United States v. Microsoft Corp.

253 F.3d 34 (D.C. Cir. 2001)

PER CURIAM:

Microsoft Corporation appeals from judgments of the District Court finding the company in violation of §§ 1 and 2 of the Sherman Act and ordering various remedies.

The action against Microsoft arose pursuant to a complaint filed by the United States and separate complaints filed by individual States. The District Court determined that Microsoft had maintained a monopoly in the market for Intel-compatible PC operating systems in violation of § 2; attempted to gain a monopoly in the market for internet browsers in violation of § 2; and illegally tied two purportedly separate products, Windows and Internet Explorer ("IE"), in violation of § 1. . . . To remedy the Sherman Act violations, the District Court issued a Final Judgment requiring Microsoft to submit a proposed plan of divestiture, with the company to be split into an operating systems business and an applications business. The District Court's remedial order also contains a number of interim restrictions on Microsoft's conduct.

Microsoft's appeal contests both the legal conclusions and the resulting remedial order. . . . [W]e find that some but not all of Microsoft's liability challenges have merit. . . . [W]e affirm in part, reverse in part, and remand in part the District Court's judgment assessing liability. We vacate in full the Final Judgment embodying the remedial order and remand the case to a different trial judge for further proceedings consistent with this opinion.

I. INTRODUCTION

A. Background

In July 1994, officials at the Department of Justice ("DOJ"), on behalf of the United States, filed suit against Microsoft, charging the company with, among other things, unlawfully maintaining a monopoly in the operating system market through anticompetitive terms in its licensing and software developer agreements. The parties subsequently entered into a consent decree, thus avoiding a trial on the merits. See *United States v. Microsoft Corp.*, 56 F.3d 1448 (D.C. Cir. 1995) ("*Microsoft I*"). Three years later, the Justice Department filed a civil contempt action against Microsoft for allegedly violating one of the decree's provisions. On appeal from a grant of a preliminary injunction, this court held that Microsoft's technological bundling of IE 3.0 and 4.0 with Windows 95 did not violate the relevant provision of the consent decree. *United States v. Microsoft Corp.*, 147 F.3d 935 (D.C. Cir. 1998) ("*Microsoft II*"). We expressly reserved the question whether such bundling might independently violate §§ 1 or 2 of the Sherman Act.

On May 18, 1998, shortly before issuance of the *Microsoft II* decision, the United States and a group of State plaintiffs filed separate (and soon thereafter consolidated) complaints, asserting antitrust violations by Microsoft and seeking preliminary and permanent injunctions against the company's allegedly unlawful conduct. . . .

After a 76–day bench trial, the District Court issued its Findings of Fact. *United States v. Microsoft Corp.*, 84 F.Supp.2d 9 (D.D.C. 1999) ("Findings of Fact"). . . . [T]he District Court referred the case to mediation to afford the parties an opportunity to settle their differences. The Honorable Richard A. Posner, Chief Judge of the United States Court of Appeals for the Seventh Circuit, was appointed to serve as mediator. . . .

Mediation failed after nearly four months of settlement talks between the parties. On April 3, 2000, with the parties' briefs having been submitted and considered, the District Court issued its conclusions of law. The District Court found Microsoft liable on the § 1 tying and § 2 monopoly maintenance and attempted monopolization claims. . . .

B. Overview

Before turning to the merits of Microsoft's various arguments, we pause to reflect briefly on two matters of note, one practical and one theoretical.

The practical matter relates to the temporal dimension of this case. . . . What is somewhat problematic, however, is that just over six years have passed since Microsoft engaged in the first conduct plaintiffs allege to be anticompetitive. . . . [S]ix years seems like an eternity in the computer industry. By the time a court can assess liability, firms, products, and the marketplace are likely to have changed dramatically. This, in turn, threatens enormous practical difficulties for courts considering the appropriate measure of relief in equitable enforcement actions. . . .

