

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

UNITED STATES OF AMERICA, Plaintiff, v. MICROSOFT CORPORATION, Defendant.	Civil Action No. 98-1232 (TPJ)
STATE OF NEW YORK <i>ex rel.</i> Attorney General ELIOT SPITZER, <i>et al.</i> , Plaintiffs, v. MICROSOFT CORPORATION, Defendant.	Civil Action No. 98-1233 (TPJ)

PLAINTIFFS’ JOINT MEMORANDUM IN RESPONSE TO MICROSOFT’S
PROPOSED FINDINGS OF FACT

Joel I. Klein
Assistant Attorney General

A. Douglas Melamed
Principal Deputy Assistant Attorney
General

Mark S. Popofsky
Senior Counsel to the Assistant Attorney
General

Rebecca P. Dick
Director for Civil Non-Merger
Enforcement

Jeffrey H. Blattner
Special Counsel for Information
Technology

U.S. Department of Justice
Antitrust Division
950 Pennsylvania Avenue, N.W.
Washington, D.C. 20530-0001

Christopher S Crook
Chief
Phillip R. Malone
Steven C. Holtzman
Karma M. Giulianelli
Michael C. Wilson
John F. Cove, Jr.
Pauline T. Wan
Jeremy D. Feinstein
Attorneys

U.S. Department of Justice
Antitrust Division
450 Golden Gate Avenue
San Francisco, CA 94102

David Boies
Special Trial Counsel

Stephen D. Houck
Antitrust Bureau
New York State Department of Law
120 Broadway Street, Suite 2601
New York, New York 10271

Plaintiffs' initial and revised Proposed Findings of Fact ("PJPF") set forth detailed, overwhelming evidence of the elements of plaintiffs' antitrust claims. This evidence comes, in part, from credible and knowledgeable representatives of many of the country's most successful technology companies (IBM, Apple, Sun, Intel, Intuit, America Online). It comes also from distinguished economic and technical experts recognized as leaders in their fields.

At trial Microsoft relied on the testimony of its own employees (who repeatedly contradicted their own contemporaneous documents), two representatives of software companies (whose businesses were admittedly dependent on special relationships with Microsoft (see, e.g., GX 1663 at 9; GX 2276 at 46-47, 56-57), and who were offered essentially as character witnesses for the defendant), a Compaq representative, and an economist (whose testimony contradicted settled economic theory, his own writings, his own testimony in prior cases, and the record evidence in this case). The one potentially credible independent technical expert listed by Microsoft as a witness was dropped as a witness after he refused at his deposition to support various Microsoft assertions. Even with Microsoft's apparent criteria for witness selection, however, every critical element of plaintiffs' claims is supported by the admissions of Microsoft's own witnesses and Microsoft's own contemporaneous documents.

Microsoft's initial Proposed Findings ("MPF") ignore most of the evidence against it, mischaracterize much of the evidence that is not ignored, and argue for a series of propositions that are, as a factual matter, at odds with the trial record and, as an economic and legal matter, irrelevant even if true.

I. Monopolization of the PC Operating System Market

Plaintiffs' monopolization claim has two elements: (a) proof that Microsoft possesses present monopoly power, and (b) proof that Microsoft engaged in anticompetitive conduct to maintain its operating system monopoly.

A. Microsoft's Monopoly Power

Microsoft's monopoly power is proven by the uncontradicted evidence that Microsoft's customers have no viable commercial alternative to Microsoft's operating system.

- Microsoft's customers recognize, state, and act on the premise that they have no viable commercial alternative to Microsoft's operating system. (See PJPF Part II.A ¶¶ 15.1-2).
- Microsoft itself tells its customers that they have no viable commercial alternative to Microsoft's operating system. (See PJPF Part II.A ¶ 15.1.4.1).
- Microsoft internally recognizes and acts on the premise that its customers have no viable commercial alternative to Microsoft's operating system. (See PJPF Part II.A ¶ 15.1.-6).

Microsoft's monopoly power is also proven by its power over the price of its operating systems.

- A substantial increase in the price of Windows will not cause (and has not caused) Microsoft's customers to switch to an alternative operating system. (See PJPF Part II.C ¶ 34-38.1.2).
- Microsoft's pricing of Windows is not materially constrained by the prices or availability of non-Microsoft operating systems. (See PJPF Part II.A ¶¶ 15.1.3-4).

Microsoft's monopoly power is also proven by its high, stable market share coupled with substantial barriers to entry.

- The relevant market is operating systems for Intel-compatible personal computers since operating systems for other computers are not reasonable or viable substitutes for operating systems designed to work with Intel-compatible personal computers. (See PJPF Part II.B ¶¶ 19-20).
- Microsoft's market share of Intel-compatible PC operating systems is over 90%. Even if Apple's Macintosh operating systems were included in the market, Microsoft's market share would still be over 85%. (See PJPF Part II.B ¶¶ 21-22).
- Microsoft's PC operating system market share is projected to remain high for a significant period of time in the future. (See PJPF Part II.B ¶¶ 21.3).
- Microsoft's dominant market share is protected by high barriers to entry, including the applications programming barrier to entry. (See PJPF Part II.B ¶¶ 23-32).
- Because the utility of a PC operating system depends on the number and variety of software applications available for it, because applications software has historically been primarily specific to a particular operating system, because network effects reinforce the disproportionate number and variety of applications available for the leading operating system, and because applications written for a particular operating system are not readily portable to other operating systems, Microsoft, its customers, and its actual and potential competitors all recognize that the applications software barrier to entry effectively precludes the successful entry and expansion of any viable commercial alternative to Microsoft's Windows operating systems. (See PJPF Part II.B ¶¶ 26-27, 29-31).

Proof of these facts comes from Microsoft's own witnesses and documents. Microsoft's economist conceded that there are no present commercially viable substitutes for Microsoft's PC operating system (Schmalensee, 1/13/99pm, at 68:17 - 69:2). Microsoft's contemporaneous business records acknowledge (indeed, rely on) that fact as well (e.g., GX 365). This evidence from Microsoft confirms the uniform testimony of Microsoft's customers and others that there is no commercially viable substitute for Microsoft's PC operating system (See PJPF Part II.A ¶¶ 15.1.1-15.1.4.2).

