f)(2)).

106. *See Rothschild v. Ford Motor Co.*, 2 F. Supp. 2d 941, 947 (E.D. Mich. 1998) (finding no infringement by shipping from the United States two burners and a cooling mechanism when the patented sand reclamation system had other components, including a furnace, retention well, conveyor, grids, and chute, because “any rational juror would find these three components contribute minimally to the accused device and therefore § 271(f)(1) is wholly inapplicable”).

107. *See T.D. Williamson, Inc. v. Laymon*, 723 F. Supp. 587, 591 (N.D. Okla. 1989) (finding infringement by supplying a “majority of the components of [the caliper] pig bodies . . . from Tulsa to the job sites in Venezuela . . . sufficiently assembled so that [the] technicians could complete the assembly at the job site in about two hour[s] time”), *aff'd*, 923 F.2d 871 (Fed. Cir. 1990).

108. *See Moore U.S.A. Inc. v. Standard Register Co.*, 144 F. Supp. 2d 188, 195–96 (W.D.N.Y. 2001) (holding that supplying all but one of the components of accused forms for combination in Switzerland constituted supplying “a substantial portion”).

109. *See id.* at 195 (emphasizing that § “271(f)(1) speaks of . . . supplying ‘a substantial portion’ of the infringing product’s components, *not* . . . ‘substantially all’ of [them]”).

110. Patent Law Amendments Act of 1984, *supra* note 12, at 5828 (“Section-by-Section Analysis”).

2002] WAYMARK CORP. V. PORTA SYSTEMS CORP. 819

Under § 271(b), “a person infringes by actively and *knowingly* aiding and abetting another’s direct infringement.”¹¹¹ Courts have further construed active inducement to require actual knowledge of the patent by the inducer¹¹² and specific intent to encourage infringement.¹¹³

But under § 271(f)(1), courts have enlarged the scope of active inducement in that a party can actively induce *itself*, as opposed to a third party, to make a foreign assembly.¹¹⁴ “Rather than a limiting factor for liability under § 271(f)(1), the legislative history suggests the phrase, ‘actively induce’ was intended to broaden the basis for liability, extending it to cover both those who actually supply the components as well as those (contributory infringers) who cause others to supply components.”¹¹⁵ Thus, on reasoning analogous to that in *Waymark*, it is unlikely that proof of an actual assembly by anybody will be required to establish § 271(f)(1) violation. The import of this holding is huge, as it clearly extends the reach of § 271(f)(1) to encompass intended extraterritorial “making” of a U.S.-patented invention.¹¹⁶

Based on the foregoing, *Waymark* appears to have had a colorable claim under § 271(f)(1).¹¹⁷ *Porta Systems*, without authorization, supplied or caused to be supplied components of a

111. *Water Techs. Corp. v. Calco, Ltd.*, 850 F.2d 660, 668 (Fed. Cir. 1988) (indicating that “[a]lthough [§] 271(b) does not use the word ‘knowing,’ the case law and legislative history uniformly assert such a requirement”). See generally 5 DONALD S. CHISUM, CHISUM ON PATENTS § 17.04[4], at 17–76 (2001) [hereinafter CHISUM ON PATENTS] (indicating that courts have construed active inducement under § 271(b) to cover “a wide variety of acts”).

112. See *Hughes Aircraft Co. v. Nat’l Semiconductor Corp.*, 857 F. Supp. 691, 699 (N.D. Cal. 1994) (finding that § 271(b) requires actual knowledge of the patents in suit).

113. E.g., *Manville Sales Corp. v. Paramount Sys., Inc.*, 917 F.2d 544, 553–54 (Fed. Cir. 1990); *Cybiotronics, Ltd. v. Golden Source Elecs., Ltd.*, 130 F. Supp. 2d 1152, 1164–65 (C.D. Cal. 2001) (finding no knowledge of the patent and therefore no infringement under § 271(b) or (c)).

114. *Moore U.S.A. Inc. v. Standard Register Co.*, 144 F. Supp. 2d 188, 195 (W.D.N.Y. 2001) (concluding that, based on the legislative history and *Williamson*, a party who supplies “all or a substantial portion of the components” for foreign assembly can be liable under § 271(f)(1) “even if it did not induce a third-party to assemble the infringing product”); *T.D. Williamson, Inc. v. Laymon*, 723 F. Supp. 587, 591–92 (N.D. Okla. 1989) (finding that, based on the legislative history, a party cannot escape liability under § 271(f)(1) by “actively inducing” itself as opposed to a third party), *aff’d*, 923 F.2d 871 (Fed. Cir. 1990).

In contrast, under § 271(b), courts have held that the inducer and the direct infringer cannot be the same person or entity. E.g., *Jervis B. Webb Co. v. S. Sys., Inc.*, 495 F. Supp. 145, 147 (E.D. Mich. 1980).

115. *Williamson*, 723 F. Supp. at 592.

116. Refer to Part IV.C *infra* (considering further the extraterritorial impact of § 271(f)).

117. Refer to note 88 *supra* and accompanying text (quoting § 271(f)(1)).

battery monitoring system, a patented combination.¹¹⁸ Further, Porta Systems made the components within the United States, shipped all or a substantial portion of the components abroad, and actively induced itself to combine components outside the United States into an assembly that would infringe if so combined within the United States.¹¹⁹ Finally, while the Federal Circuit decided *Waymark* under § 271(f)(2), the court likely would have extended its “no actual assembly required” rule to § 271(f)(1) based on similar statutory interpretation and policy rationales. Thus, the Federal Circuit could have found a rejected § 271(f)(1) claim, like *Waymark*’s rejected § 271(f)(2) claim, worthy of the district court’s reconsideration.

3. *§ 271(f)(2) Statutory Terms.* Subsection 271(f)(2) has its own set of elements. According to the legislative history,

Under [§ 271](f)(1) the components may be staple articles or commodities of commerce which are also suitable for substantial non-infringing use, but under [§ 271](f)(2) the components must be especially made or especially adapted for use in the invention. . . . , “and not a staple article or commodity of commerce suitable for substantial non-infringing use[.]” [This phrase] comes from existing [§] 271(c) of the patent law, which governs contributory infringement.¹²⁰

To avoid liability under § 271(c), courts have required that a component have “a use other than to be combined with other items that together fall within the . . . claims of the patent.”¹²¹ In assessing whether a component is a staple article of commerce suitable for substantial noninfringing use, courts consider the quality, quantity, and efficiency of alternate uses.¹²² “[O]ccasional and aberrant use of [components] . . . clearly designed to be used in a[n] [infringing] system,” or knowledge that the component is to be used in an infringing system, “even if the article has some

118. See *Waymark Corp. v. Porta Sys. Corp.*, 245 F.3d 1364, 1365 (Fed. Cir. 2001).

119. See *id.*

120. Patent Law Amendments Act of 1984, *supra* note 12, at 5828 (“Section-by-Section Analysis”).

121. *Lucas Aerospace, Ltd. v. Unison Indus., L.P.*, 899 F. Supp. 1268, 1287 (D. Del. 1995).