We do not mean to say that enforcement actions will no longer play an important role in curbing infringements of the antitrust laws in technologically dynamic markets, nor do we assume this in assessing the merits of this case. Even in those cases where forward-looking remedies appear limited, the Government will continue to have an interest in defining the contours of the antitrust laws so that law-abiding firms will have a clear sense of what is permissible and what is not. And the threat of private damage actions will remain to deter those firms inclined to test the limits of the law.

The second matter of note is more theoretical in nature. We decide this case against a backdrop of significant debate amongst academics and practitioners over the extent to which "old economy" § 2 monopolization doctrines should apply to firms competing in dynamic technological markets characterized by network effects. In markets characterized by network effects, one product or standard tends towards dominance. . . . Once a product or standard achieves wide acceptance, it becomes more or less entrenched. Competition in such industries is "for the field" rather than "within the field."

In technologically dynamic markets, however, such entrenchment may be temporary, because innovation may alter the field altogether. . . . Rapid technological change leads to markets in which firms compete through innovation for temporary market dominance, from which they may be displaced by the next wave of product advancements. . . . Microsoft argues that the operating system market is just such a market.

[W]e note that there is no consensus among commentators on the question of whether, and to what extent, current monopolization doctrine should be amended to account for competition in technologically dynamic markets characterized by network effects. . . . [Microsoft claims] that the measure of monopoly power should be different [in technologically dynamic markets. We reject this argument].

II. MONOPOLIZATION

Section 2 of the Sherman Act makes it unlawful for a firm to "monopolize." The offense of monopolization has two elements: "(1) the possession of monopoly power in the relevant market and (2) the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident." *United States v. Grinnell Corp.*, 384 U.S. 563, 570–71 (1966). The District Court applied this test and found that Microsoft possesses monopoly power in the market for Intel-compatible PC operating systems. . . .

A. Monopoly Power

While merely possessing monopoly power is not itself an antitrust violation, it is a necessary element of a monopolization charge. The Supreme Court defines monopoly power as "the power to control prices or exclude competition." *United States v. E.I. du Pont de Nemours & Co.*, 351 U.S. 377, 391 (1956). More precisely, a firm is a monopolist if it can profitably raise prices substantially above the competitive level. . . . Where evidence indicates that a firm has in fact profitably done so, the existence of monopoly power is clear. . . . Because such direct proof is only rarely available, courts more typically examine market structure in search of circumstantial evidence of monopoly power. . . . Under this structural approach, monopoly power may be inferred from a firm's possession of a dominant share of a relevant market that is protected by entry barriers. . . .

The District Court considered these structural factors and concluded that Microsoft possesses monopoly power in a relevant market. Defining the market as Intel-compatible PC operating systems, the District Court found that Microsoft has a greater than 95% share. It also found the company's market position protected by a substantial entry barrier.

Microsoft argues that the District Court incorrectly defined the relevant market. It also claims that there is no barrier to entry in that market. Alternatively, Microsoft argues that because the software industry is uniquely dynamic, direct proof, rather than circumstantial evidence, more appropriately indicates whether it possesses monopoly power. Rejecting each argument, we uphold the District Court's finding of monopoly power in its entirety.

1. Market Structure

a. Market definition

[T]he relevant market must include all products "reasonably interchangeable by consumers for the same purposes." *du Pont*, 351 U.S. at 395. In this case, the District Court defined the market as "the licensing of all Intel-compatible PC operating systems worldwide," finding that there are "currently no products—and ... there are not likely to be any in the near future—that a significant percentage of computer users worldwide could substitute for [these operating systems] without incurring substantial costs." Calling this market definition "far too narrow," Microsoft argues that the District Court improperly excluded three types of products: non-Intel compatible operating systems (primarily Apple's Macintosh operating system, Mac OS), operating systems for non-PC devices (such as handheld computers and portal websites), and "middleware" products,[*] which are not operating systems at all.