Similarly, Microsoft's executive in charge of Windows pricing acknowledged that Microsoft did not consider the prices of non-Microsoft operating systems in setting Windows' prices (Kempin, 2/25/99pm, at 97:24 - 99:8). Moreover, after first denying it in this litigation, at trial Microsoft ultimately conceded that it was able to raise the price of Windows 95 even after Windows 98 came out (Schmalensee, 1/25/99am, at 51:25 - 52:12 (sealed session); Fisher, 1/11/99pm, at 42:18-43:7; see also PJPF Part II.C.2 ¶ 36; Schmalensee, 1/20/99pm, at. 38:13-21, 37:17-24). This evidence from Microsoft's own witnesses and documents again merely confirms the evidence from Microsoft's customers and others. (See PJPF Parts II.A ¶¶ 15-15.1.6, II.C ¶¶ 33-38.3.3).

Microsoft's own economic expert also conceded that his conclusion that Microsoft did not have monopoly power depended on the premise that "Microsoft does not have the protection of substantial barriers to entry" (Schmalensee, 1/14/99am, at 8:22-9:9). And the evidence is overwhelming that the applications barrier to entry is, at a minimum, substantial (See PJPF Part II.B ¶¶ 17-31.3.3).

Microsoft's proposed findings do not (and could not) advance evidence that seriously disputes the foregoing proof of its monopoly power. Instead, Microsoft makes a series of assertions that are inconsistent with the evidence, law, economics, and common sense.

In his direct testimony, Microsoft's economic expert placed primary reliance for his conclusion that Microsoft did not have monopoly power on a pricing calculation that purported to show that if Microsoft had monopoly power, it would price Windows at roughly \$2000, considerably more than the

price of most PCs today. (See PJPF Part II.D. ¶¶ 49, 49.3.2, 49.4). Plaintiffs know of no case, nor has Microsoft identified any, in which a court has ever before considered the methodology used by Microsoft's economist to test the existence of monopoly power, and for good reason. (Even Dean Schmalensee in his long history as a testifying expert appears not to have used it for any other case.) Leaving aside the serious flaws in Dean Schmalensee's choice of values for his calculation (e.g., an unrealistically high average price for PCs; an arbitrary figure for elasticity of demand for PCs; inadequate consideration of future and complementary revenues; use of average values, even though a firm would consider marginal, not average, returns in making pricing decisions), Dean Schmalensee's calculation was fundamentally flawed in that it purported to calculate just the short-run profit-maximizing monopoly price, and did not attempt to address the long-run profit-maximizing price. (See PJPF Part II.D ¶¶ 49-49.4.2; Schmalensee, 6/24/99pm, at 73:10 - 78:20; Fisher, 6/4/99am, at 8:8 - 12:3). As Dean Schmalensee conceded, any monopolist would seek to maximize long-term profits. (Schmalensee, 1/21/99am, at 12:6 - 14:21; 1/20/99pm, at 34:24 - 38:11; 6/23/99am, at 7:3-6, 9:3-17).

Microsoft also now argues that it cannot have monopoly power because it actively "evangelizes" (i.e., advertises, promotes, and supports its products), because it innovates, and because there are some limits on what it can profitably charge for Windows. Each of these propositions fails to recognize two fundamental principles. First, monopoly power is never absolute; if it were there would be no such thing as a monopolist, because every firm faces some degree of competition and some ultimate limit on its prices. Second, even monopolists have incentives to innovate and to promote and support their products because the more desirable a monopolist's products are to its customers the more money the monopolist will make. The extent to which customers have a viable alternative if they are dissatisfied varies with the extent of a firm's monopoly power, but a monopolist will always have some incentive to innovate and to advertise, market, and support its products.

Microsoft also advances the remarkable argument that, because Microsoft felt it necessary to act to crush potential competitive threats, this means that Microsoft could not be a monopolist since a monopolist would not face competitive threats in the first place. To some extent this argument continues Microsoft's effort to confuse the question of what actually competes with Microsoft (i.e., viable substitutes for Microsoft's PC operating system) with the question of what Microsoft was seeking to thwart (i.e., complementary middleware products like browsers which, while not competitive substitutes, threatened to reduce the applications software barrier to entry and thereby facilitate operating system competition).

Even more fundamentally, Microsoft's argument again sets up the straw man of whether Microsoft has been proven to have absolute monopoly power that will last forever. That is not, never has been, and could not be the test of monopoly power. Indeed, because monopolization requires both power and anticompetitive conduct to maintain that power, there could, under Microsoft's theory, never be monopolization -- the very act of engaging in anticompetitive conduct to maintain the monopoly would itself demonstrate that there was not monopoly power.

Finally, Microsoft argues that because its power may be eroded some time in the future it should not be held to have monopoly power today. Monopoly power is no less monopoly power because it may not last forever. While there may be cases where power is so fragile and transitory that it is not really

power at all, that is not remotely the fact in this case. Microsoft's power has endured for years and there is no end in sight.

Indeed, even Microsoft's economist concedes that the speculation that the future may bring a competitive alternative to Microsoft's captive customers is no more than speculation. Dean Schmalensee asserts that Linux and, to a lesser extent, the Be operating system are the closest there is to a present alternative to Microsoft's PC operating system for OEMs.¹ Even as to Linux, Dean Schmalensee agrees that Linux is not "a viable competitive alternative to Windows for OEM manufacturers like Hewlett-Packard and Compaq" (1/13/99pm, at 42:14-22); the most he can say is that "in a year, in two years, the answer may well be different" (*id.* at 42:21-22). When pressed as to when "if ever" Linux or Be "would be a significant competitive constraint" (*id.* at 53:3-6), Microsoft's economist admits it is "impossible" to say (*id.* at 53:7-8) and that "I do not believe that can be reliably forecast, and I have not tried to do so." (*id.* at 53:15-16).

