UNITED STATES V. MICROSOFT

By Michael Woodrow De Vries

The competitive practices examined in *United States v. Microsoft*[1] give rise to important questions about the limits of competitive behavior and the role of antitrust laws in preserving competition in the information industries. Microsoft's practice of requiring purchasers of its operating system software, Windows 95,[2] also to license its browser software, Internet Explorer ("IE"), prompted the litigation that gave rise to the court's opinion in *Microsoft*. Under the antitrust laws,[3] "tying" arrangements—arrangements that condition the sale of the tying product on an agreement also to purchase the tied product—are per se illegal, provided that certain conditions are met.[4] As the Supreme Court has explained, "certain tying arrangements pose an unacceptable risk of stifling competition and therefore are unreasonable 'per se.'"[5] Despite the threat to competition in the browser market posed by Microsoft's Windows 95-IE licensing practices, however, the D.C. Circuit essentially found that the Windows 95-IE product combination was not an illegal tying arrangement.[6] By ineffectively accounting for the disruption or elimination of competition in the market for browsers, the D.C. Circuit allowed Microsoft to use its market power

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1. United States v. Microsoft, 147 F.3d 935 (D.C. Cir. 1998). This opinion represents only one segment of the Justice Department's much broader and ongoing (as of this writing) antitrust case against Microsoft.

2. Windows 95 is an operating system software produced and distributed by Microsoft. *See id.* at 3. Microsoft's operating system is installed on millions of personal computers, *see id.* at 4, and, consequently, Microsoft has a recognized "monopoly position in the operating systems market." Mark A. Lemley & David McGowan, *Legal Implications of Network Economic Effects*, 86 CALIF. L. REV. 479, 502 (1998). *See also* Mark A. Lemley, *Antitrust and the Internet Standardization Problem*, 28 CONN. L. REV. 1041, 1048 (1996) ("[Microsoft] has sold more than 80% of the personal computer operating systems in existence in the market.").

3. The primary purpose of the antitrust laws is to protect competition. *See* Grappone, Inc. v. Subaru of New England, Inc., 858 F.2d 792, 794 (1st Cir. 1988) (Breyer, J.) ("[T]he antitrust laws exist to protect the competitive process itself ... in order to help individual consumers by bringing them the benefits of low, economically efficient prices, efficient production methods, and innovation.")

4. *See* Eastman Kodak Co. v. Image Technical Servs., Inc., 504 U.S. 451, 462 (1992).

5. Jefferson Parish Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2, 9 (1984).

6. *See Microsoft*, 147 F.3d at 952.

in the operating system market to harm competition in the separate market for browsers.

I. CASE SUMMARY

A. Background

The 1994 Justice Department investigation into Microsoft's alleged anticompetitive practices culminated in the entry of a consent decree.[7] The decree prohibited Microsoft from requiring purchasers of its Windows 3.11 graphical user interface also to purchase its MS-DOS operating system.[8] Section IV(E) of the consent decree, characterized by both Microsoft and the Justice Department as the "'anti-tying' provision" of the decree,[9] prohibits Microsoft from conditioning a license for any of its products on acceptance of a license for any other product.[10]

When Microsoft began to condition the sale of Windows 95 on the licensing and installation of its browser software, IE, the Justice Department filed a petition seeking to enjoin Microsoft's practice of bundling Windows 95 and IE and to hold Microsoft in civil contempt of the consent decree.[11] The Justice Department argued that, by requiring original equipment manufacturers ("OEMs") to accept and install IE as a condition of licensing Windows 95, Microsoft had violated the "anti-tying" provision of the decree.[12] The District Court held that Microsoft's practices likely violated the consent decree, and so issued a preliminary injunction barring Microsoft from continuing to require OEMs to license both IE and Windows 95. The District of Columbia ("D.C.") Circuit reversed in *U.S. v. Microsoft*,[13] finding that the preliminary injunction had been erroneously

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7. *See id.* at 946.

8. *See id.* at 946.

9. *See id.* at 946. The antitrust law's prohibition against "tying" arrangements is discussed *infra* Part II.

10. *See id.* at 939. § IV(E) provides, in pertinent part:

> Microsoft shall not enter into any License Agreement in which the terms of that agreement are expressly or impliedly conditioned upon: (i) the licensing of any other Covered Product, Operating System Software product or other product (provided, however, that this provision in and of itself shall not be construed to prohibit Microsoft from developing integrated products)....

Id. at 939.

11. *See id.* at 940.

12. *See* United States v. Microsoft, 147 F.3d 935, 939 (D.C. Cir. 1998).

13. 147 F.3d 935 (D.C. Cir. 1998).

issued[14] and determining that Microsoft had not violated the "anti-tying" provision of the decree because the Windows 95-IE product bundle was one "integrated" product, not two distinct products "tied" together as the Justice Department had argued.[15]

B. Summary of the D.C. Circuit Opinion

Although the opinion in *Microsoft* dealt with a number of issues, this Note addresses the D.C. Circuit's determination that Microsoft's bundling of Windows 95 and IE did not violate the "anti-tying" provision of the decree.[16] The court determined that the practice of conditioning a license for Windows 95 on acceptance of a license for IE did not constitute an illegal tying arrangement because the combination of Windows 95 and IE created one "integrated" product, not a tying together of two distinct products.[17]

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14. The court found that the preliminary injunction violated F.R.C.P. 65(a)(1) because Microsoft had not been given proper notice before the injunction was issued. *Id.* at 944.

15. *See id.* at 952. With reference to a different issue raised on appeal, the D.C. Circuit held that the district court's reference of the case to a special master was an abuse of discretion because (1) it was not clear that the case was of any great complexity, and (2) because "it [wa]s very doubtful that complexity tends to legitimate references to a master at all." *Id.* at 955. Although not addressed in this Note, the issue of use of a special master implicates serious considerations regarding the role of the court in technologically complex cases.