[*] [Middleware is software that provides common services and capabilities to applications outside of what's offered by the operating system].

. . . The District Court found that consumers would not switch from Windows to Mac OS in response to a substantial price increase because of the costs of acquiring the new hardware needed to run Mac OS (an Apple computer and peripherals) and compatible software applications, as well as because of the effort involved in learning the new system and transferring files to its format. The court also found the Apple system less appealing to consumers because it costs considerably more and supports fewer applications. . . . [W]e have no basis for upsetting the court's decision to exclude Mac OS from the relevant market. [We also reject Microsoft's claim that consumers perceive non-PC devices, portal websites, and middleware as close substitutes to PC devices].

b. Market power

Having thus properly defined the relevant market, the District Court found that Windows accounts for a greater than 95% share. The court also found that even if Mac OS were included, Microsoft's share would exceed 80%. . . .

Microsoft claims that even a predominant market share does not by itself indicate monopoly power. [W]e agree with Microsoft that because of the possibility of competition from new entrants, looking to current market share alone can be "misleading." . . . In this case, however, the District Court was not misled. [A] structural barrier . . . protects the company's future position. That barrier—the "applications barrier to entry"—stems from two characteristics of the software market: (1) most consumers prefer operating systems for which a large number of applications have already been written; and (2) most developers prefer to write for operating systems that already have a substantial consumer base. This "chicken-and-egg" situation ensures that applications will continue to be written for the already dominant Windows, which in turn ensures that consumers will continue to prefer it over other operating systems. . . .

2. Direct Proof

Microsoft's alternative argument [is] it does not behave like a monopolist. Claiming that software competition is uniquely "dynamic," the company suggests a new rule: that monopoly power in the software industry should be proven directly, that is, by examining a company's actual behavior to determine if it reveals the existence of monopoly power. . . . The company claims that it invests heavily in research and development, and charges a low price for Windows (a small percentage of the price of an Intel-compatible PC system).

Microsoft's argument fails because [substitutes are not available now and are unlikely to be available in the near future].

Even if we were to require direct proof, moreover, Microsoft's behavior may well be sufficient to show the existence of monopoly power. . . . [B]ecause innovation can increase an already dominant market share and further delay the emergence of competition, even monopolists have reason to invest in R&D. Microsoft's pricing behavior is similarly equivocal. . . . Microsoft never claims that it did not charge the long-term monopoly price. . . . [S]ome aspects of Microsoft's behavior are difficult to explain unless Windows is a monopoly product. For instance, . . . the company set the price of Windows without considering rivals' prices, something a firm without a monopoly would have been unable to do. . . .

B. Anticompetitive Conduct

[A]fter concluding that Microsoft had monopoly power, the District Court held that Microsoft had violated § 2 by engaging in a variety of exclusionary acts . . . to maintain its monopoly by preventing the effective distribution and use of products that might threaten that monopoly. . . .

Whether any particular act of a monopolist is exclusionary, rather than merely a form of vigorous competition, can be difficult to discern: the means of illicit exclusion, like the means of legitimate competition, are myriad. The challenge for an antitrust court lies in stating a general rule for distinguishing between exclusionary acts, which reduce social welfare, and competitive acts, which increase it.

From a century of case law on monopolization under § 2, however, several principles do emerge. First, to be condemned as exclusionary, a monopolist's act must have an "anticompetitive effect." That is, it must harm the competitive process and thereby harm consumers. In contrast, harm to one or more competitors will not suffice. . . . Second, the plaintiff, on whom the burden of proof of course rests, . . . must demonstrate that the monopolist's conduct indeed has the requisite anticompetitive effect. . . . Third, if a plaintiff successfully establishes a prima facie case under § 2 by demonstrating anticompetitive effect, then the monopolist may proffer a "procompetitive justification" for its conduct. . . . If the monopolist asserts a procompetitive justification—a nonpretextual claim that its conduct is indeed a form of competition on the merits because it involves, for example, greater efficiency or enhanced consumer appeal—then the burden shifts back to the plaintiff to rebut that claim. Fourth, if the monopolist's procompetitive justification stands unrebutted, then the plaintiff must demonstrate that the anticompetitive harm of the conduct outweighs the procompetitive benefit.[*]