Similarly, when Microsoft witness Gordon Eubanks tried to soften his assertions that Microsoft was a "monopoly," the best he could do for his colleagues was to assert that things might change in "five to ten years." (Eubanks, 6/16/99pm, at 87:4 - 93:9). Such vague speculation about conditions years in the future does not, and cannot, vitiate the fact that for the present (and for the foreseeable future, particularly if Microsoft is unconstrained by the antitrust laws in dispatching competitive threats) Microsoft possesses monopoly power.

In its Proposed Findings, Microsoft also points to several additional possible future developments concerning everything from Palm Pilots to the AOL/Netscape merger to the iToaster that it, presumably with a straight face, offers as evidence of its lack of monopoly power. The problems with each of these putative Microsoft competitors (*see* PJPF Parts II.D ¶¶ 46-48, VII.C ¶¶ 394-396) are:

- (a) They concededly do not constrain Microsoft's present power over PC operating systems (*see* PJPF Parts II.D ¶ 46.1, VII.C ¶ 396);
- (b) They are not expected, even in the future, to evolve into PC operating systems, nor do they threaten to reduce the applications barrier to entry and therefore would not facilitate entry by other operating systems (*see* PJPF Parts II.D ¶ 46.1, VII.C ¶ 396);
- (c) Whatever the growth in "other devices," there is no evidence that those devices will become substitutes for PCs for any but a very limited number of PC users. Plaintiffs' evidence, Microsoft's internal documents, and even the testimony and exhibits Microsoft offered at trial show that the PC is projected to be the dominant form of personal computing for many years into the future. DX 2423, at 37 (PC shipment values will continue to far exceed information appliances). As Bill Gates recently stated, the PC will "remain the primary computing tool." GX 2059. (*See also* PJPF Parts II.D ¶¶ 46-47, VII.C ¶ 396); and
- (d) Even if such devices evolved into substitutes for the PC years into the future, the impact would only be to make Microsoft's monopoly in the PC operating system market less valuable by constraining sales of PCs; it would not reduce Microsoft's monopoly power in the PC operating system market. (*See also* PJPF Parts II.D ¶¶ 46.2, VII.C ¶ 396).

¹Dean Schmalensee testified that he saw two examples of "emerging competition" for the "desktop operating system" -- Linux and the Be operating system (1/13/99pm, at 52:1-7). He quickly conceded, however, that "Be is not a system to which a large OEM is likely to switch" (*id.* at 52:22-24) and that it was possible that over 90% of the users of Be used it with, not instead of Windows (*id.* at 52:8-21). *See also id.* at 50:5-24.

B. Anticompetitive Conduct

1. Background

The Internet precipitated a variety of innovative technologies that threatened to reduce the applications barrier to entry and thereby weaken the Windows monopoly. The browser properly received the greatest attention at trial. Of the emerging Internet-oriented “middleware” technologies, the browser most rapidly became a strong complement to Windows, and thus posed the most potent threat. Moreover, the browser threat had advanced the farthest, before Microsoft’s attention finally turned to crushing it, and thus left the longest trail of evidence before being thwarted.

But Microsoft’s efforts have not been limited to the browser. Microsoft used a variety of anticompetitive tactics to blunt threats from other middleware technologies under development by, among others, Apple and Intel, and from cross-platform Java. The record illustrates how Microsoft’s tactics to defeat Netscape were emblematic of a larger pattern and practice of anticompetitive conduct -- conduct designed to consistently and systematically use the full weight and influence of its monopoly to wipe out any and all incipient middleware threats.

The record shows that in each instance, Microsoft used sufficient measures to thwart potential threats to its operating system monopoly. Unwilling to compete on the merits, Microsoft routinely trampled on consumer interests in the process.

2. The Potential Threat To Erode The Applications Barrier To Entry

The evidence at trial (essentially undisputed except for bizarre assertions by Mr. Gates in his deposition that he was not aware of what Netscape was doing in mid-1995, and by Mr. Rosen at trial that he did not believe in mid-1995 that Netscape was a competitor) was that Microsoft recognized in the Spring of 1995 (see PJPF Parts III.B ¶ 56; V.B.2 ¶¶ 119-21) that the browser marketed by Netscape seriously threatened to erode the applications programming barrier to entry:

- Products that facilitate the development of programs that can be used with multiple operating systems (sometimes referred to as "cross-platform" programs) tend to erode the applications barrier to entry and thereby threaten Microsoft's monopoly power. (See PJPF Parts III.A ¶ 52, III.B ¶ 53 - 55).
- Microsoft, its customers, its actual and potential competitors, and software developers all recognize that the development of cross-platform application programs tends to erode the applications programming barrier to entry, and thereby threatens Microsoft’s operating system monopoly. (See PJPF Parts III.A & B ¶¶ 52-56).
- The broad distribution and use of the Netscape browser threatened to weaken Microsoft’s monopoly power by encouraging applications developers to write cross-platform programs to run with the browser, eventually eroding the application barrier to entry and facilitating operating system competition. (See PJPF Part III.B ¶¶ 53.3, 54).
- As Microsoft also recognized, the Netscape browser was the primary distribution mechanism for Java, which itself threatened to erode the applications software barrier to entry by facilitating the development of cross-platform applications programs. The broad distribution and use of the Netscape browser, therefore, became a double threat to Microsoft. (See PJPF Parts III.B & C ¶¶ 55, 57-61).

3. The Anticompetitive Campaign

Microsoft feared that, because of the quality and popularity of Netscape’s browser and the head-start it had, Microsoft could not successfully compete with Netscape if customers had an unrestricted

choice of browsers. Indeed, Microsoft also feared that even giving its browser away for free, and even paying people to use it, would not be enough to prevent Netscape's browser from remaining the leading browser. However, because of the importance that Microsoft attached to winning the browser war in order to maintain its dominant operating systems position, Microsoft set out to dominate the browser market regardless of the cost involved.

Because, as Cameron Myhrvold conceded, Microsoft concluded that users would choose Netscape's browser over Microsoft's browser if given a choice (Myhrvold, 2/10/99am, at 62:7-25), Microsoft undertook a broad pattern of conduct and agreements to prevent and frustrate users from making a choice between browsers on the merits, indeed from making any choice at all.