16. In *Microsoft*, the D.C. Circuit was asked to resolve whether the district court had erred procedurally in entering a preliminary injunction against defendant Microsoft. However, the court's opinion included a substantive analysis of the Justice Department's claim that Microsoft had violated a 1994 consent decree, stating that "[s]ilence at this stage would risk considerable waste of litigative resources." *Id.* at 944-45.

17. *See id.* at 952. It is important to point out that the court made clear that it understood the issue in *Microsoft* to be whether Microsoft violated the consent decree, not whether Microsoft violated the antitrust laws generally. However, in so far as the issue was whether Microsoft violated the anti-tying provision of the decree, and in light of the court's statements that it would be guided by antitrust law in the interpretive process, *id.* at 946, this Note takes the court at its word that its "understanding [of the decree] is consistent with tying law." *Id.* at 950. Indeed, the Supreme Court has made clear that antitrust consent decrees *should* be interpreted with reference to the antitrust laws. *See* United States v. ITT Continental Baking Co., 420 U.S. 223, 240 (1975) ("We must assume that the parties used the words with the specialized meaning they have in the antitrust field, since they were composing a legal document in settlement of an antitrust complaint."). This Note analyzes the court's view that Microsoft did not violate the decree in light of the substance and goals of tying law. *See also* Mark A. Lemley & David McGowan, *Could Java Change Everything? The Competitive Propriety of a Proprietary Standard*, 520 PLI/PAT 453, 473 (1998) ("With respect to its browser allegations ... the decree merely allowed the Division to move quickly: the Division's allegations themselves presented a straightforward claim of unlawful tying of Microsoft's Internet Explorer to Windows 95.").

In deciding that the Windows 95-IE product combination was one "integrated" product rather than a tie of two distinct products, the court reasoned that a product combination could not be an illegal tying arrangement provided it was a "genuine technological integration, regardless of whether elements of the integrated package are marketed separately."[18] The court defined an "integrated product" as one that "combines functionalities ... in a way that offers advantages unavailable if the functionalities are bought separately and combined by the purchaser."[19] Under the test adopted by the court, a product combination is an "integrated" product if: (1) the combination is "different from what the purchaser could create from the separate products on his own"; and (2) the combination is "better in some respect" than the separate products.[20]

The court found the first portion of the test to be satisfied, determining that Windows 95 and IE, when combined by Microsoft, was different from what the consumer could create by purchasing Windows 95 and IE separately and combining them herself. The court reasoned that Windows 95 and IE "do not exist separately."[21] Rather, the court stated, "apart from that code [shared by Windows 95 and IE], there is *nothing more to IE than the four lines of programming* required to summon browsing functionality from code that also supplies operating system functionality."[22] The court concluded that Microsoft combined Windows 95 and IE by writing the code that integrates them both because "the act of combination is the creation of the design which knits the two together."[23] The consumer could not combine Windows 95 and IE in the same way as Microsoft had without engaging in extensive reprogramming, an alternative that the court described as "absurdly inefficient."[24] Thus, the court concluded that the first

18. *Id.* at 948. The court is careful to point out that its reading of the "anti-tying" provision of the consent decree is not necessarily consistent with antitrust law generally, *id.* at 950, but as the Supreme Court pointed out in *ITT Continental*, the words of a consent decree should be interpreted in light of the "specialized meaning they have in the antitrust field." 420 U.S. at 240. Interestingly, the court did not use the *Jefferson Parish* "distinct products" test to guide its interpretation of Section IV(E)(i), the decree provision that prohibited the tying together of two distinct products unless the products were not in fact "distinct." The closest the court comes to explaining why it did not engage in a *Jefferson Parish* analysis appears to be its stated concern that application of traditional antitrust law might engage courts in the undesirable task of overseeing product design. *See Microsoft*, 147 F.3d at 37.

19. *Id.* at 948.

20. *Id.* at 949.

21. *Id.* at 951-52.

22. *Id.* at 952, n.17 (emphasis added).

23. *Id.* at 952.

24. *Microsoft*, 147 F.3d at 952.

part of its "integration" test was satisfied by Windows 95/IE because Microsoft had created a product that was different from that which the purchaser could create by purchasing Windows 95 and IE separately and combining them.

The court also found that the second part of its "integration" test was satisfied because a combination of Windows 95 and IE conferred advantages that were unavailable if the products were used separately. Careful not to place itself in the "unwelcome position of designing computers," the court stated that "[t]he question is not whether the integration is a net plus but merely whether there is a plausible claim that it brings some advantage."[25] Under this proposed standard, the court found that there was surely a plausible claim that the combination of Windows 95 and IE created some advantage.[26]

The court found the Windows 95-IE combination to confer some advantages. For instance, the court explained that the Windows 95-IE combination "provide[d] system services not directly related to Web browsing" by allowing enhanced functionality for all applications that run on the Windows 95/IE combination.[27] The court also pointed out that one could utilize IE's HTML reader to engage in more in-depth reading of the hard drive.[28] Finally, the court found that the combination allowed the user to customize "Start" menus in the Windows 95/IE.[29] Because of these various advantages, argued the court, it was "easy" to find that there was a plausible claim that the combination of Windows 95 and IE resulted in some benefit.[30] Thus, the court found that the Windows 95-IE product combination fulfilled the second portion of its "integration" test.