In cases arising under § 1 of the Sherman Act, the courts routinely apply a similar balancing approach under the rubric of the "rule of reason." . . . As the Fifth Circuit more recently explained, "[i]t is clear ... that the analysis under section 2 is similar to that under section 1 regardless whether the rule of reason label is applied." *Mid-Texas Communications Sys., Inc. v. AT & T*, 615 F.2d 1372, 1389 n. 13 (5th Cir.1980).

Finally, in considering whether the monopolist's conduct on balance harms competition and is therefore condemned as exclusionary for purposes of § 2, our focus is upon the effect of that conduct, not upon the intent behind it. Evidence of the intent behind the conduct of a monopolist is relevant only to the extent it helps us understand the likely effect of the monopolist's conduct. . . .

1. Licenses Issued to Original Equipment Manufacturers

The District Court condemned a number of provisions in Microsoft's agreements licensing Windows to OEMs, because it found that Microsoft's imposition of those provisions (like many of Microsoft's other actions at issue in this case) serves to reduce usage share of Netscape's browser and, hence, protect Microsoft's operating system monopoly. The reason market share in the browser market affects market power in the operating system market is complex, and warrants some explanation.

Browser usage share is important because. . . . a browser (or any middleware product, for that

---

[*] [The "principles" that the Court describes are commonly known as the "three-step burden shifting framework." Courts use this framework to evaluate harm to competition in rule of reason, monopolization, and merger cases].

matter) must have a critical mass of users in order to attract software developers to write applications. . . . Applications written to a particular [browser], however, would run on any computer with that browser, regardless of the underlying operating system. . . . If a consumer could have access to the applications he desired—regardless of the operating system he uses—simply by installing a particular browser on his computer, then he would no longer feel compelled to select Windows in order to have access to those applications; he could select an operating system other than Windows based solely upon its quality and price. In other words, the market for operating systems would be competitive.

Therefore, Microsoft's efforts to gain market share in one market (browsers) served to meet the threat to Microsoft's monopoly in another market (operating systems) by keeping rival browsers from gaining the critical mass of users necessary to attract developer attention away from Windows as the platform for software development. . . .

a. Anticompetitive effect of the license restrictions

[The District Court condemned license provisions prohibiting the OEMs from removing any desktop icons and altering the appearance of the Windows desktop]. The District Court concluded that [these restrictions thwart] the distribution of a rival browser by preventing OEMs from removing visible means of user access to IE. The OEMs cannot practically install a second browser in addition to IE, the court found, in part because "[p]re-installing more than one product in a given category ... can significantly increase an OEM's support costs, for the redundancy can lead to confusion among novice users." That is, a certain number of novice computer users, seeing two browser icons, will wonder which to use when and will call the OEM's support line. Support calls are extremely expensive and, in the highly competitive original equipment market, firms have a strong incentive to minimize costs. [We affirm and conclude that these restrictions are anticompetitive]. . . .

b. Microsoft's justifications for the license restrictions

Microsoft argues that the license restrictions are legally justified because, in imposing them, Microsoft is simply "exercising its rights as the holder of valid copyrights." Microsoft also argues that the licenses "do not unduly restrict the opportunities of Netscape to distribute Navigator in any event."

Microsoft's primary copyright argument borders upon the frivolous. The company claims an absolute and unfettered right to use its intellectual property as it wishes. . . . That is no more correct than the proposition that use of one's personal property, such as a baseball bat, cannot give rise to tort liability. . . .