Microsoft's anticompetitive conduct directed at the Netscape browser included:

- (a) Microsoft conditioned OEMs' licensing of Windows 95 and Windows 98 on OEMs' licensing, distributing, and promoting Microsoft's browser. Microsoft has refused to offer its monopoly operating system separate from its browser even though there is sufficient demand for the two products separately to make it efficient to do so. (See PJPF Part V.B ¶¶ 93, 96-150).
- (b) Microsoft welded its browser to Windows 98 to prevent OEMs or end users from removing the browser (or even from turning it off), without any efficiency justification that could not have been achieved if Windows 98 and the browser were also offered separately (or if OEMs and end users were given the ready ability to remove the browsers). (See PJPF Parts V.B.2. & 3 ¶¶ 145-165).
- (c) Microsoft entered into arrangements with ISPs and OEMs with the purpose and effect of raising its rivals' costs, restricting customer choices, and restricting its rivals' access to the most efficient and cost-effective distribution channels. (See PJPF Parts V.C & D ¶¶ 175-257).
- (d) Microsoft entered into arrangements with ICPs, ISVs, and others (including Apple) to limit the distribution, promotion, and support of Netscape's browser and to require the distribution of Microsoft's browser. (See PJPF Parts V.E & F ¶¶ 258-294).
- (e) Microsoft supplied its browser below cost as a "no revenue product," and announced that it would do so "forever." (See PJPF Part V.G ¶¶ 295-317).
- (f) Microsoft required OEMs to agree to screen restrictions that imposed significant costs on OEMs and limited the OEMs' prior practices of promoting other browsers more prominently than Internet Explorer as a condition of licensing Microsoft's monopoly operating system. (See PJPF Part V.C ¶¶ 175-185).
- (g) Microsoft used its monopoly power in operating systems to penalize OEMs and others who promoted competitive browsers and other products that could facilitate competition with Windows. (See PJPF Part V.C ¶¶ 196-211).

At the same time, Microsoft engaged in a related course of conduct to prevent other firms from establishing any "middleware," including Java, that could threaten, no matter how remotely, to erode the applications barrier to entry. For example:

- (a) Microsoft set out to eliminate cross-platform Java, which threatened to facilitate operating system competition by weakening the applications programming barrier to entry. (See PJPF Parts III.C ¶¶ 57-59 & VI.A ¶¶ 318-338).
- (b) Microsoft used its operating system monopoly to require the distribution of its Windows-specific version of Java and to restrict the distribution of cross-platform Java by requiring the distribution of Internet Explorer (which includes the Microsoft-specific version of Java) and restricting the distribution of Netscape's browser (which Microsoft recognized

as the “principal distribution vehicle” for cross-platform Java). (See PJPF Part VI.A ¶¶ 328-330).

- (c) Microsoft conditioned ISV access to Microsoft's monopoly operating system (which ISVs required in order to be competitive) on ISVs agreeing to use Microsoft's version of Java and not the cross-platform version. (See PJPF Part VI.A ¶¶ 330, 339).
- (d) Microsoft thwarted Intel's attempts to establish platform-level software. (See PJPF Part VI.B ¶¶ 342-356).
- (e) Microsoft attempted to bribe and coerce Apple and RealNetworks to stop offering multimedia software at the platform level. (See PJPF Part IV.B ¶¶ 73-84).

As shown in plaintiffs' Proposed Findings, the trial record clearly establishes that Microsoft engaged in the foregoing conduct, and that it did so for the explicit purpose and with the effect of eliminating the cross-platform threat to its operating system dominance posed by Netscape's browser and by Java.

Microsoft's primary response to this proof of anticompetitive conduct appears to be that other companies do the same (or similar) things. Even if that were true, Microsoft's response is irrelevant as a matter of law and economics because companies with monopoly power are, for good reason, subject to constraints on how they use that power that do not apply to competitive firms. (Indeed, since much of Microsoft's anticompetitive conduct involves the use of its monopoly power to coerce and induce companies to restrict their use, distribution, and promotion of products that could facilitate competition, such conduct can only be engaged in by a company with monopoly power.) In any event, if Microsoft's conduct is anticompetitive it is not less so merely because another company may also have engaged in it.

Most important for present purposes, Microsoft's response also is wrong as a matter of fact. Microsoft's conduct differs significantly from other firms, both in its means, including the raw use of its monopoly power, and its ends, the maintenance of its operating system monopoly. For example, Microsoft asserts that it merely tied its browser to its operating system in response to what other operating system suppliers were doing. That is factually wrong on two counts -- (a) Microsoft's contemporaneous documents make clear that it tied its browser to Windows to eliminate the Netscape threat and win the browser war (see PJPF Part V.B ¶¶ 119-125, 146), and (b) no other operating system supplier has done what Microsoft did: refused to make its operating system available without a browser or prevented customers from later removing that supplier's browser (see PJPF Part V.B ¶¶ 114-116).

With respect to Windows 95, Microsoft developed and sold at retail both a stand-alone browser and a version of Windows 95 without any browser. Mr. Allchin repeatedly testified that when combined, the stand-alone browser and the version of Windows 95 that did not include a browser gave consumers the benefits of an integrated browser. (See, e.g., Allchin, 2/1/99pm, at 37:15 - 51:22). And the evidence shows that Microsoft easily could deliver a version of either Windows 95 or Windows 98 without web browsing. Nevertheless, Microsoft has refused to make a version of Windows 95 that does not include a browser available to OEMs, but instead has required OEMs to license and distribute Microsoft's browser combined with the operating system. No other operating system supplier engaged in such conduct. Indeed, no other operating system supplier had the incentive or practical ability to engage in such conduct. Suppliers without monopoly power must seek to give customers what they want. The

record demonstrates that OEMs wanted this option. (See PJPF Part V.B ¶¶ 111-112). Microsoft, however, had both the ability and strong incentives to do what it did.