122. *Reynolds Metals Co. v. Aluminum Co. of Am.*, 457 F. Supp. 482, 509 (N.D. Ind. 1978), *rev’d on other grounds*, 609 F.2d 1218 (7th Cir. 1979). Compare *Universal Elecs. Inc. v. Zenith Elecs. Corp.*, 846 F. Supp. 641, 652 (N.D. Ill. 1994) (finding a Universal transmitter remote a “staple article” as it had “substantial non-infringing uses in that those remotes can operate many electronic devices not manufactured by Zenith”) with *Drexelbrook Controls Inc. v. Magnetrol Int’l Inc.*, 720 F. Supp. 397, 407 (D. Del. 1989) (finding a transmitter remote a “non-staple article” as it had “no practical use other than as part of this infringing system”), *aff’d*, 904 F.2d 45 (Fed. Cir. 1990).

2002] WAYMARK CORP. V. PORTA SYSTEMS CORP. 821

significant non-infringing use, . . . is sufficient to meet the burden under [§] 271(c).¹²³

Subsection 271(f)(2), unlike (f)(1), has an explicit scienter requirement:

[Subsection 271](f)(2), like existing [§] 271(c), requires the infringer to have knowledge that the component is especially made or adopted [sic]. [Subsection 271](f)(2) also contains a further requirement that infringers must have an intent that the components will be combined outside of the United [S]tates in a manner that would infringe if the combination occurred within the United States.¹²⁴

Under § 271(c), courts have construed knowledge to require “a showing that the alleged contributory infringer knew that the combination for which his component was especially designed was both patented and infringing.”¹²⁵ *Waymark* is the only Federal Circuit case discussing the additional “intent” requirement under § 271(f)(2).¹²⁶

4. *Summary: Expanded Liability.* Subsection 271(f), therefore, is a hybrid provision. It borrows many of its terms from indirect infringement § 271(b) (inducement of infringement) and (c) (contributory infringement by supplying components).¹²⁷ Like the indirect infringement provisions, § 271(f) has knowledge and intent requirements.¹²⁸ But unlike these provisions, which depend on a separate act of direct infringement under § 271(a),¹²⁹ § 271(f) has been construed to be a direct form of infringement and, therefore, not dependent on a third-party act.¹³⁰

123. *Preemption Devices, Inc. v. Minn. Mining & Mfg. Co.*, 630 F. Supp. 463, 471 & n.10 (E.D. Pa. 1985), *aff'd in part, vacated in part*, 803 F.2d 1170 (Fed. Cir. 1986).

124. Patent Law Amendments of 1984, *supra* note 12, at 5828 (“Section-by-Section Analysis”).

125. *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 377 U.S. 476, 488–91 (1964); *see also Drexelbrook*, 720 F. Supp. at 407 (finding that the defendant was “well aware of the similarity between its product and the system covered by the . . . patent” when the patentee’s products were marked, the patentee’s specifications were used in designing new products, and the defendant’s customers asked for a product like the patentee’s).

126. *Waymark Corp. v. Porta Sys. Corp.*, 245 F.3d 1364, 1367–68 (Fed. Cir. 2001). Refer to Part II.C *supra* (describing the Federal Circuit’s interpretation of § 271(f)(2)).

127. *See* 35 U.S.C. § 271(b)–(c), (f) (2000).

128. *Cf. Fla. Prepaid Postsecondary Educ. Expense Bd. v. Coll. Sav. Bank*, 527 U.S. 627, 645 (1999) (“Actions predicated on direct patent infringement, however, do not require any showing of intent to infringe; instead, knowledge and intent are considered only with respect to damages.”).

129. *Joy Techs. Inc. v. Flakt Inc.*, 6 F.3d 770, 774 (Fed. Cir. 1993) (collecting cases and demonstrating that “either form of ‘dependent infringement’ cannot occur without an act of direct infringement”).

130. *See Waymark*, 245 F.3d at 1368.

As a result, § 271(f) is broader in scope in some respects than either § 271(b)¹³¹ or (c). If an inducer induces an act of direct infringement under § 271(b), but the direct infringer does not infringe under § 271(a), the inducer is off the hook. In contrast, under § 271(f)(1), because a party may induce itself, the inducing party is not off the hook—evidence of inducement alone is enough for direct infringement liability.¹³² Similarly, if a contributory infringer under § 271(c) contributes components to a direct infringer, but the direct infringer does not infringe under § 271(a), the contributory infringer is off the hook.¹³³ Under *Waymark's* reading of § 271(f)(2), however, shipping components with knowledge of the patent and intent for foreign assembly is enough to establish direct infringement liability.¹³⁴ Shipment may be proved by discoverable shipping documents; knowledge of the patent may be proved by public record in the putative infringer's industry; intent for foreign assembly may be proved by shipment records plus patent knowledge.¹³⁵

So, § 271(f) is similar to the dependent infringement provisions in language only; instead of requiring a separate infringing act under § 271(a)—a U.S. making, use, offer, sale, or import—the statute requires only an intent to act outside the United States “in a manner that would infringe” under § 271(a).¹³⁶ The irony is that it is now easier to prove the “foreign” offense than the domestic one. The latter still requires proof of direct infringement.¹³⁷ In declaring that § “271(f)(2) does not incorporate the doctrine of contributory infringement,”¹³⁸ the Federal Circuit has removed the requirement of an actual “making” anywhere, thereby lowering the standard of proof and increasing claim viability. Thus, given the Federal Circuit's previous finding that there is no need for third party infringement under § 271(f)(1),¹³⁹ shipping components with

131. In another respect, § 271(f) is narrower in scope than § 271(b). There is no need to supply any physical thing to violate § 271(b); words alone are enough. *See* 35 U.S.C. § 271(b). In contrast, to violate § 271(f), both words and supplied goods are essential. *See* 35 U.S.C. § 271(f).