The only license restriction Microsoft seriously defends as necessary to prevent a "substantial alteration" of its copyrighted work is the prohibition on OEMs automatically launching a substitute user interface upon completion of the boot process. . . . We therefore hold that this particular restriction is not an exclusionary practice that violates § 2 of the Sherman Act. . . .

In sum, we hold that with the exception of the one restriction prohibiting automatically launched alternative interfaces, all the OEM license restrictions at issue represent uses of Microsoft's market power to protect its monopoly, unredeemed by any legitimate justification. The restrictions therefore violate § 2 of the Sherman Act.

2. Integration of IE and Windows

Although Microsoft's license restrictions have a significant effect in closing rival browsers out of one of the two primary channels of distribution, the District Court found that "Microsoft's executives believed ... its contractual restrictions placed on OEMs would not be sufficient in themselves to reverse the direction of Navigator's usage share. Consequently, in late 1995 or early 1996, Microsoft set out to bind [IE] more tightly to Windows 95 as a technical matter."

Technologically binding IE to Windows, the District Court found, both prevented OEMs from pre-installing other browsers and deterred consumers from using them. In particular, having the IE software code as an irremovable part of Windows meant that pre-installing a second browser would "increase an OEM's product testing costs," because an OEM must test and train its support staff to answer calls related to every software product preinstalled on the machine; moreover, pre-installing a browser in addition to IE would to many OEMs be a questionable use of the scarce and valuable space on a PC's hard drive. . . .

a. Anticompetitive effect of integration

As a general rule, courts are properly very skeptical about claims that competition has been harmed by a dominant firm's product design changes. . . . In a competitive market, firms routinely innovate in the hope of appealing to consumers, sometimes in the process making their products incompatible with those of rivals; the imposition of liability when a monopolist does the same thing will inevitably deter a certain amount of innovation. This is all the more true in a market, such as this one, in which the product itself is rapidly changing. Judicial deference to product innovation, however, does not mean that a monopolist's product design decisions are per se lawful. . . .

Because Microsoft's conduct, through something other than competition on the merits, has the effect of significantly reducing usage of rivals' products and hence protecting its own operating system monopoly, it is anticompetitive. . . .

Microsoft designed Windows 98 "so that using Navigator on Windows 98 would have unpleasant consequences for users" by, in some circumstances, overriding the user's choice of a browser other than IE as his or her default browser. . . . Because the override reduces rivals' usage share and protects Microsoft's monopoly, it too is anticompetitive.

b. Microsoft's justifications for integration

Microsoft proffers no justification [for the] challenged actions that it took in integrating IE into Windows. . . . Although Microsoft does make some general claims regarding the benefits of integrating the browser and the operating system, . . . it neither specifies nor substantiates those claims. . . . Plaintiffs plainly made out a prima facie case of harm to competition in the operating system market by demonstrating that Microsoft's actions increased its browser usage share and thus protected its operating system monopoly from a middleware threat and, for its part, Microsoft failed to meet its burden of showing that its conduct serves a purpose other than protecting its operating system monopoly. Accordingly, we hold that Microsoft's exclusion of IE from the Add/Remove Programs utility and its commingling of browser and operating system code constitute exclusionary conduct, in violation of § 2. . . .

3. Agreements with Internet Access Providers

[Microsoft entered into deals with Internet Access Providers ("IAPs"), giving consumers free access to certain services]. . . . Although offering a customer an attractive deal is the hallmark of competition, the Supreme Court has indicated that in very rare circumstances a price may be unlawfully low, or "predatory." . . . The rare case of price predation aside, the antitrust laws do not condemn even a monopolist for offering its product at an attractive price, and we therefore have no warrant to condemn Microsoft for offering [products] free of charge or even at a negative price. Likewise, as we said above, a monopolist does not violate the Sherman Act simply by developing an attractive product. . . .