- (a) First, because of its monopoly power, OEMs had no choice but to take whatever version Microsoft offered. (See PJPF Part II.A ¶ 15).
- (b) Second, whatever loss in attractiveness of its product that Microsoft suffered from forcing the tie on consumers was more than offset by the effect of maintaining Microsoft's operating system dominance that resulted from eliminating the Netscape threat. (See, e.g., PJPF Parts V.G ¶ 309, VII.A ¶¶ 358-359, 369-371).

With respect to Windows 98 Microsoft not only required OEMs to accept and not remove the browser; it also effectively prevented consumers from removing (or even completely turning off) the browser (something Microsoft had made easy in Windows 95). Again, no other operating system supplier engaged in such conduct. Such conduct only makes sense for a company with monopoly power that is seeking to preserve that power by denying customers a free choice.

With respect to both Windows 95 and Windows 98, Microsoft has been able to point to no plausible benefits to consumers of tying the browser to the operating system. (See, e.g., PJPF Part V.B ¶¶ 148-170). Instead, the evidence demonstrates that beneficial "integration," as Microsoft uses the term, means only that two products are designed to work well together, whether or not they are even produced by the same firm. (See, e.g., PJPF Part V.B.3 ¶¶ 159.6-7, 160). Whatever benefits of integration exist can, as Mr. Allchin conceded, be accomplished by an OEM or customer combining a version of Windows that does not include a browser with a stand-alone Microsoft browser. Indeed, as Mr. Allchin testified, the "distribution vehicle" is not important: "It doesn't matter how it was purchased. It's just code." (Allchin, 2/1/99pm, at 38:23 - 39:24). The only difference is that, when Microsoft combines them, conditions a license of its monopoly operating system on licensing and distributing its browser, and requires OEMs to agree not to remove the browser, Microsoft's customers are deprived of a free-market choice of which browser (if any) to acquire and rivals' costs are raised. As Mr. Myhrvold testified, it was precisely because Microsoft feared that customers who were free to choose would choose Netscape that Microsoft set out to prevent customers from having a choice. (Myhrvold, 2/10/99am, at 62:7-25).

Microsoft also tries to defend its below-cost distribution of its browser by pointing to other companies' distribution of browsers and other products without charge. Again Microsoft's argument is factually wrong and legally irrelevant. It is irrelevant what companies without monopoly power do.² Firms without monopoly power (or the prospect of obtaining it) cannot give away a product unless they can capture revenues through normal competitive means (for example, through sales of advanced versions of the product), and the evidence indicates that is the case with the firms Microsoft cites. (See PJPF Part V.G ¶ 313.4). In Microsoft's case, it recoups its browser losses from maintenance of its operating system monopoly -- the very definition of predatory pricing.

Microsoft's lawyers' argument that Microsoft could recoup its losses through ancillary revenues

² The conduct of companies without monopoly power might be relevant if it substantiated a claim that Microsoft undertook its below-cost distribution in order to achieve some legitimate purpose and not as a means of excluding competition. In the present case, the evidence is clear that Microsoft undertook its below-cost distribution of the browser to maintain its operating system monopoly. (See PJPF Part V.G ¶ 298).

is contrary to the trial record, including the unambiguous evidence from Microsoft's contemporaneous documents that make clear that Microsoft acted to preclude the browser threat, that the browser was to be a "no revenue product," that possible ancillary revenues played no role in Microsoft's decision-making, and that Microsoft sacrifices, rather than seeks, browser-related ancillary revenues in order to increase its browser share at Netscape's expense. (See PJPF Part V.G ¶¶ 313-313.3). (In fact, even when answering interrogatories in May 1998, it had not yet occurred to Microsoft to try to justify its below cost browser distribution on the basis of browser ancillary revenues. (See GX 1547)). Similarly, Microsoft's after-the-fact contention that the zero price for Internet Explorer was designed to increase the value of Windows is inconsistent with its contemporaneous explanation of the reasons for its browser pricing and with the actions Microsoft took to restrict the distribution of other browsers -- actions that reduce, not increase, the value of Windows to consumers and make sense only as a device to eliminate the browser threat.

However Microsoft may try to complicate this issue for litigation purposes, the simple facts are:

- (a) From the time Microsoft recognized the threat posed by Netscape, Microsoft distributed its browser below any relevant measure of cost (see PJPF Part V.G ¶¶ 305, 311, 313-314);
- (b) Microsoft distributed its browser below cost for the explicit purpose of preventing the widespread distribution of Netscape's cross-platform browser -- which Microsoft sensibly feared might erode the applications barriers (see PJPF Part V.G ¶ 298); and
- (c) Microsoft has recouped, will recoup, and from the beginning intended to recoup its browser losses from the maintenance of its operating system monopoly (see PJPF Part V.G ¶ 301).

With regard to Microsoft's imposition of the screen restrictions on the OEMs, the evidence shows that Microsoft did not impose such restrictions until it became concerned that OEMs were using their ability to differentiate their products to promote competing products such as Netscape's browser. (See PJPF Part V.C ¶ 177). Microsoft's defense is to assert, based on conclusory testimony of its own employees, that the restrictions were unimportant -- a position flatly inconsistent with the contemporaneous documents of Bill Gates and others, with the testimony of OEMs, and with Microsoft's vigorous efforts to police those restrictions prior to this litigation. (See PJPF Part V.C ¶¶ 177-178, 185).

Microsoft also says that after this litigation began it has granted certain OEMs certain oral exceptions to the written restrictions. The fact that OEMs continued to seek such exceptions is further evidence of the significance of the restrictions. The fact that Microsoft granted those exceptions underscores that the justifications Microsoft now advances to defend them are pretextual. Apparently abandoning its position that these restrictions were necessary to maintain a "consistent user experience," Microsoft permitted OEMs to make a myriad of changes -- except when those changes would jeopardize Microsoft's exclusionary strategy. Moreover, whatever relaxation of the restrictions Microsoft now permits does not undo the substantial competitive harm caused while the restrictions were in effect. Nor does it guarantee that Microsoft will continue to grant its sufferance for such exceptions after this litigation is over. Indeed, the evidence shows that much of Microsoft's power to coerce and induce customers and competitors to do its anticompetitive bidding comes from its power to grant or withhold

the ad hoc exceptions and cooperation that, because of Microsoft's monopoly, those customers and competitors need. (See PJPF Part V.C ¶¶ 186-187).