Ultimately, application of the court's test yielded a determination that the Windows 95-IE combination was an "integrated" product, and, therefore, Microsoft's practice of requiring consumers to take IE as a condition of buying Windows 95 was not an unlawful tying together of two distinct products.[31] The court remanded the case to the district court, having found

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25. *Id.* at 950.
26. *See id.* at 950-51.
27. *See id.* at 951.
28. *See id.*
29. *See id.*
30. *See Microsoft*, 147 F.3d at 950.
31. Essential to the court's argument is a claim that the "Windows 95/IE package more closely resemble[d] Windows 95 than it d[id] the [MS-DOS/Windows 3.11] bundle." *Id.* at 952. Using the fact that Windows 95 was allowed to be marketed under the consent decree as a touchstone for its interpretation of the decree, the court attempted to employ a test that would allow Windows 95 to be marketed but which would prohibit the bundling together of MS-DOS and Windows 3.11. Applying their test, the court argued

only that the issuance of the preliminary injunction was in error. However, in light of its determination that Microsoft had not violated the consent decree, the court expressed serious doubts about whether there was any reason for the Justice Department to continue to pursue this particular claim, "especially given the alternate avenues developing in its recently launched separate attacks on Microsoft's practices."[32]

II. TYING LAW

The origins of tying law can be traced to the Patent Misuse Doctrine, under which a patentee who tied the sale of a patented product to the sale of unpatented materials unlawfully exceeded the scope of the patent monopoly.[33] The Supreme Court first analyzed tying arrangements under the antitrust laws in *International Salt Co. v. United States*,[34] where it held that defendant's practice of requiring lessees of its patented salt processing machines to purchase salt and salt tablets consumed in the machines from the defendant was per se illegal under the antitrust laws.[35] The focus of the Court's analysis in *International Salt* went beyond concerns with abuses of the patent monopoly. Rather, the Court emphasized the competitive harm the tying arrangement posed to the market for the tied product (here, the market for unpatented salt and salt tablets).[36] Not surprisingly, the Court began to recognize that tying arrangements that did not involve patented products violated the antitrust laws.[37]

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that the Windows 95/IE combination was an "integrated product" within the meaning of the consent decree, and so "[Section] IV(E)(i) d[id] not bar Microsoft from offering it as one product." *Id.* However, as argued *infra* at Part III, the court should have analyzed the case in terms of existing antitrust doctrine.

32. *Id.* at 953-54. As of the time of this writing, the trial to resolve other Justice Department allegations that Microsoft acted in an anticompetitive manner was ongoing. For a discussion of that trial in light of the D.C. Circuit's opinion in *United States v. Microsoft*, see Roger Parloff, *The Microsoft Endgame*, THE AMERICAN LAWYER, Dec. 1998, at 4.

33. *See* Motion Picture Patents Co. v. Universal Film Mfg. Co., 243 U.S. 502 (1917) (holding that the sale of a patented film projector could not be conditioned on exclusive use of the patentee's films).

34. 332 U.S. 392 (1947).

35. *See id.* at 396 ("By contracting to close this market for salt against competition, [defendant] has engaged in a restraint of trade for which its patents afford no immunity from the antitrust laws.").

36. *See id.* at 396 ("[I]t is unreasonable, per se, to foreclose competitors from any substantial market.").

37. *See, e.g.*, Northern Pacific Ry. v. United States, 356 U.S. 1 (1958) (holding that tying sales of land-grant holdings to preferential routing clauses violated the antitrust laws).

While early cases such as *International Salt* may have suggested that all tying arrangements are per se illegal under the antitrust laws, the Supreme Court has clarified that tying arrangements are per se illegal only when certain conditions are present.[38] In order for a tying arrangement to be per se illegal, there must be (1) "two distinct products,"[39] (2) which are tied together,[40] and (3) the seller must have "appreciable economic power in the tying market."[41] Provided those conditions are met, the tying arrangement is per se illegal.

There is little doubt that Microsoft enjoys appreciable economic power in the market for the tying product, its Windows 95 operating system software.[42] Furthermore, provided that Windows 95 and IE are two distinct products, Microsoft's practice of conditioning the sale of Windows 95 on the licensing and installation of IE surely "ties" those products together.[43] Therefore, whether the Windows 95-IE products bundle constituted an illegal tying arrangement turns on the first condition of per se illegality: that there be two distinct products.

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38. Use of the term "per se" is consistent with Supreme Court terminology. *See* Jefferson Parish Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2, 15 (1984) (referring to "[p]er se condemnation" and "the per se rule"). The Court uses the term "per se" to explain that certain tying arrangements are illegal, and compares tying arrangements to price-fixing agreements which are also per se illegal. *See id.* However, unlike price-fixing agreements, which are always illegal, *see id.* at 9 n.10, tying arrangements are only illegal provided certain conditions are met. *See id.* at 13-14 (explaining that tying arrangements are only illegal if the seller has "market power" in the tying product market). The Court acknowledges as much. *See id.* at 11 ("[N]ot every refusal to sell two products separately can be said to restrain competition"). Thus, the use of the term "per se" is meant to contrast tying law analysis with Rule of Reason analysis, employed in some antitrust contexts, under which "courts carefully assess, on a case-by case basis, whether the harm produced by a particular contract outweighs its benefits." Alan J. Meese, *Tying Meets the New Institutional Economics: Farewell to the Chimera of Forcing*, 146 U. PA. L. REV. 1, 17 (1997).

39. Eastman Kodak Co. v. Image Technical Servs., 504 U.S. 451, 462 (1992).

40. *See id.* For recognition of the fact that sellers may effectively "tie" together two products by creating economic incentives that effectively force the consumer to purchase the tied product along with the tying product, see 9 AREEDA ET AL., ANTITRUST LAW, ¶ 1702 at 17 (1991) ("[T]he two products must be tied together *or customers must be coerced.*") (emphasis added).

41. *Eastman Kodak*, 504 U.S. at 464. In addition, there is a threshold requirement that a tying arrangement affect a substantial volume of trade, *see Jefferson Parish*, 466 U.S. at 16, but that requirement is rarely, if ever, at issue in tying cases. *See* AREEDA, *supra* note 40, ¶ 1702, at 17.

42. *See supra* note 2.

43. *See* 9 AREEDA, *supra* note 40, at 1 (defining tying arrangements as "arrangements by which a seller of one product 'forces' customers to take a second product as well.").