132. Refer to notes 114–15 *supra* and accompanying text (discussing self-inducement).

133. *Waymark*, 245 F.3d at 1368 (recognizing that liability under § 271(c) is “dependent on an act of direct infringement”).

134. *Id.* at 1367–68.

135. *See* *Manville Sales Corp. v. Paramount Sys. Inc.*, 917 F.2d 544, 553–54 (Fed. Cir. 1990) (indicating that, under § 271(b), the intent requirement may be satisfied by either direct or circumstantial evidence).

136. 35 U.S.C. § 271(f).

137. *See id.* § 271(a).

138. *Waymark*, 245 F.3d at 1368.

139. *T.D. Williamson, Inc. v. Laymon*, 723 F. Supp. 587, 591–92 (N.D. Okla. 1989)

intent to assemble a U.S.-patented invention abroad is enough—even if no actual assembly or separate act of infringement occurs, inside or outside the United States.¹⁴⁰

In sum, the Supreme Court’s “narrow and technical” territorial reading of § 271(a) in *Deepsouth* has been circumvented—first by Congress in the form of a separate cause of action under § 271(f), then by the courts through liberal construction of statutory terms.

B. No Liability for Attempt? The “Offer to Sell” Analogy

In *Waymark*, rejecting the argument that § 271(f)(2) impermissibly creates liability for attempt, Judge Rader stated: “shipping components of an invention abroad without combining them is no more an attempt¹⁴¹ than offering to sell an invention without actually selling it.”¹⁴² In direct contrast, a federal district court more recently expressed, “the ‘offer to sell’ language is to a ‘sale’ that infringes the statute what an ‘attempt’ prosecution is to the crime that is attempted.”¹⁴³

Judge Rader’s choice of analogy—infringement by “offer to sell”¹⁴⁴—is intriguing.¹⁴⁵ Courts agree that the “offer to sell” language provides an independent basis for liability when the offer is preliminary to an anticipated infringing sale.¹⁴⁶ However, the law surrounding an “offer to sell” an invention without an actual or contemplated infringing sale remains unsettled.¹⁴⁷ The

(holding that a party can actively induce itself under § 271(f)(1)), *aff’d*, 923 F.2d 871 (Fed. Cir. 1990).

140. See *Waymark*, 245 F.3d at 1367–68.

141. “Attempt” means “[t]he act or an instance of making an effort to accomplish something, especially] without success.” BLACK’S LAW DICTIONARY 123 (7th ed. 1999).

142. *Waymark*, 245 F.3d at 1368 (citing 35 U.S.C. § 271(a) as prohibiting the act of making an unauthorized offer to sell a patented invention within the United States).

143. *Cybiotronics, Ltd. v. Golden Source Elecs., Ltd.*, 130 F. Supp. 2d 1152, 1171 (C.D. Cal. 2001) (considering the scope of § 271(a)’s “offer to sell” language).

144. See § 271(a) (“[W]hoever without authority . . . offers to sell . . . any patented invention within the United States . . . infringes the patent.”). Congress added “offer to sell” language to the Patent Act in 1994 to conform U.S. law with the Trade-Related Aspects of Intellectual Property (TRIPS) provision of the April 1994 Uruguay Round trade agreements. See 5 CHISUM ON PATENTS, *supra* note 111, § 16.02[5][g], at 16–58 (citing Uruguay Rounds Agreement Act, Pub. L. No. 103-465, § 533(a)(1), 108 Stat. 4809, 4988 (1994) (effective Jan. 1, 1996)).

145. *Waymark*, 245 F.3d at 1366.

146. See *Recycling Scis. Int’l, Inc. v. Soil Restoration & Recycling, L.L.C.*, No. 00 C 0311, 2001 WL 969040, at *2 (N.D. Ill. Aug. 24, 2001) (citing 3D Sys., Inc. v. Aarotech Lab., Inc., 160 F.3d 1373, 1378 (Fed. Cir. 1998), as an example of liability arising simply from an offer to sell a patented product); see also *Star Scientific, Inc. v. R.J. Reynolds Tobacco Co.*, 174 F. Supp. 2d 388, 393 (D. Md. 2001) (indicating that liability can also exist based on offers to sell products manufactured using a patented process).

147. See generally Edwin D. Garlepp, *An Analysis of the Patentee’s New Exclusive*

center of the dispute is whether an “offer to sell . . . within the United States” must contemplate an infringing making, use, or sale within the United States in order to constitute an infringement.¹⁴⁸

The unsettled nature of § 271(a)’s “offer to sell” language takes on further significance in any consideration of § 271(f). Absent an infringing making, use, or sale within the United States, or import into the United States, “offer to sell” liability is the only alternative to § 271(f) for reaching a foreign-assembled, U.S.-patented invention in an infringement suit.¹⁴⁹ Therefore, ultimate judicial construction of the scope of § 271(a)’s “offer to sell” language likely will affect the ultimate scope and prominence of § 271(f). Intriguingly, the Federal Circuit’s *Waymark* opinion makes no reference to *Rotec Industries v. Mitsubishi Corp.*,¹⁵⁰ the court’s own most recent decision considering § 271(a) “offer to sell” and § 271(f) infringement claims.

In *Rotec*, the Federal Circuit considered an alleged U.S. offer for sale but foreign manufacture, use, and sale¹⁵¹ of a U.S.-patented invention.¹⁵² However, the court’s position on whether such an offer would infringe a U.S. patent was not made explicit. After finding insufficient evidence of an “offer for sale” within the United States,¹⁵³ the inquiry ended. The court affirmed summary

Right to “Offer to Sell,” 81 J. PAT. & TRADEMARK OFF. SOC’Y 315 (1999) (defining the unsettled scope of “offer to sell” in light of U.S. and foreign case law and policy); David Sulkis, Note, *Patent Infringement by Offer to Sell: Rotec Industries, Inc. v. Mitsubishi Corp.*, 38 HOUS. L. REV. 1099 (2001) (analyzing “offer to sell” in the context of the Federal Circuit’s *Rotec* decision).

148. See Garlepp, *supra* note 147, at 325 (describing the ambiguity as “whether the phrase ‘within the United States’ qualifies the word ‘offer’ alone, or both ‘offer’ and ‘sell’ within the phrase ‘offer to sell[,]’” and observing that the former reading allows the mere act of offering within the United States to be an infringement, while the latter reading requires both the offer and contemplated sale to be within the United States).