Microsoft's suggestion that the restrictions are somehow justified by its copyright (MPF ¶¶ 1029-31) is a red herring. Microsoft's contemporaneous documents make clear that Microsoft recognized that its copyright alone did not prevent the OEM product differentiations that Microsoft was determined to stop, and that new contractual provisions were required. See PJPF Part V.C ¶ 177.2, 194.2A. In any event, the existence of a patent or copyright does not grant antitrust immunity. Indeed, the use of a patent or copyright to secure additional market power is an antitrust violation, not an antitrust defense.³

Again, contrary to Microsoft's proposed findings, the simple, dispositive facts are:

- (a) Microsoft imposed screen and other contractual restrictions on OEMs for the specific purpose of preventing OEMs from continuing to effectively distribute and promote Netscape's browser and other non-Microsoft products (see PJPF Part V.C ¶ 178);
- (b) Microsoft, OEMs, Netscape, and others all recognized that the restrictions significantly restrict the effective distribution and promotion of competing products, including Netscape's browser, by OEMs (see PJPF Part V.C ¶ 178-182, 185);
- (c) Microsoft conditioned OEMs' access to Microsoft's monopoly operating system on the OEMs' agreeing to the contractual restrictions (see PJPF Part V.C ¶ 177.3); and
- (d) Microsoft's justifications for those restrictions are pretextual (see PJPF Part V.C ¶¶ 188-193).

Microsoft attempts to defend its arrangements with OEMs, ISPs, ICPs, ISVs, and others to require distribution and promotion of Internet Explorer and to restrict distribution and promotion of Netscape's browser by asserting that other companies enter into joint marketing programs that it alleges are similar to Microsoft's. But Microsoft's conduct was, once again, quite different. The other firms to which Microsoft compares itself do not effectively tie up 75% to 100% of the two most important (and most efficient) channels of distribution for the purpose of blunting an emerging threat to their monopoly position.⁴

Microsoft's suggestion that its actions are lawful as long as some other channel (however costly, inefficient or ineffective) remains available has no support in law, economics, or common sense. As Microsoft's economist concedes, what is important is the "real world." (See, e.g., Schmalensee, 1/13/99pm, at 52:18-21, 1/25/99am, at 21:4-9 (sealed), 6/22/99pm, at 34:10-11, 37:23 - 38:1, 59:6-14). The evidence is clear that in the real world there are not viable substitutes for the ISP and OEM channels; indeed, today the OEM channel itself has no viable substitutes. (See, e.g., GX 1553 (2/26/96

³ Moreover, the modifications that the restrictions prohibit OEMs from taking do not involve the sort of creative expression that could plausibly implicate its copyright, and Microsoft's waiver of some restrictions shows they were not intended to ensure that Microsoft reaped the value of its copyrighted work. (See PJPF Part V.C ¶ 178.3).

⁴ Moreover, these firms could not offer the valuable inducements Microsoft did in order to bribe firms to agree to exclude their rivals because these firms could not recoup those expenditures through preserving monopoly power. Nor could these firms use such power, as Microsoft did, to extract or coerce such agreements.

Myhrvold e-mail explaining Gates' view that "as soon as we put IE into Win95, it's [ISP distribution] no longer an issue"). Moreover, if the "real world" were as Microsoft asserts, there would have been no reason for it to expend the substantial money and effort it did to exclude Netscape from particular channels. The very fact Microsoft took the actions it did belies its current litigation argument that all distribution channels are effectively equivalent. (See PJPF Part VII.A ¶¶ 362-363, 365-366).

Microsoft's contracts have resulted in Microsoft's browser being distributed with virtually 100% of PCs at the present time, and Netscape's browser also being included with less than 25% of new PCs. (In the period prior to the trial date of this case, Netscape was included with far fewer new PCs. During the trial, Compaq (which provided a witness for Microsoft and boasts of its special "front-line" partnership with Microsoft) suddenly began shipping Netscape's browser in addition to Microsoft's browser. (See, e.g., PJPF Part VII.A ¶ 380.3.1)).

This is not a case where a firm competed on the merits for distribution, promotion, and support of its product. Rather, this is a case where a monopolist uses its monopoly position over one product (the operating system) to restrict the distribution and promotion (and to raise competitors' costs of distribution and promotion) of a new product (the browser) that threatens to facilitate competition with the monopoly product.

The simple, dispositive facts with respect to the ISP and OEM channels are:

- (a) Those two channels are, and were recognized by Microsoft to be, the two most important, effective, and efficient channels for browser distribution. (See PJPF Part V.A.2 ¶¶ 362-363).
- (b) No other channel of distribution is an effective substitute for those channels. Indeed, as Microsoft recognizes, there is today no effective substitute for the OEM channel. (See PJPF Part V.A ¶¶ 362-363).
- (c) Microsoft foreclosed Netscape from more than 75% to 80% of the ISP channel, including during the years that channel was most important. (See PJPF Part V.D. ¶¶ 222, 243).
- (d) Even the dubious figures relied on by Microsoft at trial show that Microsoft foreclosed Netscape from some 78% of the OEM channel. (See PJPF Part VII.A ¶ 380.3.1.3).⁵
- (e) Microsoft accomplished its foreclosure in part by telling ISPs and OEMs that they would not be able to have access to Microsoft's monopoly operating system unless they agreed to the previous Microsoft demands. (See PJPF Part V.C & D ¶¶ 203.1, 205.1-2, 224, 227-231).
- (f) Microsoft was willing to give up things of "potentially great value" (Silverberg Dep., 1/13/99, at 689:16-25; see also id. at 692:12 -693:25) to secure these channels for itself, and to foreclose competitors, precisely because it recognized that these channels were the most effective and efficient and that other channels were not viable substitutes. (See, e.g., PJPF Parts V.D ¶¶ 230-232 & VII.A 366).