[Microsoft entered into deals with leading IAPs requiring these companies not promote any non-Microsoft browser, nor provide software using any non-Microsoft browser except at the customer's request]. . . . In this case, plaintiffs challenged Microsoft's exclusive dealing arrangements with the IAPs under both §§ 1 and 2 of the Sherman Act. . . . [They] allege that, by closing to rivals a substantial percentage of the available opportunities for browser distribution, Microsoft managed to preserve its monopoly in the market for operating systems. . . .

Plaintiffs having demonstrated a harm to competition, the burden falls upon Microsoft to defend its exclusive dealing contracts with IAPs by providing a procompetitive justification for them. . . . Microsoft's only explanation for its exclusive dealing is that it wants to keep developers focused upon its APIs—which is to say, it wants to preserve its power in the operating system market. . . . That is not an unlawful end, but neither is it a procompetitive justification for the specific means here in question, namely exclusive dealing contracts with IAPs. Accordingly, we affirm the District Court's decision holding that Microsoft's exclusive contracts with IAPs are exclusionary devices, in violation of § 2 of the Sherman Act.

4. [Other Third Parties]

[The Court affirmed the District Court's holding that Microsoft's agreements with other third parties were exclusionary, in violation of § 2 of the Sherman Act. The Court also affirmed the holding that Microsoft used a wide range of practices to impair the markets for middleware].

III. ATTEMPTED MONOPOLIZATION

To establish a § 2 violation for attempted monopolization, "a plaintiff must prove (1) that the defendant has engaged in predatory or anticompetitive conduct with (2) a specific intent to monopolize and (3) a dangerous probability of achieving monopoly power." *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447, 456 (1993).

The determination whether a dangerous probability of success exists is a particularly fact-intensive inquiry. . . . To establish a dangerous probability of success, plaintiffs must as a threshold matter show that the . . . a hypothetical monopolist in that market could enjoy market power. This, in turn, requires plaintiffs (1) to define the relevant market and (2) to demonstrate that substantial barriers to entry protect that market. Plaintiffs have not carried their burden on either prong. . . .

IV. TYING

The District Court concluded that Microsoft's contractual and technological bundling of the IE web browser (the "tied" product) with its Windows operating system ("OS") (the "tying" product) resulted in a tying arrangement that was *per se* unlawful. We hold that the rule of reason, rather than *per se* analysis, should govern the legality of tying arrangements involving platform software products. . . . Accordingly, we vacate the District Court's finding of a per se tying violation and remand the case.

. . . There are four elements to a *per se* tying violation: (1) the tying and tied goods are two separate products; (2) the defendant has market power in the tying product market; (3) the defendant affords consumers no choice but to purchase the tied product from it; and (4) the tying arrangement forecloses a substantial volume of commerce.

Microsoft . . . argues that Windows (the tying good) and IE browsers (the tied good) are not "separate products," and that it did not substantially foreclose competing browsers from the tied product market. . . .

A. Separate-Products Inquiry Under the Per Se Test

The requirement that a practice involve two separate products before being condemned as an illegal tie started as a purely linguistic requirement: unless products are separate, one cannot be "tied" to the other. . . . [In] *Times-Picayune Publishing Co. v. United States*, 345 U.S. 594 (1953), [the Supreme Court held] that the separate-products issue [is] a distinct element of the test for an illegal tie. *Id.* at 614. . . .

The first case to give content to the separate-products test was *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 12–18 (1984). That case addressed a tying arrangement in which a hospital conditioned surgical care at its facility on the purchase of anesthesiological services from an affiliated medical group. The facts were a challenge for casual separate-products analysis because the tied service—anesthesia—was neither intuitively distinct from nor intuitively contained within the tying service—surgical care. A further complication was that, soon after the Court enunciated the *per se* rule for tying liability in *International Salt Co. v. United States*, 332 U.S. 392, 396 (1947), and *Northern Pacific Railway Co. v. United States*, 356 U.S. 1, 5–7 (1958), new economic research began to cast doubt on the assumption. . . .