149. See 35 U.S.C. § 271(a) (2000); *Cybiotronics, Ltd. v. Golden Source Elecs., Ltd.*, 130 F. Supp. 2d 1152, 1166–67 (C.D. Cal. 2001) (finding (1) no direct infringement by making, use, or sale in the United States when all occurred abroad, and (2) that the remaining territorial bases for infringement under § 271(a) were “offers to sell” and “imports”).

150. 215 F.3d 1246 (Fed. Cir. 2000).

151. *Id.* at 1249–50. Manufacture, sale, and use of the system all occurred within China, but some activities preliminary to the contract occurred in the United States. *Id.* at 1248–49.

152. The defendants joined together to bid on a concrete placing system for China’s Three Gorges Dam project. *Id.* at 1249. Rotec’s patent claims a tower crane and concrete conveyor system for use in large construction projects. *Id.* at 1248–49.

153. See *id.* at 1252 (finding that, because a particular defendant’s work related to some but not all of the components, the defendant did not offer to sell the entire patented invention as required under *Deepsouth*, thereby extending *Deepsouth’s* holding to § 271(a)’s new “offer to sell” language); *id.* at 1255 (rejecting, “[i]n the absence of a

2002] WAYMARK CORP. V. PORTA SYSTEMS CORP. 825

judgment for noninfringement under § 271(a) and did not reach the issue of whether a U.S.-made offer contemplating a foreign sale could infringe a U.S. patent.¹⁵⁴

Nevertheless, the *Rotec* panel's analysis of whether an offer for sale was made—under facts clearly indicating no U.S. sale—suggests that the Federal Circuit *could* find infringing a U.S. offer for foreign sale.¹⁵⁵ In her concurring opinion in *Rotec*, Judge Newman made explicit this inference: “the majority opinion necessarily accepts the critical premise that an ‘offer to sell’ made in the United States can constitute patent infringement even when the contemplated sale [outside the United States] could not infringe the patent.”¹⁵⁶ Judge Newman then disagreed with the inferred majority stance, asserting that such an offer to sell cannot be infringing because the sale itself would be extraterritorial and thus noninfringing.¹⁵⁷

Despite the inferred Federal Circuit majority stance, post-*Rotec* district courts considering the issue¹⁵⁸ have instead followed Judge Newman's approach.¹⁵⁹ Judge Newman inferred from § 271(i)—requiring the thing offered to be actually sold before the patent expires¹⁶⁰—that the sale must be one that will infringe the patent.¹⁶¹ Thus an offer within the United States to sell a system with all components made in a foreign country—for sale, installation, and use in a foreign country—would not infringe the

communication [by defendants] with a third party,” *Rotec*'s argument that defendants' U.S. activities “generat[ed] interest . . . to the commercial detriment of the rightful patentee” (citing *3D Sys., Inc. v. Aarotech Lab., Inc.*, 160 F.3d 1373, 1379 n.4 (Fed. Cir. 1998))).

154. See ROBERT L. HARMON, *PATENTS AND THE FEDERAL CIRCUIT* 312 n.122 (5th ed. 2001) (“[T]he 2-1 panel decision raises as many questions as it answers.”).

155. The Federal Circuit's opinion in *Waymark* seems to support this assessment when it states that an “offer for sale” is not an “attempt.” *Waymark Corp. v. Porta Sys. Corp.*, 245 F.3d 1364, 1368 (Fed. Cir. 2001).

156. See *Rotec*, 215 F.3d at 1258 (Newman, J., concurring).

157. *Id.* at 1258–60 (Newman, J., concurring) (citing § 271(i)'s requirement that the thing offered be actually sold before the patent expires).

158. See *Cybiotronics, Ltd. v. Golden Source Elecs., Ltd.*, 130 F. Supp. 2d 1152 (C.D. Cal. 2001); *Star Scientific, Inc. v. R.J. Reynolds Tobacco Co.*, 174 F. Supp. 2d 388, 393 (D. Md. 2001); *Recycling Scis. Int'l, Inc. v. Soil Restoration & Recycling, L.L.C.*, No. 00 C 0311, 2001 WL 969040 (N.D. Ill. Aug. 24, 2001).

159. *Rotec*, 215 F.3d at 1259 (Newman, J., concurring) (asserting that an offer to sell cannot be infringing when the sale itself would be extraterritorial and thus noninfringing).

160. See 35 U.S.C. § 271(i) (2000) (“[A]n ‘offer to sell’ by a person other than the patentee, or any designee of the patentee, is that in which the sale will occur before the expiration of the term of the patent.”).

161. See *Rotec*, 215 F.3d at 1259–60 (Newman, J., concurring) (stressing that § 271(a) cannot be read in isolation from § 271(i): “It is clear . . . that an infringing offer to sell, § 271(a), must be of an item that would infringe the [U.S.] patent upon the intended sale, § 271(i)”).

U.S. patent¹⁶² because the actual sale would not infringe. Judge Newman further asserted that “[t]he purpose of § 271(a) [is] to permit a patentee to act against threatened infringing sale by establishing a cause of action before actual sale occur[s],” so that the patentee need not wait until actual sale to seek damages due to the offer.¹⁶³

The Central District of California provides the most thorough post-*Rotec* examination of the issue in *Cybiotronics, Ltd. v. Golden Source Electronics, Ltd.*¹⁶⁴ The *Cybiotronics* court dismissed an infringement suit against a Hong Kong manufacturer that completed its sale in Hong Kong, even though the offer to sell may actually have occurred in New York.¹⁶⁵ The court recognized *Rotec* as “[t]he only case that directly presented the question of hinging liability on an ‘offer to sell’ goods that would not end up in the United States,” but nevertheless distinguished *Rotec* as it “did not decide [this] question . . . because [there was] no . . . evidence of an ‘offer to sell’ made ‘within the United States.’”¹⁶⁶

The *Cybiotronics* court instead turned to *Quality Tubing, Inc. v. Precision Tube Holdings Corp.*,¹⁶⁷ which was decided in the Southern District of Texas after the *Rotec* district court decision, but before appellate review by the Federal Circuit. The *Quality Tubing* court found “as a matter of law, . . . no act of infringement under [§] 271(a) . . . by contracting, in the United States, to manufacture, sell, and deliver a product in Scotland and Norway, for use in Norway.”¹⁶⁸

Relying on the *Quality Tubing* interpretation, which is squarely at odds with the inferred Federal Circuit stance in *Rotec*, the *Cybiotronics* court held that “liability under [§] 271(a) does not extend to ‘offers to sell’ which do not contemplate actual

162. *Id.* at 1260 (Newman, J., concurring).