A. Distinct Products Analysis: the *Jefferson Parish* Approach

There can be no illegal tying arrangement when only one product is involved.[44] In determining whether there are two distinct products, courts focus on whether a combination of products is an "integrated" single product or a tying arrangement of two separate products; when the combination yields an "integrated" product, tying law does not prohibit the combination.[45] Before courts analyze whether a "product bundle" constitutes a single "integrated" product or two distinct products, however, they "generally give the plaintiff the threshold burden of proving (1) that *some* customers actually want the items separated and (2) that separating them is physically and economically possible."[46] The Court in *Jefferson Parish* demonstrated concern for the first requirement by examining the extent to which customers requested that anesthesiological services (the allegedly tied product) be provided by someone other than the hospital that furnishes the surgery rooms (the allegedly tying product).[47] The second requirement addresses concerns of judicial efficiency and feasibility; if it is not economically or physically possible to unbundle the products, then the bundle should be considered a single product and the tying analysis is complete.[48] After this threshold burden has been met, the court may begin its analysis of whether there are two distinct products.

In *Jefferson Parish*, a case in which the defendant hospital required patients using its surgery rooms also to use an anesthesiologist provided by the hospital, the Supreme Court held that whether there is one or two products turns on whether there are distinct markets for the two products:

> [T]he answer to the question whether one or two products are involved turns not on the functional relation between them, but rather on the character of the demand for the two items. . . . [A] tying arrangement cannot exist unless two separate product markets have been linked.[49]

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44. *See* Donald F. Turner, *The Validity of Tying Arrangements Under the Antitrust Laws*, 72 HARV. L. REV. 50, 68 (1958) ("The requirement that they be 'different' [products] obviously cannot be dropped out."). *See also* ILC Peripherals Leasing Corp. v. IBM Corp., 448 F. Supp. 228 (N.D. Cal. 1978) (holding that since the combination of a head/disk assembly and a disk drive was an integrated single product rather than a tying together of two separate products, there was no illegal tying arrangement).

45. *See ILC Peripherals Leasing Corp.*, 448 F. Supp. 228.

46. 10 PHILLIP AREEDA, ET AL., ANTITRUST LAW, ¶ 1743 at 192 (1996).

47. *See* Jefferson Parish Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2, 22-23 (1984).

48. *See* 10 AREEDA, *supra* note 46, ¶ 1743b, at 193.

49. *Jefferson Parish*, 466 U.S. at 19.

In finding that the hospital's practice "combined the purchase of two distinguishable services in a single transaction,"[50] the Court in *Jefferson Parish* focused its examination on the market practices of competitors, the way in which customers were billed for the products, and evidence that buyers wanted the products separately.[51] The Court ultimately relied on the existence of separate product markets as the means of determining that it was efficient to offer the products separately.[52]

The *Jefferson Parish* distinct products test looks to consumer demand and market structure as the primary means of distinguishing between one "integrated" product and two distinct products. The Court held that when sufficient consumer demand exists so that the products may be efficiently offered separately, they are distinct products. The Supreme Court again ratified the *Jefferson Parish* approach to the distinct products analysis in *Eastman Kodak Co. v. Image Technical Services,*[53] where the Court found that plaintiffs had produced sufficient evidence that replacement parts and repair services are distinct products because "there [may] be sufficient consumer demand so that it is efficient for a firm to provide service separately from parts."[54] The Court in *Kodak* refused to give weight to the fact that parts and services may be functionally linked, focusing its analysis of whether there are two distinct products or one "integrated" product on the existence of consumer demand for the products when offered separately.[55]

As a testament to its broad applicability, the *Jefferson Parish* distinct products test has been applied in analysis of technological products.[56] A

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50. *Id.* at 24.

51. *See id.* at 22-24.

52. The existence of separate markets for surgery rooms and anesthesiological services indicated that selling the products separately was efficient, and so the Court found that surgery rooms and anesthesiological services were two distinct products, not one "integrated" product. *See id.* at 19-23.

53. 504 U.S. 451, 462-63 (1992).

54. *Id.* at 462.

55. *See id.* at 463 (quoting Jefferson Parish Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2, 19, n.30) ("We have often found arrangements involving functionally linked products at least one of which is useless without the other to be prohibited tying devices.").

56. *See, e.g.,* PSI Repair Servs., Inc. v. Honeywell, Inc., 104 F.3d 811, 815 (6th Cir. 1997) (holding that whether circuit-board components and service are two distinct products turns on whether there is "sufficient consumer demand so that it is efficient for a firm to provide service separately from parts."); Allen-Myland, Inc. v. International Bus. Mach. Corp., 33 F.3d 194, 211 (3d Cir.. 1994) (finding that whether upgrade computer parts and upgrade labor are distinct products turns on "the character of the demand for the two items."); Service & Training, Inc. v. Data Gen. Corp., 963 F.2d 680 (4th Cir.. 1992) (holding that diagnostic software and maintenance/repair service are distinct products

good example of the *Jefferson Parish* test applied to technological products is provided by *Digidyne Corporation v. Data General Corporation.*[57] In *Digidyne*, the Ninth Circuit held that NOVA operating system software and NOVA central processing units ("CPUs") were two distinct products, illegally tied together by the defendant's refusal to license them separately. The court reasoned that the operating system and the CPU were separate products because

> a demand existed for NOVA instruction set CPUs separate from defendant's RDOS [operating system], and ... each element of the NOVA computer system could have been provided separately by customers if defendant had not compelled purchasers to take both.[58]

The court's reasoning in *Digidyne* was consistent with that employed by the Court in *Jefferson Parish.* When sufficient consumer demand exists so that the products may efficiently be offered separately to consumers, the products are distinct, and efforts to require purchasers to take both products are prohibited under tying law provided that other conditions, such as market power in the market for the tying product, are met.[59]

B. Distinct Products Analysis: the "Integration" Approach

A quarter century before *Jefferson Parish* was decided, commentators argued that "there must be some room for the innovative combination of elements, 'normally' produced and sold separately, into new single products."[60] That argument recognizes that innovation often takes the form of bundling together two previously unbundled products.[61] Under a strict application of the *Jefferson Parish* test, any combination of products for which separate consumer demand exists, so that the products may efficiently be offered separately, would involve the tying together of two distinct products.[62] Commentators such as Einer Elhauge, whose proposed

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because of "sufficient evidence of separate markets for MV/ADEX licenses and for repair services").