[In *Jefferson Parish*, the Court] clarified that "the answer to the question whether one or two products are involved" does not turn "on the functional relation between them." In other words, the mere fact that two items are complements [or] that "one ... is useless without the other" does not make them a single "product" for purposes of tying law. . . . Second, . . . the Court decreed that "no tying arrangement can exist unless there is a sufficient demand for the purchase of [the tied product] separate from [the tying product]." . . .

But not all ties are bad. Bundling obviously saves distribution and consumer transaction costs. This is likely to be true, to take some examples from the computer industry, with the integration of [technologies]. . . . Bundling can also capitalize on certain economies of scope. . . . Indeed, if there were no efficiencies from a tie (including economizing on consumer transaction costs such as the time and effort involved in choice), we would expect distinct consumer demand for each individual component of every good. In a competitive market with zero transaction costs, the computers on which this opinion was written would only be sold piecemeal—keyboard, monitor, mouse, central processing unit, disk drive, and memory all sold in separate transactions and likely by different manufacturers. . . .

With this background, we now turn to the separate products inquiry before us. The District Court found that many consumers, if given the option, would choose their browser separately from the OS. . . .

Microsoft does not dispute that many consumers demand alternative browsers. . . . In our discussion of monopoly maintenance we find that [Microsoft failed to show balancing efficiencies]. Accordingly, Microsoft's implicit argument—that in this case looking to a competitive fringe is inadequate to evaluate fully its potentially innovative technological integration, that such a comparison is between apples and oranges—poses a legitimate objection to the operation of Jefferson Parish's separate-products test for the per se rule. . . . In light of the monopoly maintenance section, obviously, we do not find that Microsoft's integration is welfare-enhancing or that it should be absolved of tying liability.[*]

B. Per Se Analysis Inappropriate for this Case.

. . . There is no doubt that "[i]t is far too late in the history of our antitrust jurisprudence to question the proposition that certain tying arrangements pose an unacceptable risk of stifling competition and therefore are unreasonable '*per se*.'" *Jefferson Parish*, 466 U.S. at 9. But there are strong reasons to doubt that the integration of additional software functionality into an OS falls among these arrangements. Applying *per se* analysis to such an amalgamation creates undue risks of error and of deterring welfare-enhancing innovation.

. . . The early Supreme Court cases on tying dealt with arrangements whereby the sale or lease of a patented product was conditioned on the purchase of certain unpatented products from the patentee. . . . Later Supreme Court tying cases did not involve market power derived from patents, but continued to involve contractual ties. . . . In none of these cases was the tied good physically and technologically integrated with the tying good. Nor did the defendants ever argue that their tie improved the value of the tying product to users *and* to makers of complementary goods. . . .

. . . We do not pass judgment on Microsoft's claims regarding the benefits from integration of its [technologies]. We merely note that these and other novel, purported efficiencies suggest that judicial "experience" provides little basis for believing that [the bundling lacks] *any* redeeming virtue. . . .

We do not have enough empirical evidence regarding the effect of Microsoft's practice on the amount of consumer surplus created or consumer choice foreclosed by the integration of added functionality into platform software to exercise sensible judgment regarding that entire class of behavior. . . . We remand the case for evaluation of Microsoft's tying arrangements under the rule of reason. . . . That rule more freely permits consideration of the benefits of bundling in software markets, particularly those for OSs, and a balancing of these benefits against the costs to consumers whose ability to make direct price/quality tradeoffs in the tied market may have been impaired. . . .

---

[*] [NOTE: The evaluation of efficiencies and reasonableness is irrelevant to applications of the per se illegality rule. Thus, whenever courts consider efficiencies and reasonableness, they move away from the per se illegality rule].

VII. CONCLUSION

The judgment of the District Court is affirmed in part, reversed in part, and remanded in part. We vacate in full the Final Judgment embodying the remedial order, and remand the case to the District Court for reassignment to a different trial judge for further proceedings consistent with this opinion.