163. *Id.* at 1259 (Newman, J., concurring).

164. 130 F. Supp. 2d 1152, 1167–73 (C.D. Cal. 2001); *see also* *Cybiotronics, Ltd. v. Golden Source Elecs., Ltd.*, No. 99CV10522, 2001 WL 327826, at *8–*9 (C.D. Cal. Feb. 26, 2001) (deciding similarly in a parallel case against the co-defendant two weeks later).

165. *Cybiotronics*, 130 F. Supp. 2d at 1156–59 (indicating that the alleged offers to sell occurred during communications between the defendant manufacturer in Hong Kong and a third party in New York, and that the allegedly infringing telephones were made in China, sold in Hong Kong, and ultimately sold in the United States).

166. *Id.* at 1170 (citing *Rotec*, 215 F.3d at 1257, as finding no basis for § 271(a) liability).

167. 75 F. Supp. 2d 613 (S.D. Tex. 1999).

168. *Id.* at 625 (concluding that “[b]ecause a sale is infringing only if it occurs within the United States, an offer to sell is not infringement unless the contemplated sale is to occur in the United States”).

2002] WAYMARK CORP. V. PORTA SYSTEMS CORP. 827

'sales' of goods to be consummated within the United States."¹⁶⁹ Likening "offer to sell" to an attempted "sale,"¹⁷⁰ the court reasoned, "the addition of the 'offer to sell' language to § 271(a) was not intended to add a whole new substantive *basis* for liability to the [Patent Act], but . . . merely . . . to incorporate into the statute coverage of activities that might pre-date the actual *consummation* of a sale within the United States."¹⁷¹

In *Star Scientific, Inc. v. R.J. Reynolds Tobacco Co.*,¹⁷² the district court cited neither the *Rotec* concurring opinion nor the *Cybotronics* decision, relying only on *Quality Tubing* to reach the same conclusion at odds with the inferred *Rotec* majority stance. Based on *Quality Tubing*, the *Star Scientific* court found it "clear" that "expansion of the statute to include offer to sell means that [t]he patent holder no longer has to wait for an actual infringing sale before filing suit. Rather, the patent holder can sue its competitor for infringement at an earlier stage, when there is an offer to make an infringing sale."¹⁷³ This district court, like the others, thus appears to ascribe to the position that imposing liability for an "offer to sell" without a contemplated infringing sale would be akin to imposing liability for "attempt."¹⁷⁴

In *Recycling Sciences International, Inc. v. Soil Restoration & Recycling, L.L.C.*,¹⁷⁵ the district court relied on *Rotec* when noting that the changes in § 271 "were sought to strengthen the protections afforded under § 271."¹⁷⁶ The court then recited two "purposes of adding the 'offer to sell' terminology[:]. . . to prevent a party from 'generating interest in a potential infringing product to the commercial detriment of the rightful patentee'"¹⁷⁷ and "to permit a patentee to act against threatened infringing sale by establishing a cause of action before the actual sale occurred."¹⁷⁸ Thus, like Judge Newman, the *Recycling Sciences* court saw

169. *Cybotronics*, 130 F. Supp. 2d at 1170.

170. *Id.* at 1171.

171. *Id.* (quoting *Quality Tubing*, 75 F. Supp. 2d at 623–24).

172. 174 F. Supp. 2d 388 (D. Md. 2001).

173. *Id.* at 393 (quoting *Quality Tubing*, 75 F. Supp. 2d at 623–24, in which the district court (1) examined an "offer to sell" within the United States, but product manufacture and delivery outside the United States, and (2) noted "that an 'offer to sell' includes both an agreement to sell [and] performance of the contract").

174. Refer to note 141 *supra* (defining "attempt").

175. No. 00 C 0331, 2001 WL 969040 (N.D. Ill. Aug. 24, 2001).

176. *Id.* at *2 (quoting *Rotec Indus., Inc. v. Mitsubishi Corp.*, 215 F.3d 1246, 1252 (Fed. Cir. 2000)).

177. *Id.* (quoting *3D Sys., Inc. v. Aarotech Lab., Inc.*, 160 F.3d 1373, 1379 (Fed. Cir. 1998)).

178. *Id.* (quoting *Rotec*, 215 F.3d at 1259 (Newman, J., concurring)).

“strengthened protections” in the patentee’s ability to obtain earlier protection against infringement by sale. However, also like Judge Newman, the court did not contemplate strengthened protections by extension of § 271(a) to U.S. offers for foreign sales.

In sum, the Federal Circuit has not expressly ruled on whether, under § 271(a), an offer made within the United States can infringe if the making, sale, and use occur wholly within a foreign country.¹⁷⁹ District courts, likening offer for sale to liability for attempt, have been reluctant to extend U.S. patent protection this far.¹⁸⁰ Thus, in the case where there is no making, use, sale, or importation within the United States, a patentee may also be foreclosed from establishing liability for foreign activities under an “offer to sell” theory.¹⁸¹ Such a patentee will then have only one option left: § 271(f).¹⁸² This is why, in the context of combination patents, the Federal Circuit’s interpretation of the scope of § 271(f) is so important. By firmly establishing § 271(f)’s status as a direct form of infringement, and by clarifying its relatively innocuous standard of proof, the Federal Circuit has freed § 271(f) for a greater role in future patent infringement disputes.

C. Extraterritorial Effects

“Courts and commentators often state that patent . . . laws have no extraterritorial effect. . . . [They] do not apply to conduct abroad absent some act of infringement within the United States.”¹⁸³ Nevertheless, like other laws increasingly applied to

179. Refer to notes 151–57 *supra* and accompanying text (discussing the inferred *Rotec* majority stance).

180. See, e.g., *Cybiotronics, Ltd. v. Golden Source Elecs., Ltd.*, 130 F. Supp. 2d 1152, 1171 (C.D. Cal. 2001). The court opined:

The addition of “offer to sell” to the statute merely allows a plaintiff to seek liability for activity that does not constitute a “sale,” but which nonetheless threatens the patentee’s right to an exclusive American market. However, the “offer to sell” language was *not* intended to (and could not) extend the protection of a U.S. patent to allow the patentee to also prevent sales taking place in other countries. Our patent laws are limited to the United States.