57. 734 F.2d 1336 (9th Cir. 1984).

58. *Id.* at 1399.

59. *See Jefferson Parish*, 466 U.S. at 24-25 (requiring purchasers to buy two distinguishable services is unlawful provided that the seller has market power in the market for the tying product).

60. Turner, *supra* note 44, at 68.

61. *See* X Areeda, *supra* note 46, ¶ 1746, at 224.

62. *See* Digidyne Corp. v. Data Gen. Corp., 734 F.2d 1336, 1339 (9th Cir. 1984).

"integration" test was adopted by the court in *Microsoft*,[63] have suggested that certain products which combine historically distinct products in a new and useful way should be considered one "integrated" product rather than two distinct products.[64] This approach contrasts with the *Jefferson Parish* test, under which "whether one or two products are involved turns ... on the character of the demand for the two items."[65]

Elhauge argues that "no one [distinct products] test has proven capable of adjusting for all circumstances and of resolving concretely all single product cases."[66] Accordingly, Elhauge argues in favor of a distinct products test which would define products that combined historically distinct products to be a single new product when "the newly bundled items operate better when bundled *by the defendant* than if bundled by the end user."[67] Unlike the *Jefferson Parish* test, Elhauge's test is not explicitly concerned with the existence of separate product markets.[68] It is this test that the court in *Microsoft* applied in analyzing whether Windows 95 and IE were distinct products or one "integrated" product.

There has been support in the case law for an Elhauge-like "integration" approach to the distinct products analysis. In *ILC v. IBM*,[69] the court held that a head/disk assembly and disk drive bundle were an 'integrated" product (1) because the bundle allowed "a significantly larger on-line storage capacity than ha[d] previously been available,"[70] and (2) because IBM physically integrated the items in a way in which consumers could not achieve themselves.[71] Of course, *ILC* was decided before the Supreme Court's decision in *Jefferson Parish*, but it represents a different approach to the distinct products analysis.

Elhauge proposes that the distinct products determination be based on an examination of whether the product bundle operates better when com-

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63. *See* United States v. Microsoft, 147 F.3d 935, 948-51 (D.C. Cir. 1998); Einer Elhauge, *Combination Lock: the D.C. Circuit Incorrectly Applied an Integrated-Product Test in* Microsoft *Case*, SAN FRANCISCO DAILY JOURNAL, July 14, 1998, at 4 ("The court's legal test happened to be the one I proposed in my chapters of a co-authored antitrust treatise.").

64. *See* 10 AREEDA, *supra* note 46, ¶ 1746, at 224.

65. *Jefferson Parish,* 466 U.S. at 20.

66. 10 AREEDA, *supra* note 46, ¶ 17D-1, at 175.

67. *Id.* ¶ 1746, at 224 (emphasis in original).

68. However, it is not clear that proper application of Elhauge's proposed "integration" test would yield a substantially different result than would the *Jefferson Parish* test. *See infra* notes 115-17 and accompanying text.

69. 448 F. Supp. 228 (N.D. Cal. 1978).

70. *Id.* at 232.

71. *See id.* at 230-32.

bined by the producer instead of by the consumer. This approach, like that taken in *Jefferson Parish*, seeks to balance the competing interests of preserving competition and encouraging innovation/efficiency. *Jefferson Parish* balances the two by looking at market structure and consumer demand, while Elhauge attempts to balance the two by examining the benefits conferred by bundling the products and asking whether consumers could obtain those benefits absent the tie. Elhauge fears that courts are not competent to analyze the benefits of bundling technologically complex products, however, and in that vein urges courts to err on the side of finding a "single product" so that tying law will not deter technological innovation.[72] It is questionable, however, whether this approach properly takes into consideration the danger that Elhauge anticipates: that a product bundle may simply be "an anticompetitive tie that no one has tried before."[73]

III. DISCUSSION

The D.C. Circuit's opinion in *Microsoft* appears to reject the notion that Microsoft's efforts at "innovative combination" should be checked by antitrust law, claiming that "courts have recognized the limits of their institutional competence and have on that ground rejected theories of 'technological tying.'"[74] The assertion that courts have refused to apply tying law to "technological" products is questionable and unsupported,[75] but it is telling of the approach taken by the D.C. Circuit. The "integration" test employed by the court wholly ignored the competitive consequences that Microsoft's practices had on the market for browser software. Furthermore, taking the court at its word that its "understanding [of the decree] is consistent with tying law,"[76] the test allowed the court to remove Microsoft's Windows 95-IE licensing practices from antitrust tying scrutiny on a simple showing that "there is a plausible claim that [the combination of the products] brings some advantage,"[77] and that Microsoft designed it that way.[78] Ultimately, the court did reject the Justice Department's theory of "technological" tying and, by doing so, abdicated its responsibility to protect consumers against anticompetitive ties.

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72. *See* 10 AREEDA, *supra* note 46, ¶ 1746b, at 226.

73. *Id.* ¶ 1746 at 224.

74. United States v. Microsoft, 147 F.3d 935, 949 (D.C. Cir. 1998).

75. *See supra* notes 56-59 and accompanying text.

76. *Microsoft*, 147 F.3d at 950.

77. *Id.*

78. *See id.* at 951 (finding that consumers cannot purchase Windows 95 and IE separately and then combine them themselves because "the act of combination is the creation of the design that knits the two together.").