In the face of the foregoing facts, Microsoft's proposed findings attempt to argue that all of Microsoft's conduct (on which Microsoft spent so much money and to which it attached such

⁵ Microsoft introduced some evidence that Netscape was involved in 22% of PC shipments. Among the problems with that number is that it includes all instances in which Netscape's browser was included in the box or on a disk -- instances in which the consumer is unlikely to actually use the browser. By contrast, Microsoft's browser is preinstalled on the desktop 100% of the time.

importance) really had no effect. After earlier declaring (internally and publicly) that the browser war was over and it had won, Microsoft now asserts as a final defense that its conduct has not really diminished the ability of the Netscape browser to facilitate platform competition with Windows. Having first claimed that it did not shoot the victim, and then that everyone does it, and then that the victim would have died anyway, Microsoft now argues that the victim is unharmed.

The facts, of course, are otherwise. Microsoft's contractual restrictions substantially foreclosed the two most important channels for obtaining browser usage. And Microsoft engaged in a broader course of anticompetitive conduct, including its agreements with third parties such as Apple and its predatory pricing, that also contributed to the significant anticompetitive increase in Internet Explorer's share at browser rivals' expense.

Regardless of whose figures are used, it is clear that Netscape's share has declined substantially, Microsoft's share has increased sharply, and (in the absence of a judicial remedy) those trends will continue. (See PJPF Part VII.A ¶¶ 369-370, 381). The figures that Microsoft relies on are seriously flawed survey data that produce results inconsistent with plaintiffs' studies and inconsistent with the figures used and relied on by Microsoft itself in the ordinary course of running its business. The figures are even inconsistent with figures used by Microsoft at trial to show that Netscape dominated the browser market in the early years of Microsoft's conduct -- when Microsoft wants to argue that Netscape was initially dominant so that Microsoft was entitled to use whatever techniques it wanted. Microsoft uses one set of figures that shows Netscape's early share very high; when Microsoft argues that Netscape's share has not declined all that much, it uses a different set of figures that shows Netscape's early share much lower. (See PJPF Part VII.A ¶¶ 377-377.1.2A).

But even Microsoft's flawed survey data show significant declines in Netscape's share (and increases in Microsoft's share). Those share changes are particularly dramatic when a "flow" measure of share -- net new browser installations (rather than the installed base figures that include Netscape's browser installations from prior years) -- are considered. For example, as Microsoft executive Brad Chase testified at trial, Microsoft's share of new browser installations during the first nine months of 1998 was over 75%. (Chase, 2/11/99pm, at 5:1 - 7:2; GX 1845; GX 1846; PJPF Part VII.A ¶ 369.2; MPF ¶ 248).

Microsoft argues in the alternative that its share gains (and Netscape's share losses) are simply the result of Microsoft offering a better product. (MPF ¶ 270). Microsoft's argument is, again, inconsistent with the evidence.⁶ (See PJPF Part VII.A ¶ 381.1).

- (a) Microsoft's share began to increase dramatically before even Microsoft claims at trial it had a superior product (See PJPF Part VII.A ¶ 381.1); and
- (b) Microsoft's internal assessments (as has so often been the case in this trial) contradict Microsoft's litigation claims and in fact corroborate the evidence from plaintiffs' witnesses.⁷ Even Microsoft's economist finally admitted that Microsoft's browser had

⁶ Even if that were true, it would not be a defense because Microsoft's conduct was intended to (and did) reduce the ability and incentive of Netscape to continue to invest in product improvements.

⁷ Microsoft's internal documents recognize that Microsoft's browser is seen as a "commodity product" with no significant advantages. (See, e.g., GX 173). Microsoft's primary "evidence" to the contrary consists of little more than ambiguous press articles, none of which link any increase in the quality

little advantage on the merits over Netscape's browser. (See PJPF Part VII.A ¶ 381.3-4; Schmalensee, 1/20/99am, at 41:2-20).

The evidence, including Microsoft's own documents, shows that Microsoft's conduct has vitiated the threat non-Microsoft browsers posed to its monopoly, weakened the Java threat, and has deterred, and will continue to deter, other such threats from arising. Microsoft's contention that AOL can single-handedly resurrect the browser threat ignores the impact of Microsoft's predatory campaign: having made clear it will use its monopoly power and other weapons to blunt threats to its operating system, Microsoft has successfully deterred AOL and others from taking action that would threaten Microsoft's core operating systems monopoly. Microsoft's contention also ignores the fact that Microsoft continues to make AOL an offer AOL cannot rationally refuse to distribute and support Microsoft's browser even at the expense of the browser it owns.

4. Consumer Harm

Because monopolization invariably distorts market forces, the antitrust laws are based on the principle that the willful maintenance of monopoly harms consumers. Even without the compelling evidence of direct and substantial consumer harm present in this case, Microsoft could not defend conduct that otherwise violates the antitrust laws on the grounds that it did not hurt consumers enough in the short run. As the Supreme Court has repeatedly held, monopolization is illegal because it is recognized to always harm consumers in the long run. In any event, in the present case, there is compelling evidence that Microsoft's conduct has directly, immediately, and substantially harmed consumers, and, left unabated, will continue to harm consumers. Microsoft's practices have immediately harmed consumer welfare by depriving consumers of choices, by making it more difficult for consumers to obtain and use certain non-Microsoft products, by increasing consumers' costs, and by depriving consumers of the benefits of innovation outside Microsoft's control. For instance:

- (a) Microsoft's contractual restrictions in the OEM channel made it more costly for OEMs to promote and distribute non-Microsoft browsers (and therefore less likely that consumers would have a convenient choice of alternative software) (see PJFP Parts VII.A & E ¶¶ 364-369, 371, 405-406);
- (b) Microsoft's contractual restrictions on browser choice through the ISP, OLS, ICP and the Apple Macintosh channels, combined with its other practices, substantially deprived consumers of the ability to make a meaningful choice between products, and to obtain and use non-Microsoft browsers (see PJFP Parts VII.A & E ¶¶ 365, 369-371, 405-406.1-2);
- (c) Microsoft's welding of the browser to the operating system also increased the costs to users of obtaining and using non-Microsoft browsers, and deprived consumers of the choice of having no browser at all (see PJFP Parts V.B ¶¶ 166-174, VII.A ¶¶ 405-406);
- (d) Microsoft's conduct with respect to alternate platforms and standards such as Java and HTML deprived consumers of the benefits of innovation unimpeded by Microsoft's use of its operating system monopoly (see PJFP Parts VI.A & B ¶¶ 333, 353, VII.E 405-406, 408-410).