Id.

181. See Sulkis, *supra* note 147, at 1126 (predicting that, should courts side with Judge Newman in *Rotec* and the *Quality Tubing* opinion, it would render “offer to sell” language of “little practical effect”).

182. See *Waymark Corp. v. Porta Sys. Corp.*, 245 F.3d 1364, 1367–69 (Fed. Cir. 2001) (affirming noninfringement under § 271(a) when the defendant tested system components in the United States then shipped them to Mexico for assembly, and remanding for infringement analysis under § 271(f)).

183. Bradley, *supra* note 10, at 507–08 & 508 n.8; see also *Deepsouth Packing Co. v. Laitram Corp.*, 406 U.S. 518, 531 (1972) (“Our patent system makes no claim to

2002] WAYMARK CORP. V. PORTA SYSTEMS CORP. 829

reach foreign conduct,¹⁸⁴ the patent infringement statute increasingly has been construed as having extraterritorial effect.¹⁸⁵

The statutory language focuses on prohibiting specific acts of infringing conduct within the United States. For example, consider § 271(f)'s focus on "supplying or causing to supply components" from the United States for assembly abroad, and § 271(g)'s focus on importing from within the United States a product made abroad by a U.S.-patented process.¹⁸⁶ The domestic focus of the statutory language avoids "pos[ing] the appearance of 'giving extraterritorial effect to [U.S.] patent protection.'"¹⁸⁷

But appearances are not everything. Subsections 271(f) and (g), both of which were enacted to overrule *Deepsouth* and to prevent easy foreign evasion of U.S. patents, necessarily have extraterritorial effects that cannot be judicially avoided.¹⁸⁸ Indeed, one court has made explicit its finding that § 271(f), by definition, extends the extraterritorial reach of U.S. patent law.¹⁸⁹ To borrow a term, § 271(f) and (g) effectively act as "hooks" to

extraterritorial effect."); *Paper Converting Mach. Co. v. Magna-Graphics Corp.*, 745 F.2d 11, 17 (Fed. Cir. 1984) (noting that "there is thus a horror of giving extraterritorial effect to [U.S.] patent protection"); 5 CHISUM ON PATENTS, *supra* note 111, § 16.05, at 16-233 (stating that a U.S. patent "confers no protection as to acts taking place in foreign countries").

184. See Bradley, *supra* note 10, at 519 (citing claims that the territorial presumption's "rationales have been undermined" by (1) recent events, including "an increased focus by Congress on extraterritorial matters[,] and (2) judicial construction of federal trademark, admiralty, antitrust, and securities statutes as having extraterritorial effect "despite the absence of clear extraterritorial language"); Jonathan Turley, "When in Rome": *Multinational Misconduct and the Presumption Against Extraterritoriality*, 84 NW. U. L. REV. 598, 601 (1990) (suggesting that courts, using outcome-determinative tests, tend to grant extraterritorial relief for market-related statutes).

185. See Dodge, *supra* note 56, at 87 (defining "extraterritorial" for regulatory purposes in terms of "conduct" and "effect"). "When both the conduct and the effects of an activity occur entirely within a single state," that regulation is "territorial"; but when "the conduct, the effects, or both occur outside the regulating state, the regulation may be characterized as 'extraterritorial' to at least some degree." *Id.* at 87-88.

186. 35 U.S.C. § 271(f)-(g) (2000).

187. *Waymark*, 245 F.3d at 1368.

188. See David Silverstein, *Patents, Science and Innovation: Historical Linkages and Implications for Global Technological Competitiveness*, 17 RUTGERS COMPUTER & TECH. L.J. 261, 313 (1991) (indicating that the "[n]ew . . . legislation gives U.S. patents a limited degree of extraterritorial effect").

189. *Aerogroup Int'l, Inc. v. Marlboro Footworks, Ltd.*, 955 F. Supp. 220, 232 (S.D.N.Y. 1997) ("Rather than a blanket change in [§] 271(a)'s narrow, territorial reach, [§] 271(f)(1) is a specific and targeted exception to the fact that the patent protection generally extends only within the United States."); *cf.* *Windsurfing Int'l, Inc. v. Fred Ostermann GmbH*, 668 F. Supp. 812, 820 (S.D.N.Y. 1987) ("[Subsection] 271(f) was intended to overrule *Deepsouth* by expanding the definition of 'makes' in § 271(a) to prohibit the partial . . . assembly of patented objects . . . in the United States for export to foreign countries.").

impose infringement liability on a foreign “making” of the patented invention.¹⁹⁰

On the other hand, these “hooks” do not catch all fish. Under § 271(f), supplying the *completed* combination from the United States, where the making and sale are to occur abroad, is not actionable.¹⁹¹ Thus, a purchaser of the completed combination would not be liable for buying a machine and for shipping it abroad,¹⁹² but someone who buys and ships the parts would be. Under § 271(g), someone who supplies the equipment or material needed to practice a patented process—and useful only for that purpose—is not liable if the process is to be carried out abroad and the result of the process will stay there.¹⁹³ Further, there is no liability for importing the output products of a patented machine or patented cell culture, as only method or process claims can be infringed under § 271(g).¹⁹⁴ But there would be liability if the U.S. patent claimed a method of making widgets, or a method of producing insulin from cell culture, and the widgets or insulin were imported.¹⁹⁵ The extraterritorial effects of § 271(f) and (g) are limited by the language and scope of those statutory enactments.

The § 271(f) “no assembly required” rule clarified in *Waymark* favors patentees with foreign economic interests to a greater extent than the process patent provision, § 271(g).¹⁹⁶

190. Refer to note 14 *supra* (quoting Chisum, *Territoriality*, *supra* note 14, at 607).

191. 35 U.S.C. § 271(f) (imposing infringement liability only if the supplied components are “uncombined in whole or in part”).

192. *Johns Hopkins Univ. v. CellPro, Inc.*, 152 F.3d 1342, 1366 (Fed. Cir. 1998) (noting that under § 271(a) “neither export from the United States nor use in a foreign country of a product covered by a [U.S.] patent constitutes infringement”).