Any reasoned attempt to determine whether a particular practice violates the antitrust tying laws must necessarily begin with an understanding of the harms against which tying law is meant to protect. The House Report on Section Three of the Clayton Act[79] vehemently expressed the dangers inherent in tying arrangements:

> Where the [corporation] making these contracts is already great and powerful ... the exclusive or 'tying' contract ... becomes one of the greatest agencies and instrumentalities of monopoly ever devised by the brain of man. It completely shuts out competitors, not only from trade in which they are already engaged, but from the opportunities to build up trade in any community where these great and powerful combinations are operating.[80]

By protecting competition in the market for the tied product, tying law fundamentally protects the interests of the consumer.[81] In the *Microsoft* case, the interest that tying law, expressed in the "anti-tying" provision of the decree, could potentially protect is the consumer's interest in competition in the market for browser software.[82]

By deciding that Windows 95/IE was one "integrated" product, the court in *Microsoft* ignored the aspect of tying law that has been most central to the Supreme Court's approach to tying jurisprudence: the existence of "forcing." According to the Court, the essential danger of tying arrangements is that they force the consumer to purchase a product that they might not have purchased at all, "or might have preferred to purchase elsewhere on different terms."[83] The element of forcing clearly appears to be present in Microsoft's *requirement* that OEMs license and preinstall IE as a condition of licensing Windows 95. Microsoft's power in the operating system market,[84] in good part attributable to "network effects,"[85] may

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79. 15 U.S.C. § 14 (1998).

80. Jefferson Parish Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2, 11 (1984) (quoting H.R. Rep. No. 627, 63d Cong., 2d Sess., 12-13 (1914)).

81. *See* Turner, *supra* note 44, at 61 ("The buyer's interest in a choice of alternative sources of supply is simply that the existence of alternatives is more likely to guarantee that he will get competitive terms.").

82. *See* Lemley & McGowan, *supra* note 2, at 480 ("[P]recluding Microsoft from requiring computer manufacturers to install Internet Explorer as a condition of installing Windows 95 will facilitate competition among browsers in the future and thereby, to an extent as yet undetermined, enhance social welfare."). *See also Jefferson Parish*, 466 U.S. at 14 ("[I]f [market] power is used to impair competition on the merits in another market, a potentially inferior product may be insulated from competitive pressures.").

83. *Jefferson Parish*, 466 U.S. at 12.

84. *See supra* note 2.

allow it to force consumers to take IE as a condition of obtaining Windows 95. There may be OEMs who wished to install different browser software, but because Microsoft required them to preinstall IE, that option was unavailable.

Absent some other justification, there appears to be no principled reason why consumers should be forced to accept a combination of products when the consumer could have combined the products himself. Assuming that consumers are rational, they will choose to purchase and combine the products themselves in order to obtain the purported benefits; the existence of the tying arrangement, whereby consumers are forced to take the combination, suggests that consumers may have chosen not to accept the imposed combination absent the tying arrangement.[86] In *Microsoft*, there is a strong argument that consumers could have purchased Windows 95 and IE separately and combined them if they desired to obtain the synergistic benefits that Microsoft argues are obtainable by combining the products.[87] In this case, however, the court in *Microsoft* finds that consumers are incapable of doing the "combining" in this instance.[88]

Not all commentators endorse the Supreme Court's approach to tying law and its attendant emphasis on the anticompetitive effects of forcing consumers to take a "tied" product.[89] Chicago School theorists, for exam-

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85. In simple terminology, "network effects" refers to the phenomenon whereby consumers derive more utility from a good as the number of other users of the good increases. *See* Lemley & McGowan, *supra* note 2, at 483-84 (providing a comprehensive and lucid overview of network economic effects on antitrust and other areas of law). The classic example of a network good is the telephone, which is only valuable when used in conjunction with other phones. *Id.* at 488-89. Operating system software exhibits what is referred to as "virtual" network economic effects; while "the value of a given program grows considerably as the number of additional purchasers increases," an operating system "will allow even a single user to perform a variety of tasks regardless whether even a single other consumer owns the software." *Id.* at 491.

86. *See* Digidyne Corp. v. Data Gen. Corp., 734 F.2d 1336, 1339 (9th Cir. 1984) ("[E]ach element of the NOVA computer system could have been provided separately by customers if defendant had not compelled purchasers to take both.").

87. *See* Lemley & McGowan, *supra* note 2, at 480 ("[I]f Internet Explorer is a superior browser there is presumably no need to demand that it be installed. If Internet Explorer is not a superior browser, demanding that it be installed will reduce social welfare.").

88. *See* United States v. Microsoft, 147 F.3d 935, 951-52 (D.C. Cir. 1998); The dispute over whether consumers can "combine" Windows 95 and IE is not a dispute over the technical intricacies of combining software code, but a dispute over the definition of "combination." *See infra* notes 110-14 and accompanying text.

89. *See, e.g.*, Meese, *supra* note 38, at 1-99 (arguing generally that tying arrangements are not always the product of forcing, even when the seller has appreciable economic power in the market for the tying product, because they often amount to partial

ple, question whether tying arrangements as a class necessarily have negative consequences on competition.[90] Perhaps the most salient commentary on the Supreme Court conception of tying law is provided by Mark Lemley and David McGowan in their article, *Could Java Change Everything? The Competitive Propriety of a Proprietary Standard.*[91] Lemley and McGowan suggest that tying arrangements may not necessarily be competitively injurious in a market characterized by network effects.[92] They argue that, because consumers benefit by the selection of a standard in a network market, tying arrangements may be beneficial if they cause one product to be selected as a standard in a market that would otherwise fail to select a standard.[93] This may be true even if the tying arrangement caused an inferior product to become the standard, provided that the consumer benefit of having a standard outweighs the loss to consumers suffered as a result of having an inferior product.[94] Tying arrangements in a network market, then, may not be purely anticompetitive, provided that the market would not select a standard in their absence. However, to the extent that consumers will, absent the tying arrangement, select a standard based on product superiority rather than forcing, it is optimal, even in markets characterized by network economic effects, to protect consumers from tying arrangements that force them to use one product over another. Lemley and McGowan acknowledge that contention,[95] and Lemley in an earlier article[96] argues that the focus of tying law should be on preserving competition in the standard-setting stage of a network market.[97]

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vertical integration in an attempt to avoid market failures such as false attribution). Other commentators point out the potentially beneficial effects that certain tying arrangements may confer. *See* Melissa Hamilton, *Software Tying Arrangements Under the Antitrust Laws: a More Flexible Approach*, 71 DENV. U. L. REV. 607 (1994) (arguing that in the context of software-maintenance tying arrangements the courts should employ a Rule of Reason, rather than per se, approach to tying analysis because of the procompetitive effects that such tying arrangements may have).