In addition, the consumer harm caused by Microsoft's individual acts is not harm that occurs in isolation; the cumulative impact of these practices, operating together and reinforcing one another, has

of Internet Explorer to its gains in usage share. (See PJPF Part VII.A ¶ 381.3.3).

been far-reaching consumer harm. Microsoft's widespread pattern of conduct to maintain its operating system monopoly has deprived consumers of the long-run benefits of competition in the operating systems market and the greater choices, price reductions, and non-Microsoft innovation that would follow from such competition. For instance, Microsoft's willingness to take whatever action necessary to undermine Internet-related middleware threats (even remote ones) will continue to harm consumers:

- (a) Microsoft will continue to have substantial control over the standards for software development (and therefore maintain its operating system monopoly) (see PJFP Part VII.C ¶¶ 398-401);
- (b) Microsoft will continue to control the direction of innovation in software and hardware, including on the Internet (see PJFP Parts VII.C ¶ 402); and
- (c) Microsoft will continue to exert substantial influence over the innovations attempted by rivals and competitors, by virtue of expressing its approval or disapproval, and its well-known ability, willingness, and incentive to predate against future threats (see PJFP Parts VII.C ¶¶ 403-404).

II. Attempted Monopolization of the Browser Market.

The two elements of plaintiffs' attempted monopolization claim are: (a) anticompetitive conduct, from which a specific intent to monopolize may be inferred; and (b) a dangerous probability of success.

Microsoft's anticompetitive conduct concerning the browser, discussed in connection with Microsoft's monopolization of the operating system market, also supports plaintiffs' attempted monopolization claim. Microsoft's dangerous probability of success is shown by the sharp and continuing increase in Microsoft's share -- already about 50% even by Microsoft's survey data on an installed base measure, and already over 70% on a share of new installation basis. (See PJPF Part VII.B ¶¶ 390, 386.1).

Moreover, even in the absence of all that evidence, the June 21, 1995 market division meeting would be sufficient by itself to prove attempted monopolization. The participants in the meeting were recognized at the time as the two significant actual or potential browser suppliers. No other browser supplier was projected to obtain (or did thereafter obtain) more than a marginal share. The evidence from both the Netscape and Microsoft participants, and from the contemporaneous documents prepared by Netscape and Microsoft, is that Microsoft planned to propose and did propose an arrangement in which Netscape would receive valuable concessions if it agreed to restrict its browser competition with Microsoft, and that if Netscape refused it would be penalized. (See PJPF Part IV.A ¶¶ 67-70). This is also what participants in the meeting reported at the time to AOL had occurred. (See PJPF Part IV.A ¶ 67.9). This evidence is also confirmed by the testimony of Microsoft executive Chris Jones, who had been given the responsibility for presenting Microsoft's position at the meeting. (See PJPF Part IV.A ¶ 67.2).

In the face of this evidence the deposition testimony of Mr. Gates that he was not aware at the time even what Netscape was doing and the trial testimony of Mr. Rosen that he did not at the time consider Netscape a competitor or competitive threat is simply not credible.

Perhaps realizing as much, Microsoft in its Proposed Findings argues that it could not monopolize a browser market because (contrary to Microsoft's internal documents and analyses, contrary to common industry understanding, contrary to the head-to-head browser competition in which

Microsoft and Netscape engaged, and contrary to the consistent evidence that customers viewed browsers as a distinct market) there really is not a browser market at all. (MPF ¶ 242).

Microsoft asserts that this is so because Microsoft has combined the browser with its operating system and priced the browser at zero. If Microsoft's arguments were correct, companies could attempt to monopolize (indeed monopolize) with impunity simply by pricing at zero and tying the product to be monopolized to another product that was already monopolized. Microsoft's argument also ignores the facts that:

- (a) Netscape continues to market browsers separate from any operating system (see PJPF Part V.B.1 ¶ 113.1);
- (b) Microsoft itself continues to market browsers separate from the operating system (including through ISPs, ICPs, Apple, and at retail) (see PJPF Part V.B ¶ 113.2); and
- (c) Before it was forced to reduce its price to zero to match Microsoft, Netscape was earning more than \$100 million a year from licensing its browser (see PJPF Part V.G ¶ 298.3.1; Schmalensee Dir. Figure 1).

Microsoft also suggests that plaintiffs' attempt to monopolize claim should fail because Netscape refused Microsoft's proposal. But Netscape's refusal did not make Microsoft's proposal any less of an attempt; not every attempt succeeds or there would be no attempted monopolization. (Moreover, as already noted, the attempt claim is not dependent on the market allocation proposal; even if the market allocation proposal had never occurred, Microsoft's other anticompetitive conduct following the June 1995 meeting would still establish an attempt to monopolize).

Of a similar vein is Microsoft's argument that it is not guilty of attempted monopolization because Netscape is still marketing browsers. But it is not necessary that a competitor be eliminated in order to establish a monopolization claim. No attempt case has ever been held not to meet the dangerous probability threshold on facts even approaching the strength of those present here, including the evidence of Microsoft's market share and market share trends.

III. Unreasonable Restraints of Trade

Because Microsoft's exclusionary conduct includes anticompetitive agreements, that conduct violates Section 1 of the Sherman Act as well as Section 2.

Microsoft's conduct in tying its browser to its operating system; in coercing and inducing OEMs to agree not to remove the browser or turn it off or remove its icon, and to agree to limit their promotion of Netscape's browser on the first screen and otherwise; in coercing and inducing ISPs, ISVs, ICPs, and others, including Apple, to agree to limit their promotion and distribution of Netscape's browser; and in coercing and inducing ISVs and others to agree to limit their promotion and distribution of Java, in each case:

- (a) substantially restrains trade and prevents competition on the merits, and
- (b) is not reasonably necessary to achieve any legitimate purpose.