193. *Pfizer Inc. v. Aceto Corp.*, 853 F. Supp. 104, 105 (S.D.N.Y. 1994) (“[Sub]section 271(g) was not intended . . . to prevent the use of a U.S. patented process in another country. . . . and provides no remedy against foreign manufacturers whose infringing acts do not occur within the United States.”); *John Mohr & Sons v. Vacudyne Corp.*, 354 F. Supp. 1113, 1115 (N.D. Ill. 1973) (noting that there can be no “infringement of a method claim of a [U.S.] patent by one who manufactures in the United States equipment capable of carrying out the claimed method and who sells this equipment to a foreign customer for use exclusively in the foreign country”).

194. 35 U.S.C. § 271(g) (prohibiting importation of a product that has been made by the unauthorized use of a process patented in the United States); *id.* § 100(b) (defining “process” to include “process, art[,] or method”); *see also* *Bayer AG v. Housey Pharms., Inc.*, 169 F. Supp. 2d 328, 330 (D. Del. 2001) (“To date, the Federal Circuit has not expanded the application of [§] 271(g) beyond *methods* of manufacture.”).

195. 35 U.S.C. § 271(g); *Pfizer*, 853 F. Supp. at 106 (noting that House and Senate reports accompanying the Process Patent Amendments Act of 1988, *supra* note 12, “are replete with commentary specifying that ‘the offending act is the importation of a product made through the use of a protected process patent’”).

196. 35 U.S.C. § 271(g). *See generally* Anna M. Budde, Note, *Liability of a Foreign Manufacturer Using a Patented Process for Indirect Infringement*, 42 WAYNE L. REV. 291 (1995) (discussing this provision and case law construing it).

2002] WAYMARK CORP. V. PORTA SYSTEMS CORP. 831

Courts have interpreted § 271(g) to impose infringement liability only on the U.S. importer—not on the foreign manufacturer who uses a U.S.-patented process to make the imported product.¹⁹⁷ This interpretation finds support in the legislative intent to “not give extraterritorial effect to U.S. law.”¹⁹⁸ In contrast, § 271(f) can impose infringement liability on a foreign manufacturer who supplies or causes to be supplied components for foreign assembly, thereby effectively capturing the extraterritorial “making.”¹⁹⁹

Subsection 271(f) also seems advantageous over indirect infringement § 271(b) and (c) for reaching foreign manufacturers. Under § 271(b) and (c), “conduct abroad can be reached . . . if it actively induces or contributes to [direct] infringement occurring within . . . U.S. territory.”²⁰⁰ In a case like *Waymark*, where there is no direct infringement by U.S. manufacture, use, or sale, § 271(b) and (c) are not implicated.

Congress has “substantial power to legislate extraterritorially, especially with respect to U.S. citizens.”²⁰¹ At issue is whether Congress *intended* § 271(f) to have extraterritorial effects. On one hand, the legislative history suggests that Congress intended merely to overturn *Deepsouth's* contentious result, to protect patentees from bad actors desiring to circumvent U.S. patents by shipping easily assembled modular parts, instead of operably assembled infringing products, abroad.²⁰² On the other hand, Congress’s expansion of the statutory language beyond *Deepsouth's* facts—for example, by adding “or causes to supply” and “any” or “a substantial portion” of the components—suggests a more focused

197. *E.g., Pfizer*, 853 F. Supp. at 105–06 (holding that there is no foreign manufacturer liability even if the manufacturer could foresee the importation).

198. *Id.* at 105 (quoting S. REP. NO. 100-83, at 48 (1987)).

199. *See* 35 U.S.C. § 271(f).

200. Bradley, *supra* note 10, at 522 (citing *Spindelfabrik Suessen-Schurr v. Schubert & Salzer Maschinenfabrik Aktiengesellschaft*, 903 F.2d 1568, 1577–78 (Fed. Cir. 1990)); *see also* *Deepsouth Packing Co. v. Laitram Corp.*, 406 U.S. 518, 526 (1972) (“[I]f *Deepsouth's* conduct were intended to lead to use of patented deveiners inside the United States its production . . . activity would be . . . an induced or contributory infringement.”); *Akzona Inc. v. E.I. du Pont de Nemours & Co.*, 662 F. Supp. 603, 613 (D. Del. 1987) (“[T]he inducing activity may take place outside of the United States, so long as the direct infringement occurs within the United States.”).

201. *See* Bradley, *supra* note 10, at 510–11 (citing *EEOC v. Arabian Am. Oil Co.*, 499 U.S. 244, 248 (1991), and *Foley Bros., Inc. v. Filardo*, 336 U.S. 281, 284 (1949)).

202. Refer to note 84 *supra* and accompanying text (quoting the stated legislative purpose “to avoid encouraging manufacturing outside the United States”). One commentator points to the provision’s “most immediate effect . . . to create one more incentive for U.S. companies who compete in foreign markets to move their manufacturing facilities abroad” as evidence that “[§] 271(f) is ill-conceived.” Chisum, *Territoriality*, *supra* note 14, at 607.

effort to extend liability beyond mere U.S.-made kit assembly to include true foreign manufacture.²⁰³

The *Waymark* decision informs that the U.S. patentee need not provide proof of the alleged infringer's foreign component assembly, a difficult evidentiary task.²⁰⁴ Not requiring such proof makes it easier to establish liability for what amounts to an extraterritorial act, thereby giving the statute even greater extraterritorial effect. If the product is assembled outside the United States, it may never reach, nor be intended to reach, the U.S. market. Nevertheless, the U.S. patent is infringed on a mere showing that the alleged infringer shipped components and had knowledge of the patent. Thus, *Waymark's* "no assembly required" rule effectively extends the extraterritorial reach of U.S. patent law beyond U.S. territorial limits.

Whether extraterritorial effects are desirable depends on whether the primary purpose of patent law is to protect the rights of the public or the patentee.²⁰⁵ As to public rights, extraterritorial effects run the risk of putting U.S. inventors and entrepreneurs at a competitive disadvantage in foreign markets.²⁰⁶ By definition, a patent grants the owner exclusive rights that are limited—in time,²⁰⁷ place,²⁰⁸ and duration²⁰⁹—in order to facilitate societal technological advancement.²¹⁰ Removing the territorial limitation may operate to hinder technological advancement, thereby subverting the constitutional goal of promoting the useful arts. As to the patentee's "right to

203. Refer to Part IV.A *supra* (comparing legislative intent and judicial construction of

§ 271(f)'s terms). See Bradley, *supra* note 10, at 518–19 (presenting the argument that due to "an increased focus . . . on extraterritorial matters, . . . [strict territoriality] no longer reflects likely congressional intent" and asserting that the "growing significance of international trade and investment has increasingly led the United States and other nations to devote regulatory attention to conduct occurring abroad").