90. *See* Meese, *supra* note 38, at 23 ("Chicagoans see such 'forcing' as, at best, a source of efficiency gains and, at worst, competitively neutral.").

91. Lemley & McGowan, *supra* note 2, at 479.

92. *See id.* at 462.

93. *See id.*

94. *See id.*

95. *See id.* at 480 ("[W]e would be more confident that social welfare had been enhanced if its market position were obtained through innovation and price competition rather than the imposition of a tie.").

96. *See* Lemley, *supra* note 2, at 1041.

97. *See id.* at 1078 ("During the period of competition to set a standard, antitrust can in theory serve a valuable role as market referee. By ensuring that the standards competi-

The import of Lemley and McGowan's approach to the *Microsoft* case is two-fold. First, it suggests that Microsoft's requirement that consumers license IE as a condition of licensing Windows 95 may not necessarily be harmful to consumers if consumers would not otherwise have selected a browser standard. There is no evidence to suggest, however, that consumers are not capable of selecting a browser standard. Absent such evidence, there appears to be little reason for not allowing consumers the opportunity to choose which browser they find to be superior. Second, the approach taken by Lemley and McGowan suggests that antitrust law in general, and tying law in specific, should regulate anticompetitive conduct in the standard-setting stage of a network market like the market for browsers.[98] This suggests that courts should be especially sensitive to the possibility that a tying arrangement would adversely affect the standard-selection process, and vociferously employ tying law to limit practices like that employed by Microsoft on the assumption that they could have serious anticompetitive effects on the process of selecting the optimal browser software as the standard. The court in *Microsoft* demonstrated no such sensitivity, as the "integration" test it employed removed Microsoft's practices from the scrutiny of tying law, at least in so far as it was expressed in the consent decree.

On balance, Lemley and McGowan's approach to tying arrangements, while providing important insights into the impact of network economic effects on tying law, appears to comport with the Supreme Court's concern that tying arrangements adversely impact competition in the market for the tied product by forcing consumers to accept a potentially inferior product. The D.C. Circuit in *Microsoft* articulates no similar concern that Microsoft may be "forcing" consumers to take IE, thereby negatively impacting competition in the market for browser software. The *Microsoft* court employs an "integration" test in analyzing whether Windows 95 and IE are distinct products, a test that does not follow the distinct products analysis established by the Supreme Court in *Jefferson Parish.* As a result, the court insulates Microsoft's practices from the reach of tying law, at least in so far as the court's understanding is truly "consistent with tying law."[99]

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tion is resolved on the merits of the competing products, rather than on the basis of power leveraged from other contexts, this form of antitrust scrutiny would promote social welfare at least to some extent. ... The market may still be locked into a new standard, but at least it will be the best possible standard.").

98. *See id.* at 1092 ("Antitrust may need to take account of the peculiar economics of the Internet, but it does not need to be discarded entirely.").

99. United States v. Microsoft, 147 F.3d 935, 950 (D.C. Cir. 1998).

Under the distinct products test established by *Jefferson Parish*, Windows 95 and IE are two distinct products. The separate product demand for Windows 95 and for IE[100] suggests that it was efficient to offer the products separately, and so Windows 95 and IE are two distinct products, not one "integrated" product.[101] Under *Jefferson Parish*, then, Microsoft's practice of requiring licensees of Windows 95 also to license IE constituted a tying together of two distinct products.[102] Microsoft's argument that consumers should be forced to use both Windows 95 and IE is only persuasive, then, if the D.C. Circuit is correct in their finding that consumers are unable to purchase the products separately and combine them themselves if they so choose.[103]

Although the very fact that Microsoft had to require OEMs to take both Windows 95 and IE suggests that even Microsoft did not think of the two as one "integrated" product,[104] the court in *Microsoft* insisted on employing an "integration" test, rather than relying on the Supreme Court test established by *Jefferson Parish*, in analyzing whether the two products were "distinct." Elhauge, who formulated the test adopted by the court in *Microsoft*, explains that it may be necessary to look beyond the *Jefferson Parish* separate product markets test in instances where an "innovation[] involve[s] the bundling of previously unbundled items."[105] Apart from Microsoft's urging, however, there is no principled reason for finding that Microsoft's decision to start requiring OEMs to install both Windows 95 and IE constituted anything more than an "innovative" anticompetitive tie.[106] If the court had refused to allow Microsoft to continue forcing OEMs to license both Windows 95 and IE, it is unlikely that innovation would have been stifled. If consumers had desired to obtain the benefits that Microsoft claimed attended use of the two products in combination,

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100. *See* Elhauge, *supra* note 63, at 4 (explaining the separate demand for Windows 95 and IE).

101. *See* Allen-Myland, Inc. v. International Bus. Mach. Corp., 33 F.3d 194, 211 (3d Cir. 1994) (applying *Jefferson Parish*, there are two distinct products provided that there is "a market structure in which it is efficient to offer the tied product separately from the tying product.").

102. *See* Jefferson Parish Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2, 12-18 (1984).

103. *See Microsoft*, 147 F.3d at 951.

104. *See* Lemley & McGowan, *supra* note 2, at 474 ("Microsoft evidently perceived that the browser and the operating system were, at the time of the contempt proceeding, something more than a single, 'integrated' product; otherwise it would not have had to insist that they be purchased together.").

105. 10 AREEDA, *supra* note 46, ¶ 1746, at 224.