204. *Waymark Corp. v. Porta Sys. Corp.*, 245 F.3d 1364, 1368 (Fed. Cir. 2001).

205. See *Brown v. Duchesne*, 60 U.S. (19 How.) 183, 187 (1856) ("The object of the patent laws is to develop [both] the genius [via patentee rights] and industry [via public rights] of the country.").

206. *Deepsouth Packing Co. v. Laitram Corp.*, 406 U.S. 518, 531 (1972) (noting that patent laws "are not intended to grant a patentee the bonus of a favored position as a flagship company free of American competition in international commerce").

207. U.S. CONST. art. I, § 8, cl. 8 (granting Congress the power to "promote the Progress of . . . useful Arts, by securing for [only] limited Times to . . . Inventors the exclusive Right to their respective . . . Discoveries").

208. 35 U.S.C. § 154(a)(1) (granting the "right to exclude others from using, offering for sale or selling throughout the United States, or importing into the United States").

209. *Id.* § 154(a)(2) (granting a term of twenty years from the date the application was filed).

210. See Dan L. Burk, *Transborder Intellectual Property Issues on the Electronic Frontier*, STAN. L. & POL'Y REV. 9, 11 (1994).

2002] WAYMARK CORP. V. PORTA SYSTEMS CORP. 833

the fruits of the inventive genius,”²¹¹ extraterritorial effects may unfairly deprive the patentee of licensing fees by encouraging the relocation of manufacturing facilities to foreign soil in order to avoid U.S. patent infringement by component export.²¹² On balance, the anticompetitive effect of extraterritorialism on the ability of the public to compete in the global marketplace should be given substantial weight against any unfairness in allowing foreign patent-evasive techniques to continue without compensation to the U.S. patent holder.

V. CONCLUSION: THE FUTURE OF § 271(f)

Arguably, the Federal Circuit’s interpretation of § 271(f) in *Waymark* did little to change the law. Nonetheless, the combined effect of (1) the court’s clarification that § 271(f)(2) does not incorporate the doctrine of contributory infringement and that no proof of actual foreign component assembly is required, (2) gradual judicial broadening of the statute beyond the facts of *Deepsouth* and beyond the meaning of like statutory terms, and (3) potential foreclosure of “offer to sell” as another possible basis for infringement absent a U.S. making, use, or sale, may result in an increasing number of § 271(f) claims.²¹³ One commentator further speculates that this provision may have applicability to transactions over the Internet.²¹⁴ Regardless, “we appear to be in

211. *Deepsouth*, 406 U.S. at 524.

212. See Chisum, *Territoriality*, *supra* note 14, at 607 (asserting that § 271(f) creates an “incentive for U.S. companies who compete in foreign markets to move their manufacturing facilities abroad”); Sulkis, *supra* note 147, at 1128 (suggesting that encouragement of overseas manufacture reduces the value of patents and weakens the import of the Constitutional grant).

The Federal Circuit’s *Waymark* decision is consistent with the court’s general trend toward increasing protections for the rights of U.S. patentees. See Silverstein, *supra* note 188, at 310–11 (suggesting that, based on statistics and patent bar perception, the Federal Circuit is “pro-patent” and “more often than not” resolves issues “in favor of patent validity and infringement”).

213. The Federal Circuit’s 1998 *State Street* decision, which obliterated the so-called business method exception to patentability, also arguably did little to change the law. See *State St. Bank & Trust Co. v. Signature Fin. Group*, 149 F.3d 1368, 1375 (Fed. Cir. 1998) (laying the “ill-conceived [business method] exception to rest” and noting that the “exception has never been invoked by this court . . . to deem an invention unpatentable”). Nonetheless, the decision did clarify expansive patent rights and led to a substantial increase in the number of business method patent applications. See William C. Smith, *Patent This!*, 87 A.B.A. J. 48, 51 (2001) (noting that the number of business method patents issued jumped from 39 in 1997 to 301 in 1999); Timothy J. Mullaney & Spencer E. Ante, *Info Wars*, BUS. WK., June 5, 2000, at EB106, available at 2000 WL 7826788 (noting that the number of computer-related business method patent applications jumped from 700 in fiscal 1996 to 2600 in fiscal 1999).

214. See Keith E. Witek, *Software Patent Infringement on the Internet and on Modern Computer Systems—Who Is Liable for Damages?*, 14 SANTA CLARA COMPUTER & HIGH TECH. L.J. 303, 381 (1998) (predicting that a future additional application of § 271(f)

a period of patent ascendancy.”²¹⁵ The global marketplace is here to stay, and along with it comes a desire by U.S. patentees to protect their claims and economic interests abroad. Subsection 271(f), by effectively reaching foreign manufacture of U.S.-patented combinations, may help with this protection.

Protection of U.S. patent rights abroad, however, comes at a price: the public’s ability to compete with U.S. patentees in foreign markets.²¹⁶ The interest in facilitating international competition and encouraging reliance on foreign patent protection regimes—while recognizing their potential costs²¹⁷—must be weighed against the interest in protecting the domestic patent at all costs in the global marketplace.

Joan E. Beckner

will be to make export of time serial copies of a patented invention via the Internet an infringement). *But cf.* Burk, *supra* note 210, at 12 (“[A]pplying [§ 271(g)] to computer networks may stretch the law beyond its proper bounds” because it is “doubtful . . . that Congress considered [these] applications when the statutes were enacted.”).

215. A. Samuel Oddi, *The International Patent System and Third World Development: Reality or Myth?*, 1987 DUKE L.J. 831, 832 n.5 (1987) (noting recent expansions in patent protection by Congress and the Supreme Court).

216. *Deepsouth Packing Co. v. Laitram Corp.*, 406 U.S. 518, 531 (1972) (“What is at stake here is the right of American companies to compete with an American patent holder in foreign markets.”). Other concerns potentially at odds with expanding the extraterritorial reach of U.S. patent law include international law, international comity, choice-of-law principles, likely Congressional intent, and separation-of-powers considerations. Bradley, *supra* note 10, at 513–16.

217. *See* Chisum, *Territoriality*, *supra* note 14, at 618 (noting that the “cumulative costs of registering and maintaining . . . patents internationally threaten to exclude small, independent enterprises, which may be unable to obtain funding and to compete in product and service markets that are heavily dependent on intellectual property protection”).