106. *See id.* at 224 ("[T]he 'innovation' may be an anticompetitive tie that no one has tried before.").

they could have simply purchased Windows 95 and IE separately and installed the products themselves.[107] Because the *Jefferson Parish* distinct products test presented none of the innovation- stifling problems suggested by Elhauge, the court in *Microsoft* should have followed Supreme Court precedent and conducted its distinct products analysis under the direction of *Jefferson Parish.*

Furthermore, it does not appear that the court properly executed the "integration" test that it employed. Under that test, a product combination is "integrated" if it "offers advantages unavailable if the functionalities are bought separately and combined by the purchaser."[108] The court stated that the first part of the test was satisfied if there was "any plausible claim that [the combination] brings some advantage."[109] It is not surprising that the court found that the Windows 95-IE combination fulfilled that nonexistent hurdle; in fact, it is hard to imagine any combination of products that the seller could not plausibly claim conferred some advantage.

In perhaps the least supportable portion of the opinion, the court finds that the second portion of the "integration" test was also met, finding that the advantages of combining Windows 95 and IE were unavailable if Windows 95 and IE were bought separately and combined by the purchaser.[110] Even Elhauge, whose test the court employed, criticized this determination.[111] The problem with the court's analysis is that its definition of the term "combine" ignores the rationale behind a focus on whether consumers can purchase the products separately and still obtain the benefits of their combination. The court reasoned that the act of combination was not the installation of Windows 95 and IE, but "the creation of the design that knits the two together."[112] The court here attempts to ascertain the existential meaning of the term "combine," whereas a proper analysis would focus on whether it is efficient and possible to offer the two products separately for consumer combination if so desired. As Elhauge points out, it was undoubtedly efficient to offer Windows 95 and IE separately

107. *See infra* notes 110-14 and accompanying text.

108. *Microsoft*, 147 F.3d at 948.

109. *Id.* at 950.

110. *See id.* at 951-52.

111. Elhauge explained that the existence of separate consumer demand for Windows 95 and IE meant that consumers clearly could purchase the products separately and combine them if they wished to obtain the benefits available by their combination. *See* Elhauge, *supra* note 63, at 4 ("We know that it is feasible to put them on separate disks with independent value because Microsoft in fact did precisely that. And we know that their combination by Microsoft did not confer advantages unobtainable by their combination by buyers, because Microsoft actually had its buyers combine the separate disks.").

112. *Microsoft*, 147 F.3d at 952.

for consumer combination, for Microsoft did just that.[113] The court's reading of the second portion of the test would essentially mean that any combination of software could be "integrated" at the discretion of its producer.[114] The more rational reading of the second portion of the court's "integration" test is that two products should not be deemed "integrated" if consumers are able to purchase the products separately and combine them at their own discretion.

Despite its differing focus, it is difficult to see how the distinct products analysis employed by the court, even when used in the way intended by Elhauge,[115] takes any substantial departure from the *Jefferson Parish* distinct products analysis in terms of results. Under *Jefferson Parish*, two products are considered "distinct" if there is sufficient consumer demand so that it is efficient to offer the two products separately, thereby allowing consumers to choose whether to take advantage of the combination rather than forcing them to do so.[116] Regardless of whatever benefits the combination of two products may have, if the existence of separate demand makes it efficient to offer the two products separately, the consumer should have the opportunity to decide whether or not to enjoy the "advantages" of the combination. Under the *Microsoft* court's "integration" test, products are distinct if they may be efficiently combined by consumers, provided that the combination confers any advantage. Under this so-called "integration" test, a product combination does not involve two distinct products (i.e. is an "integrated" product) if the combination confers some benefit and insufficient consumer demand exists so that it is inefficient to offer the products separately for consumer combination. The result would be the same under the *Jefferson Parish* test, however, under which a product combination involves two distinct products only when they can be efficiently offered separately to the consumer.[117] It appears that the only thing that the court's "integration" test would add to the *Jefferson Parish* analysis in terms of result is that, under that test, products would be considered "distinct" if their combination offered no advantages, regardless of a consumer's inability to combine efficiently the products. While that result may be important in some situations, it is of no import to the situation

113. *See supra* note 111.

114. Judge Wald's dissenting opinion recognizes that fact. *See Microsoft*, 147 F.3d at 957, n.1 (Wald, J., dissenting opinion).

115. *See* Elhauge, *supra* note 63, at 4.

116. *See* Digidyne Corp. v. Data Gen. Corp., 734 F.2d 1336, 1339 (9th Cir. 1984) ("[E]ach element of the NOVA computer system could have been provided separately by customers if defendant had not compelled purchasers to take both.").

117. *See id.*

in *Microsoft*. Thus, nothing beyond the *Jefferson Parish* test was needed to determine that Windows 95 and IE were distinct products that Microsoft need not have forced on consumers.

IV. CONCLUSION

Perhaps the impetus behind the desire to employ an "integration" test as opposed to the *Jefferson Parish* test is to catch the even trickier cases of software combination. Microsoft's obvious reaction to a finding that its Windows 95 and IE licensing practices constituted an illegal tying arrangement is the development of a product like Windows 98, which "embeds" the browser software "within" the operating system software.[118] Indeed, following allegations that it had illegally tied sales of its Windows 3.11 graphical interface to sales of its MS-DOS operating system, Microsoft developed Windows 95, a product that "integrated" the graphical interface and the underlying DOS operating system.[119] Tying law must be sensitive to the potential benefits these "integrations" offer, and it is that impulse that appears to have informed the D.C. Circuit's opinion in *Microsoft*. At the same time, however, the courts must acknowledge and address anticompetitive tying arrangements. By ignoring precedent and employing a new distinct products analysis without proper justification, the court in *Microsoft* failed to balance those competing goals.

If faced in the future with allegations that a product like Windows 98 constitutes an illegal tying arrangement, the courts should not wholesale abandon past precedent. Rather, a new distinct products analysis should only be adopted if the *Jefferson Parish* test does not adequately balance the desire to allow product innovation and the continuing need for the judiciary to limit anticompetitive conduct.

118. *See* Lemley, *supra* note 2, at 1076 ("Microsoft's recent market approach ... seems to involve embedding Internet applications deeply within its server operating systems.").

119. *See Microsoft*, 147 F.3d at 945.